# Report

On

# SCOPE AND PRACTICES OF SUSTAINABLE PROCUREMENT IN LOCAL GOVERNMENT ENGINEERING DEPARTMENT (LGED), BANGLADESH: A CASE STUDY ON RUPGANJ UPAZILA, NARAYANGANJ

By

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An internship report submitted to the BIGD in partial fulfilment of the requirements for the degree of

Masters in Procurement and Supply Chain Management

BRAC Institute of Government and Development (BIGD)

Brac University September, 2022

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# **Declaration**

It is hereby declared that

- 1. The internship report submitted is my 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 have acknowledged all main sources of help.

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**BRAC** University

# **Letter of Transmittal**

Mir Mehbubur Rahman MCIPS, FIEB Faculty, BIGD BRAC University 66 Mohakhali, Dhaka-1212

Subject: Submission of Report titled "Scope and Practices of Sustainable Procurement in

LGED, Bangladesh: A Case Study on Rupganj Upazila, Narayanganj".

Dear Sir,

I am grateful to submit herewith my report on "Scope and Practices of Sustainable Procurement in Local Government Engineering Department (LGED), Bangladesh: A Case Study on Rupganj Upazila, Narayanganj", 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 from procurement professionals of LGED related to the public procurement for Rupganj Upazila, Narayanganj.

I hope that the report will meet the desires.

Sincerely yours,

Surayia Sharmin

Student ID 20282016 BIGD, BRAC University

Date: August 16, 2022

# **Non-Disclosure Agreement**

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

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# Acknowledgement

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Last but not the least, the author would like to express deepest gratitude and appreciation to her **family members and other well-wishers** for their constant inspiration and encouragement.

# **Executive Summary**

Sustainable Public Procurement (SPP) is a process by which government of the country seek to achieve the appropriate balance between the three pillars of sustainable development - economic, social and environmental - when procuring goods, services or works at all stages of the project. In Bangladesh, Local Government Engineering Department (LGED) is one of the largest public sector organizations in the country entrusted for planning and implementation of rural, urban and small-scale water resources infrastructure development programs who procures goods, works and services as a large scale.

A case study has been conducted with LGED officials of Upazila level addressing three aspects of sustainability to know the present scenario of procurement practice and find out the opportunities and barriers to adopt the sustainability in the public sector procurement in Rupganj Upazila, Narayanganj.

From interview survey through the questionnaires it is found that the preparedness of the field level professionals is quite satisfactory but due to different barriers the practices of sustainability in procurement cannot be done effectively. A clear and formal commitment is necessary between the top level of government and Upazila level through proper channel for effective sustainable development. Besides different awareness programs for other entities, contractors, local leaders and mass beneficiaries about public procurement are required to ease the sustainable public procurement process. Besides, reduction of major obstacles, such as, financial barriers, land acquisition difficulties and bureaucratic complexities may create more scope to adopt sustainability in procurement for LGED at field level.

Advanced research needs to be conducted in order to get a deeper insight into the sustainability issue in relation to the public procurement at Upazila.

## **Key words:**

Sustainability, Procurement, Preparedness, Opportunities, Barriers, Beneficiaries

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# **List of Acronyms**

Addl.CE Additional Chief Engineer

AE Assistant Engineer

CE Chief Engineer

CIPS Chartered Institute of Procurement and supply

CPTU Central Procurement Technical Unit

DPM Direct Procurement Method

EGP Electronic Government Procurement

EE Executive Engineer

EMS Environmental Management System

GCC General Conditions of Contracts

ICT Information and communication Technology

IT Information Technology

IWRM Integrated Water Resources Management

KPI Key Performance Indicators

LGED Local Government Engineering Department

LTM Limited Tendering Method

MLSS Member of Lower Subordinate Staff

OSTETM One Stage Two Envelop Tendering Method

OTM Open Tendering Method

PPA Public Procurement Act

PPR Public Procurement Rule

PEC Proposal Evaluation Committee

SAE Sub-Assistant Engineer

SE Superintending Engineer

SP Sustainable Procurement

SPP Sustainable Public Procurement

STD Standard Tender Document

SRFPs Standard Request for Proposals

Sr.AE Senior Assistant Engineer

TSTM Two Stage Tendering Method

TEC Tender Evaluation Committee

UAE Upazila Assistant Engineer

UE Upazila Engineer
UK United Kingdom

WLC Whole Life Costing

# Glossary

Procurement is the method of discovering and agreeing to

terms and purchasing goods, services, or other works from an external source, often with the use of a tendering or

competitive bidding process.

Public procurement When a government agency buys goods or services through

the procurement by utilizing public money, it is referred to

as public procurement.

Whole-life-Costing Whole-life cost is the total cost of ownership over the life

of an asset that takes account of the cost of a product or service over its life, from determining the need for it

through to its eventual disposal.

Sustainability Sustainability means meeting our own needs without

compromising the ability of future generations to meet their own needs. It is a societal goal that broadly aims for humans to safely co-exist on planet Earth over a long time.

#### **CHAPTER 1**

## 1 Introduction

# 1.1 Background

The term 'Sustainability' points out the process of living to be maintained at a similar level into the future. More precisely, it means the actions taken today do not curb or jeopardise our comfort or well-being in the future. Sustainable Procurement is an approach that considers economic, environmental and social sustainability when making purchasing decision.

Public procurement is mainly concerned with spending the tax payers' money appropriately on goods, works and services for the development of tax payers and citizen of the country by the public sector organizations. In today's world sustainability is one of the major issues that the whole world concern about. But it is matter of regret that preparedness and practices of sustainable procurement is still in need of enough concern in most developing countries like Bangladesh.

## 1.2 Objectives

The main objective of the study is to find out the opportunities and barriers of adopting sustainability issues in public procurement in the field level works of LGED. Hence to ease the study work it is divided into two sub-objectives as the route that will take to the final objective. They are,

- i. To understand the preparedness of procurement officials of LGED about sustainability
- ii. To identify the current practices of sustainability in procurement of LGED at field level

# 1.3 Research Questions

To accomplish the main research objective, it comes up with two research questions for the study as follows,

- I. What is the level of conception & preparedness on sustainable issues in Public Procurement among the officials of Local Government Engineering Department (LGED), Rupganj Upazila, Narayanganj?
- II. What is the existing degree of practice in public procurement process of Local Government Engineering Department (LGED) Rupganj Upazila, Narayanganj as regards sustainability?

# 1.4 Scope of the Study

This study is basically focused on public procurement in Local Government Engineering Department (LGED). As one the largest engineering agencies of the country it implements more than 60 development projects a year in rural development, agriculture, water and transportation constituted the bulk of total public procurement that practise procurement management, monitoring and e-GP implementation. Though the amount of dedicated works done on sustainability issues in field level procurement activities in LGED is limited; but the importance of research on the level of preparedness and existing degree of sustainability practice cannot be overlooked. Hence the scope of the study is limited to assessing among at least 10 government officials related to public procurement within 03 financial year from 2019 to the year of 2022 in Local Government Engineering Department (LGED), Rupganj Upazila, Narayanganj through an interview session with a detailed questionnaire.

#### 1.5 Limitations

There exist some limitations of this study stated as below,

#### > Time Constraint

The main limitation of this study is time constraint. Due to lack of adequate time the study has to be bound within only one Upazila as research area. To find out the total scenario

about preparedness and practices of sustainable procurement of LGED in field level more effectively; it might be more implicit if more than one Upazila or a whole district could be selected as the research area.

#### **➤** Limited Access to data

The data collected for the study were to be limited within only 10 respondents related to procurement activities of Upazila for last 03 (three) financial years. Though in this study through the interview survey the real and prompt responses were tried to be collected; but still data from more officials from more financial years would be better for this research.

## Lack of previous studies on the topic

Since the numbers of similar research works done on this topic is limited, it required enough study and analysis within the limited time to develop a proper methodology to achieve the objectives of the research.

#### 1.6 Research Methodology

To reach the responses of research questions for the paper, mostly primary data and some secondary data are used. Almost all primary data are collected from face to face interview and others are received from telecommunication methods such as email, telephone etc. As the research area is Rupganj Upazila, Narayanganj; the data for 03 financial years (FY 2019-2020, 2020-2021 and 2021-2022) collected from the LGED officials, Executive Engineers, Senior Assistant Engineers, Assistant Engineers of Narayanganj district and Upazila Engineers, Upazila Assistant Engineers of Rupganj Upazila, Narayanganj.

#### 1.6.1 Data collection

- Primary data are collected from face to face interviews, telephone interviews and responds over email from LGED Officials.
- Secondary data are collected mainly from Websites (CPTU, LGED, Rupganj Wikipedia etc.) related articles, journals etc.

#### **CHAPTER 2**

#### 2 Literature Review

This chapter focuses on the theoretical knowledge of sustainability, sustainable development and sustainable procurement. As a result, the concept of sustainable development and sustainable procurement with the potential benefits in public sector has been analysed. To get the intense knowledge several books, journals, publications and websites have also been scrutinized as well. Public Procurement Act-2006 and Public Procurement Rules-2008 have a strong influence in this study, because in Bangladesh public procurement system is highly bound to follow these guidelines.

# 2.1 The Concept of Sustainable Development

Sustainable Development means the development activity that can be endured over the long period of time without doing harm to the resources required to preserve wellbeing into future.

The concept of sustainability first emerged into mainstream during United Nations Conference in 1972 while significant environmental concerns were raised regarding industrial development and its practices on issues such as deforestation, pollution and the use of toxic chemical pesticides etc. A paradox was raised at that time about the importance of Industrial Development which brings development along with high-profile environmental disasters (such as, Chernobyl nuclear reactor explosion, etc.) and lack of social injustices as well. Gradually after different discussions, meetings and conferences the world leaders introduced a general concept of "Sustainable Development". According to Brundtland Commission's report that published in 1987, sustainable development can be defined as,

"Development that meets the needs of the present without compromising the ability of future generations to meet their own needs".

Later in 1992, the Earth Summit of Rio agreed that the world disproportionately exploited the earth's resources to make unbridled economic progress. The pace of growth was viewed as unsustainable. So, the ideas of sustainable development were refined in which social justice and human rights issues (such as peace, poverty, child labour, gender issues etc.) were explicitly added to the mix.

**Triple Bottom Line**: In 1997, a business concept, 'triple bottom line'(TBL) was introduced by John Elkington to spotlight the needs for the countries and organizations to measure their performance in all three areas (economic-environmental-social). It can also be said as 3Ps'of sustainability that means Profit, People and Planet.



**Figure 1: Triple Bottom Line** 

#### 2.2 Sustainable Procurement

According to CIPS, Sustainable Procurement can be described as,

"A process whereby organisations 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 organisation, but also to society and the economy, whilst minimising damage to the environment."

Overall, the term 'sustainable procurement' emphasises the full spectrum of economic. environmental and social criteria.

#### 2.2.1 Potential Benefits of Sustainable Procurement

According to Milton Friedman and Elaine Sternberg, 'the social responsibility of business is profit maximization to give a return on shareholders' investment'. Though different organisations, sectors and industries have different drivers for sustainability in different areas of their activity there are some general potential benefits may be advanced for sustainable procurement policies and practices.

- Compliance
- Reputational Benefits
- Competitive advantage
- Workforce Commitment
- Supply base Commitment

- Supply Continuity
- Failure cost minimization
- Cost Management and Efficiency
- Innovation

#### 2.2.2 Conflicts and trade-offs in Sustainability

It is recognised that there are key arears of having scopes for conflicts, compromises and tradeoffs between business objectives and sustainability targets. They are,

- **Cost** is an important issue where targets require short term cost reductions or maintenance (creating a conflict between lowest achievable price and ethical considerations) rather than long term return on investment over the life of the purchase.
- Social and environmental responsibility may conflict with economic performance, such as, damaging domestic supply markets, human rights standard, GHG emissions etc.
- Pressures for quality and compliance may conflict with cost and sustainable development considerations, such as low-cost labour with poor standards etc.
- Pressure on buying organisations to minimise costs in order to achieve value for money which is a primary objective of public sector procurement.

#### 2.2.3 Sustainable Performance Measurement

Sustainable performance measures can be incorporated into the framework of supplier performance measurement by various techniques including use of benchmarks, development of key performance indicators (KPIs), use of balanced scoreboards etc.

#### **Supply Chain Audits:**

According to British Standards Institution, an audit is a process in the supply chain management to assess a supplier's systems, processes and business practice to establish the validity and reliability of information provided to customer organization.

Auditing may take place as a part of

- i. Supplier Selection
- ii. Ongoing Contract and Supplier Management

**Compliance Audits**: Assessing conformance to law and regulations (i.e., health and safety regulations), and requirements for government permits and licences (i.e., waste disposal licences).

#### **CHAPTER 3**

# 3 Public Procurement of Bangladesh and LGED

This chapter focuses on the general background of public procurement that includes its history and evolution with showing a scenario of public procurement in Bangladesh by incorporating the legal framework, regulations, the general principles and features of public procurement currently in practice.

According to Public Procurement Act, 2006 (PPA 2006),

'Procurement is the purchasing or hiring of goods, or acquisition of goods through purchasing and hiring, and the execution of works and performance of services by any contractual means.'

Public procurement means the procurement of goods, services or works (i.e., constructions) on behalf of a public authority, such as government agencies.

## 3.1 Public procurement in Bangladesh

As Transparency, Accountability, Equitable Treatment to all and ensuring perfect competition in public procurement is a global concern in today's world, implementation of good governance in public procurement with established procurement framework and management capacity is a priority for any government.

# 3.1.1 Methods of Public Procurement in Bangladesh

In Bangladesh as per PPR-2008, Rule no 61 and 62, there are 06 types of methods for public procurement used for different types of government purchasing. They are,

- OTM (Open Tendering Method)
- LTM (Limited Tendering Method)
- DPM (Direct Procurement Method)
- RFQM (Request for quotation Method)
- OSTETM (Open Stage Two Envelope Tendering Method)
- TSTM (Two Stage Tendering Method)

For public procurement, the preferred method is the Open Tendering Method (OTM) that ensures equal opportunity to all suppliers by using open competition. But in the case of Limited Tendering Method LTM a PE may maintain a shortlist of eligible tenderers for urgent low-cost tenders which especially encourage the local suppliers.

# 3.2 Sustainability addressed in Public Procurement

The Public Procurement Act, 2006 and the Public Procurement Rules, 2008 are two principal documents that regulate public procurement at present. Besides a number of Standard Tender Documents (STDs) for goods and works and Standard Request for Proposals (SRFPs) are prepared by CPTU for services that depend on the size or volume of procurement. The Table

1 shows the several sustainability factors those have been addressed in public procurement documents.

Table 1: Sustainability addressed in Public Procurement, Bangladesh

	Articles addressed Sustainability Issues
Economic	• [Rule 15(2), PPR-2008]
Sustainability	• [Rule 15(7), PPR-2008]
	• [Rule 29(2), PPR-2008]
	• [Rule 29(3), PPR-2008]
Social and Ethical	• [Rule 15(7), PPR- 2008]
Sustainability	• Rule 29(5), PPR-2008]
	• [Rule 83(1)(e), PPR-2008]
	• [GCC 27.1, STD-PW3]
	• [GCC 28.1, STD-PW3]
	• [GCC 29.1, STD-PW3]
	• [GCC 29.3, STD-PW3]
	• [GCC 30.1, STD-PW3]
	• [GCC 37.1, STD-PW3]
Environmental	• [GCC 27.1, STD-PW3]
Sustainability	• [GCC 29.2, STD-PW3]

#### 3.3 LGED and Procurement Activities

Local Government Engineering Department (LGED) not only develop the transport infrastructures but also provides technical support to the rural ae well as the urban local government institutions (LGIs) to enhance the communication and transport network, job creation, and poverty reduction. The department is headed by a Chief Engineer, supported by 12 Additional Chief Engineers (Civil), 25 Superintending Engineers, 152 Executive Engineers, 72 Senior Assistant Engineers, 492 Upazila Engineers, 165 Assistant Engineers, 489 Upazila Assistant Engineers, 1255 Sub-Assistant Engineers and staffs spread all over the country. It has 11184 regular employees which is highest number employees among all others engineering departments.

#### 3.3.1 Central Level Procurement Activities

To serve a well-framed and prompt service LGED has a number of specialized units at the Central Level like Administration Unit, Planning Unit, Design Unit, Training Unit, ICT (Information & Communication Technology) Unit, IWRM (Integrated Water Resource Management) Unit, Quality Control Unit, Monitoring and Evaluation Unit, Maintenance Unit, Urban Management Unit and Procurement Unit. Each Unit is headed by an Additional Chief Engineer (Addl. CE), supported by a Superintending Engineer (SE), an Executive Engineer (EE), Senior Assistant Engineers (Sr.AE), Assistant Engineers (AE) and other staffs. The main

functions of Procurement Unit include providing technical assistance to Pes, monitoring the compliances, assisting HOPE, help-desk support etc.

# 3.3.2 Upazila Level Procurement Activities

LGED has 07 (seven) divisional offices, 14 regional offices, 64 District offices and 491 Upazila offices. Divisional office is headed by Additional Chief Engineer (Addl. CE), regional office is headed by Superintending Engineer (SE), District office is headed by Executive Engineer (EE) and Upazila office is headed Upazila Engineer (UE). In LGED Upazila office, Upazila Engineer (UE) is supported by an Upazila Assistant Engineer (UAE) and other staffs. Two PE offices works for procurement at Upazila level;

- Office of the Executive Engineer
- Office of the Upazila Engineer

For a Upazila, office of the Executive Engineer may call tenders for all development projects of LGED and regular maintenance work programmes approved for that upazila except projects from other agencies (such as govt primary school construction projects, etc.) and upazila own funded works (such as, Upazila Development Fund etc.) as office of the upazila engineer calls these tenders.

# 3.3.3 Initiatives taken by LGED to come up with sustainability considerations:

LGED has already developed some important initiatives regarding sustainability issues described as follows,

- **Trainings** on Public Procurement, Contract Management, e-GP, e-CMS, Capacity Development, Gender disparities etc. for the officials to prepare them for the procurement activities.
- **Effective use of ICT** to analyse, monitor and reporting system by developing different apps, software (i.e., GIS, FIMS, EMIS, PMS etc.)
- Risk Management activities to reduce the risks
- **Asset Management initiatives** related to maximum use of current asset and further scopes for reuse, recycle and disposal

# 4 An Analysis in Research Area and Methodology

## 4.1 Research Area

Rupganj, an Upazila of Narayanganj District in the Division of Dhaka, Bangladesh that is divided into two municipalities, Kanchan, Tarabo and 07 (seven) union parishads: Bholabo, Golakandail, Kayetpara, Bhulta, Daudpur, , Murapara, and Rupganj. LGED office at this Upazila are consisted of 18 employees, headed by one Upazila Engineer and supported by one Upazilla Assistant Engineer, three Sub-Assistant Engineers, one Draftsman, one Surveyor, one Accountant, one Account Assistant, one Community Organiser, one Computer operator, one Electrician, four Work Assistants and two MLSS. An Average of 100 crore tk procurement activities are happened from Upazila PE office and almost three to four times more than that happened from executive engineer's PE office for Rupganj Upazila at every financial year.

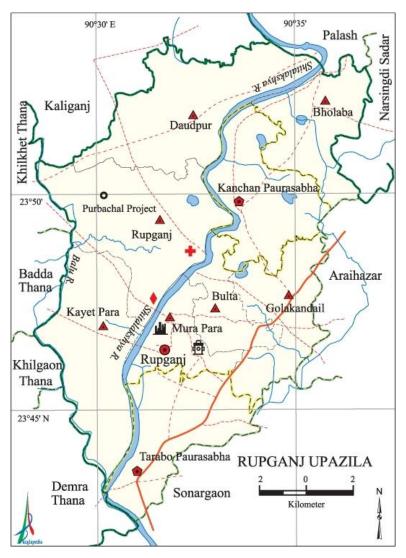


Figure 2: Map of Rupganj Upazila

#### 4.2 Research Model and Methods

Research Models can be classified broadly in two types

- Quantitative
- Qualitative

In this study **a qualitative research model** has been used to find out the scope and practises of sustainability issues in the procurement for works of LGED at Rupganj Upazila. The **components of the research procedure** are,

- The method by which information has been gathered- Interview survey.
- The subject on which information has been gathered- Preparedness of the procurement officials of the LGED and sustainability practice in Public Procurement at Upazila level
- The population on which information has been gathered- Procurement Professionals who are involved in Public Procurement Process for Rupganj Upazila
- **Data Collection Process**: A semi-structured questionnaire response data about sustainability practice in procurement process to identify preparedness & level of practice in Upazila Level.
- **Number of Samples**: At least 10 (ten) numbers samples (questionnaire) have been collected from 10 (ten) procurement officials from Executive Engineer's Office, Narayanganj and Upazila Engineer's Office, Rupganj for last 03 financial years from 2019 to 2022.

#### **CHAPTER 5**

# 5 Findings

This section depicts the findings of the research and the analysis and discussion about those findings. The questionnaire was developed using the outcomes of the literature review. The questionnaire consists of three sections, two of the sections contained closed-ended questions and one was for open opinion. The sections are,

- Scope and Preparedness of the procurement professional at Upazila Level
- Sustainability Practices in Procurement at Upazila Level
- Comments and suggestions

From first section, it was an aim to collect data from different level officials to learn the level of preparedness of practising sustainability issues in the procurement of LGED. All of them had worked in LGED for almost 3 to 15 years. Figure 1 illustrates the respondent's details on the level of experience in Public Procurement.

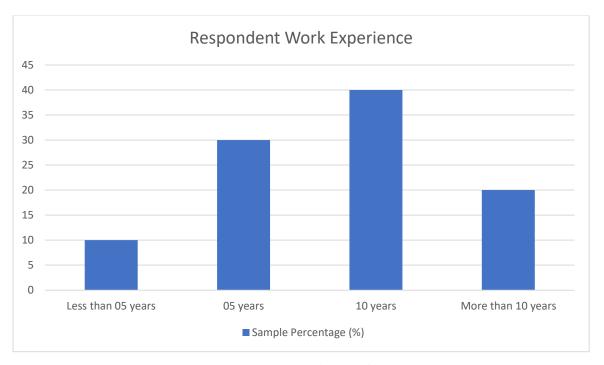
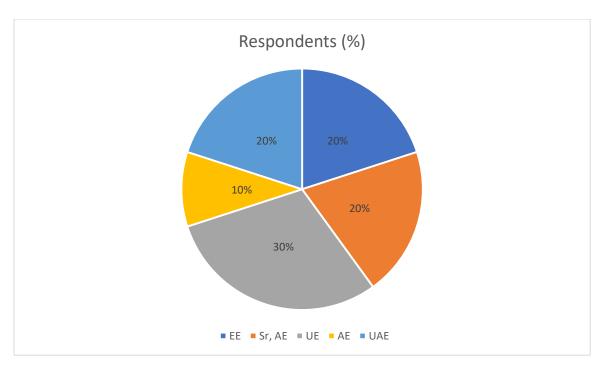


Figure 3: Work Experience of Respondents

There were total 10 samples collected from procurement professionals worked for last 03 financial years (FY 2019-2022) which consisted of 02 Executive engineers, 02 Sr Assistant Engineers and 01 Assistant Engineer of Narayanganj district and 03 Upazila Engineers and and 02 Upazila Assistant engineers of Rupganj upazila in the sample.



**Figure 4: Composition of Respondents Position** 

The respondents were asked 10 (ten) closed end questions in first section (Part A) on which they answered by choosing Yes, No or Partial. The focus of questions mainly on their thought of the officers about sustainability scopes, in terms of environmental, social, and economic considerations, to adopt at field level works.

# Preparedness of the procurement professional at Upazila:

Almost 80% officers have good conception about sustainability issues in procurement as they have enough trainings and other qualifications about public procurement of Bangladesh. About 60% officers they get enough support from stakeholders (suppliers, office staffs and HQ, etc.), 30% think it is partial and 10% think they do not get enough support they required. About 100% procurement professionals of Rupganj Upazila think that there are enough scopes to put sustainable criteria in procurement process regarding economic and social considerations but 20% think it is not always possible to put all types of environmental criteria as it cannot be maintained cent percent by the contractors during construction.

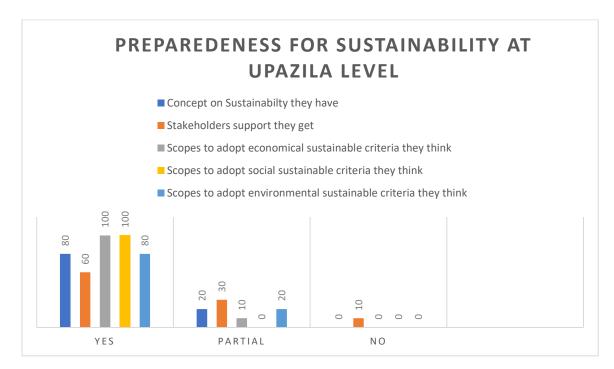


Figure 5: Respondent responses on Preparedness for sustainability

# Sustainability Practices in Procurement at Upazila:

The Second section of the questionnaire the respondents' opinions on sustainability practises in procurement were evaluated out in three categories of considerations.

➤ Economic Aspect: When it is considered about economic aspects, 20% agreed that PE office considers whole life costing rather than lowest price in procurement, but 70% think this practice is partial and 10% think it never happens. About 60% agreed about putting criteria in procure to encourage local contractors' participation, 10% disagreed and 30% said it happens sometimes.

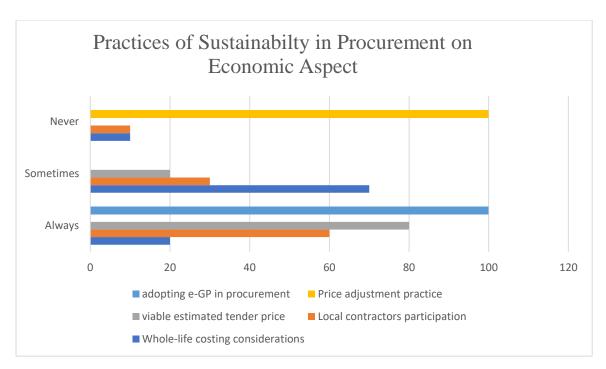


Figure 6: Respondent Responses about Sustainability Practices on Economic Aspect

➤ Environment Aspect: In consideration of environmental aspect, 90% agreed that PE office have Environmental Management System (EMS), 30% consider environmental criteria for reducing noise level during construction, 60% said it cannot be considered always, but partial consideration is possible. 80% respondents agreed with practices of reducing water consumption, but others agreed for sometimes. For considering on reuse, recycle and disposal 20% officers agreed about doing so always, 60 % said it is partial and 10% said it never happens. And finally, 40% agreed with finding alternatives of cutting trees during construction, 50% tried sometimes and 10% never bothered about it at all.

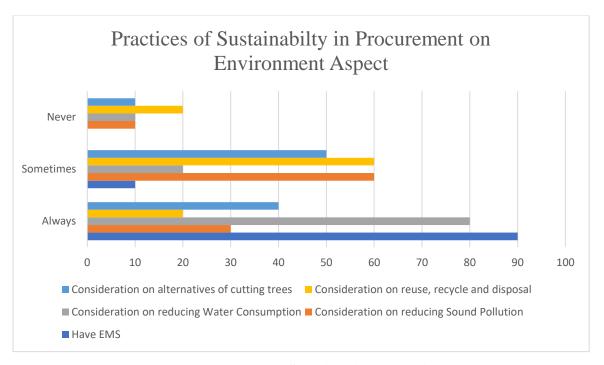


Figure 7: Respondent Responses about Sustainability Practices on Environment aspect

Social Aspect: Last sustainability issues but not the least is social or ethical issue on which the respondents agreed most among themselves with the different criteria. About 100% agreed that they follow principle of equality and comply with legal provisions in public procurement. 60% agreed about putting criteria regarding workers health and safety issues while 40% said they put it sometimes. 80% agreed focusing on capacity development activities, 20% said they focus sometimes. About putting criteria regarding child and gender issues, 60% agreed that it happens sometimes but 40% said they do it always. And 90% agreed that there is no compliance audit for suppliers conduct in the procurement process of Upazila.

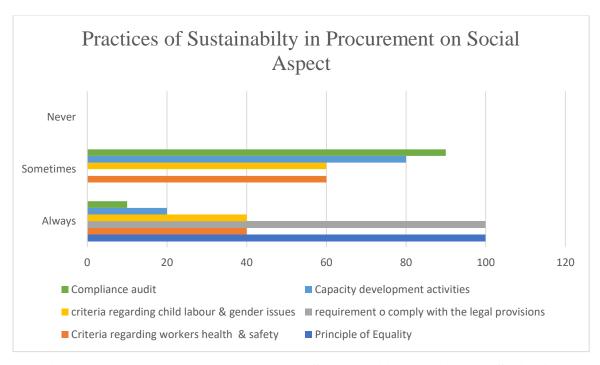


Figure 8: Respondent Responses about Sustainability Practices on Social Aspect

# Comments and suggestions of the Procurement officials at Upazila:

Finally, the third and last section of questionnaire was designed to find out the officers' comments on 05 points.

• Most important issue to consider for sustainability for new construction:

The findings in this regard are,

- Proper Need analysis
- Considering whole-life costing
- ➤ Land availability
- Most important issue to consider for sustainability for repair and maintenance

The findings are,

- Quality Work
- > Traffic management
- ➤ Water logging
- Suggestion about any initiatives that the department may adopt to achieve sustainability

The findings in this regard are,

- ➤ Increase Use of Uni-block instead of Brick for herringbone road construction
- Capacity Development of other entities (UP, UNO, UEO, PIO etc.)
- > Social awareness about public procurement
- Barriers in practicing sustainable procurement at upazila level

The findings in this regard are,

- ➤ Bureaucratic Complexity
- > Less cooperation from other local entities
- Lack of knowledge of local suppliers/contractors about public procurement
- Land acquision difficulties and weather condition challenges.
- ➤ Lock in traditional procurement practices.
- > Price fluctuation of construction materials
- > Sometimes Financial barriers
- Absence of rewarding to the contractors who considered sustainability issues

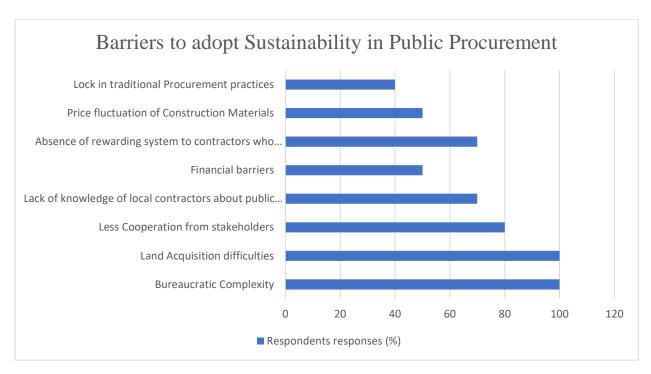


Figure 9: Barriers to adopt Sustainability in Public Procurement

- Any other suggestion if they have,
  - > Strictly follow PPA-2006 and PPR-2008
  - ➤ Need Assessment and proper feasibility study should be a must
  - > Spontaneous cooperation of the stakeholders is important
  - ➤ Adoption of sustainability criteria not only for donor funded projects but also for all projects should be functional
  - > Successful Contractors can be rewarded
  - ➤ Reduction of financial barriers will increase the quality of construction works

#### 6 Conclusion and Recommendations

#### 6.1 Conclusion

In public procurement the importance of non-economic factors along with the economic factor has been increasing significantly day by day with the development of the concept of sustainable development worldwide.

In this chapter, the whole study will be summed up by finding out answers of the research questions that mentioned in Chapter One to conclude the overall research.

I. What is the level of conception & preparedness on sustainable issues in Public Procurement among the officials of Local Government Engineering Department (LGED), Rupganj Upazila, Narayanganj?

Officials have fair understanding on sustainability issues, as they got several trainings on PPR, e-GP and higher degrees with experiences regarding public procurement. Besides they have honest and sincere intentions to optimize the use of natural assets and public properties during sustainable development in rural sector.

II. What is the existing degree of practice in public procurement process of Local Government Engineering Department (LGED) Rupganj Upazila, Narayanganj as regards as sustainability?

To find out the level of practices and further scopes a comparison can be shown in Table 6.1 that shows the current level of practices with the scopes addressed in PPR mentioned in Chapter 2 (Table 1), as below,

Table 2: Comparison of Practices with Sustainability addressed in PPR

SI	Sustainability issues addressed in	Sustainability Practices Public		
	Public Procurement	Procurement at Upazila according to		
	(Rules in the PPR 2008 and/or Clauses	respective rules in PPR-2008		
	in the Standard Bidding Document)	(Practised / Not Practised /Partially		
		Practised)		
01	[Rule 15(2), PPR-2008]	Practised. Respondents agreed that		
	[Rule 15(7), PPR-2008]	Schedule of Rates of LGED, estimated		
	[Rule 29(2), PPR-2008]	tender prices including viable margins, use		
	[Rule 29(3), PPR-2008]	of e-GP and Participation of Local		
		Tenderers help to comply with these rules		

		regarding specifications, fair competition, use of local goods etc.
02	[GCC 27.1, STD-PW3] [GCC 28.1, STD-PW3] [GCC 29.1, STD-PW3] [GCC 29.3, STD-PW3]	Partially Practised. Due to financial barriers, less cooperation and lack of knowledge of stakeholders, Consideration regarding workers health and safety is not much practised but criteria regarding compliance with legal is considered effectively.
03	[GCC 30.1, STD-PW3] [GCC 37.1, STD-PW3]	Partially Practised. Criteria regarding child labour, gender issues and insurance coverage are strongly practised in mainly donor-funded projects, but not too strongly adopted in other projects (GOB, Own funded).
04	[GCC 27.1, STD-PW3]	<b>Practised.</b> Environment Management system (EMS) and other environmental criteria regarding noise level, water consumption and pollution etc. in tender documents are well practised at Upazila.

So, in conclusion it can be stated that preparedness level of the professionals for sustainability is quite fair but practice level is not yet up to mark. Despite having different challenges and obstacles, there are scopes to practise more regarding these issues in different programs and projects of Upazila. To obtain sustainable development for rural sector, procurement officials at field level of LGED are responsible to cope with other entities, local leaders, contractors, mass beneficiaries and have to face different obstacles like land inadequacy, financial barriers, weather challenges, bureaucratic complexity etc. Hence, they require a proper formal support from top level of government to do their duties in secured and effective way. Otherwise, sustainability cannot be adopted at field level in spite of having good conception and preparedness of the officials about it.

#### **6.2** Recommendations

Some **recommendations** are mentioned as follows to establish sustainability aspects at Upazila level of LGED:

- **6.2.1 All types of sustainability criteria** should be set in the procurement process not only for donor-funded projects but also for all development works (new construction as well as maintenance) of Upazila
- **6.2.2** Capacity Development activities can be increased to aware the suppliers, local leaders and beneficiaries.
- **6.2.3 Initiatives should be taken to improve cooperative activities** with other entities, such as Upazila Parishad, Union Parishad, Administration, other departments and corporations etc.
- **6.2.4 Support from top management** regarding policy, legal issues, compliances are very important for field level officers to adopt sustainability issues in practice in more effective way.
- **6.2.5** Innovations regarding sustainability issues should be encouraged.

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#### QUESTIONNAIRE ON DISSERTATION

Dear Sir,

This is a survey questionnaire for conducting a research on "SCOPE AND PRACTICES OF SUSTAINABLE PROCUREMENT IN LOCAL GOVERNMENT ENGINEERING DEPARTMENT (LGED), BANGLADESH. A CASE STUDY ON RUPGANJ UPAZILA, NARAYANGANJ". It is a requirement for the fulfilment of the degree "Masters in Procurement and Supply Chain Management (MPSM)" in BRAC Institute of Governance and Development (BIGD) of BRAC University that I am pursuing. Your sincere reply to questionnaire is precious to the researcher. The researcher does assure that the information and opinion given by you will be kept off the record and will be used only for the academic purpose.

Could you please manage some time to go through the questions and give answers according to your understanding and realization?

Thank you and Best Regards.

## Part A: PREPAREDNESS ABOUT SUSTAINABILITY

Please mention appropriate answer of the following questions. (Just tick mark appropriate one)

SI	Statement			
i.	I have got <b>trainings</b> on Public Procurement, e-GP and e-CMS to conduct Public Procurement activity	Yes	Partial	NO
ii.	I have got <b>higher degree</b> (PGD/Masters/PHD) related to Procurement.	Yes		No
iii.	I think it is not always possible to consider other aspects (environment or social) while a procurement official dedicates his/her works for generating the organization's benefits and reputation by achieving value for money.	Yes	Partial	NO
iv.	I prefer including health and social equity, labour rights, decent working condition, etc. focused <b>criteria in tender document</b> in procurement process.	Yes	Partial	NO
V.	I believe there are scopes to put criteria regarding reduce of air pollution, noise level and water consumption during construction.	Yes	Partial	NO
vi.	I think the itemized specification of LGED <b>schedule of rates</b> is addressing sustainability in procurement duly.	Yes	Partial	NO

vii.	I think LGED staffs in field level are <b>not electronically (i.e., use of computers, software etc) sound</b> enough which makes barriers in gaining sustainability.	Yes	Partial	NO
viii.	I think contractors or suppliers are <b>enough concerned and cordial</b> about adopting sustainability issues.	Yes	Partial	NO
ix.	I think <b>Department's central Procurement Team</b> give satisfactory support and guidelines to field level procurement professionals when needed.	Yes	Partial	NO
X.	I think <b>PPA-06 &amp; PPR-08</b> have addressed sustainability issues in procurement process properly	Yes	Partial	NO

# Part B: SUSTAINBILITY PRACTICE IN PROCUREMENT

Please mention appropriate answer of the following questions. (Just tick mark appropriate one)

Ecor	nomic Aspect			
I	Does PE office consider <b>whole life cost (WLC)</b> principals rather than lowest price in its procurement decisions?	Yes	Partial	No
II	Does PE office put any criteria in the tender documents to encourage participation of <b>local domestic firms?</b>	Yes	Partial	No
III	Does Your organization's estimated <b>tender price</b> include suppliers /contractors fair and viable margins?	Always	Sometimes	Never
IV	Do you insert and practice <b>price adjustment</b> clause in your procurement contract in order to cope with market price change and security of delivery?	Always	Sometimes	Never
V	Does your PE office adopt E-tendering process, <b>e-GP</b>	Yes	Partial	No
VI	Does your PE office adopt E-Contract Management process, <b>e- CMS</b>	Yes	Partial	No
Envi	ronmental Aspect			
i	Does PE office have an <b>environmental management system</b> (EMS) or make requirement for contractors to have environmental management system?	Always	Sometimes	Never
ii	Do you consider <b>environmental criteria for reducing Noise Level</b> in procurement process	Always	Sometimes	Never

iii	Do you consider environmental criteria for reducing Water Consumption (i.e., use of membrane curing compound or water hyacinths etc) in procurement process	Always	Sometimes	Never
iv	Do you prefer considering <b>disposal</b> of products/ works procured for your Upazila?	Always	Sometimes	Never
>	Do you consider options <b>for reuse, repair, upgrade</b> or modification in waste management before making a new purchasing demand?	Always	Sometimes	Never
vi	Do you prefer <b>cutting trees during construction</b> works rather than finding other alternatives?	Yes	Partial	Never
Soci	al Aspect			
·i	Does the procurement process follow the <b>principle of equality</b> (i.e. participation to all the potential suppliers/ contractors) in your organization?	Yes	Partial	No
ii	Does PE office put any criteria or clause regarding workers/ employee's health & safety (i.e., use of helmets, boots, pure drinking water, hygienic toilet facilities, pandemic precautions etc.) in your tender document?	Yes	Partial	No
iii	Does PE office make requirement for supplier or contractor to comply with <b>the legal provisions</b> regarding working hours, rest and vacation and decent wages?	Always	Sometimes	Never
iv	Does PE office put any criteria or clause regarding <b>child labour</b> and <b>gender issues</b> in your tender document?	Yes	Partial	No
V	Does your office focus on <b>capacity development activities</b> (i.e., trainings, workshops etc.) to develop awareness in the stakeholders?	Yes	Partial	No
vi	Does your organization conduct <b>compliance audit</b> for suppliers in the employment conditions (e.g. minimum wage, health and safety issues?)	Always	Sometimes	Never

# Part C: Comments and Suggestions

1)	Which is the most important issue you may consider from sustainability point of view for <b>new construction</b> in Rupganj Upazila?
2)	Which is the most important issue from you may consider sustainability point of view for <b>repair &amp; maintenance</b> work in Rupganj Upazila?
3)	Could you <b>please suggest any initiative</b> that can help achieve sustainable procurement in LGED?
4)	Which, do you think, are the barriers in practicing sustainable procurement in LGED?

5)	Any more suggestions/ opinions/ comments regarding sustainable procurement from your experience in public procurement in Bangladesh

Thank you very much for your cordial co-operation