



# **Report On**

## **Prospects & Challenges of Sustainable Procurement in Bangladesh Hi-Tech Park Authority**

By

**ROKIBUL HASAN**  
**SID: 20282026**

An internship report submitted to the BIGD in partial fulfillment of the requirements for  
the degree of  
**Masters in Procurement & Supply Management (MPSM)**

**BRAC Institute of Governance and Development**  
**BRAC University**  
**March, 2023**

## **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 have acknowledged all main sources of help.

**Student's Full Name & Signature:**

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**ROKIBUL HASAN**

**Student ID: 20282026**

Masters in Procurement & Supply Management (MPSM)

BRAC Institute of Governance & Development (BIGD)

BRAC University, Mohakhali, Dhaka

**Supervisor's Full Name & Signature:**

---

**Md. Mosta Gausul Hoque, PMP**

Senior Trainer

BRAC Institute of Governance & Development (BIGD)

Brac University

## Letter of Transmittal

Md. Mosta Gausul Hoque, PMP  
Senior Trainer  
BRAC Institute of Governance & Development (BIGD)  
BRAC University  
66 Mohakhali, Dhaka-1212

Subject: Report on ‘**Prospect & Challenge of Sustainable Procurement in Bangladesh Hi-Tech Park Authority**’

Dear Sir,

This is my pleasure to display my entry level position provide details regarding' Recruitment and Selection Procedure of ', Bangladesh Hi-Tech Park Authority, Information & Communication Technology Division which I was appointed by your direction. I have attempted my best to finish the report with the essential data and recommended proposition in a significant compact and comprehensive manner as possible.

I trust that the report will meet the desires.

Sincerely yours,

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**ROKIBUL HASAN**

**Student ID: 20282026**

Masters in Procurement & Supply Management (MPSM)  
BRAC Institute of Governance & Development (BIGD)  
BRAC University, Mohakhali, Dhaka  
Date: 30/03/2023

## **Non-Disclosure Agreement**

A report on

**“Prospect & Challenge of Sustainable Procurement in Bangladesh Hi-Tech Park Authority”.**

This agreement is made 18 December,2022 and entered into by and between Bangladesh Hi-Tech Park Authority and Rokibul Hasan, Assistant Director (Procurement), BHTPA, the undersigned student at BRAC University.

WHEREAS Bangladesh Hi-Tech Park Authority have provided permission to prepare a report on Prospect & Challenge of Sustainable Procurement in Bangladesh Hi-Tech Park Authority But not to permit to provide any other information which may create problem on the administrative & financial management of the authority.

WHEREAS, the student of BRAC University Rokibul Hasan will present only the data related to Sustainable Procurement or Public procurement and within his jurisdiction of study under BRAC University, and

Now therefore the parties hereby agree as follows:

Rokibul Hasan, a student of BRAC University will prepare as a report on **“Prospect & Challenge of Sustainable Procurement in Bangladesh Hi-Tech Park Authority”** and will **be submit to** BRAC University as a part of course of Masters in Procurement & Supply Management (MPSM) & hence all required support will be provided by Bangladesh Hi-Tech Park Authority for preparing the report.

.....

**ROKIBUL HASAN**

**Student ID: 20282026**

Masters in Procurement & Supply Management (MPSM)  
BRAC Institute of Governance & Development (BIGD)  
BRAC University, Mohakhali, Dhaka

.....

**Md. Mahafuzull Kabir**

Deputy Director (Procurement)

Bangladesh Hi-Tech Park Authority

## **Acknowledgement**

I would like to express my sincere thanks to Managing Director, Director, Deputy Director, the consultants, my family member specially my wife & the procurement team of Bangladesh Hi-Tech Park Authority, and other related personnel for letting me work on this report. I am very grateful to them for their support in completing this report through providing data, attending the meeting, FGD and other SWOT analysis.

Primarily, I would like to thank Almighty Allah for being me able to complete this report with success. Then, I would like to express my sincere thanks and gratitude to my respected Teacher Mr. Md. Mosta Gausul Hoque, PMP, Faculty Member, BIGD, School of Business, Brac University, 66 Mohakhali, Dhaka-1212 for his guidance, encouragement, advice and continuous support to complete this report.

Secondly, I would like to express my sincere thanks to Mr. Mahafuzull Kabir, Deputy Director (Procurement), & Md. Nurul Islam, Procurement Consultant Bangladesh Hi-Tech Park Authority under whose guidance I have prepared the report. Their suggestions and directions have helped in the completion of this report.

Finally, I would like to thank my beloved wife Asia Khanom, Alif Layla , Shahidul Islam, and Colleague who have helped me with their valuable suggestions and guidance and have been very helpful in various stages of report completion.

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**ROKIBUL HASAN**

**Student ID: 20282026**

Masters in Procurement & Supply Management (MPSM)

BRAC Institute of Governance & Development (BIGD)

BRAC University, Mohakhali, Dhaka

## **Executive Summary:**

Public procurement is one of the government activities where most of the expense occur. Public institutions as well as state-owned enterprises need to procure goods, services and works to carry out their responsibilities and duties. The total volume of public procurement, which is the government activity of purchasing goods, services and works, accounted for 12% of GDP and 29% of general government expenditure in OECD countries amounting to EUR 4.2 trillion in 2013. The share of public procurement at the subnational level represents 63% of the general government procurement in OECD countries. From the above data it is clear that most environment risk prone area of public activity is the public procurement. Sustainable procurement can reduce risk of environment and make our sustainable environment. Sustainable procurement refers to the process of purchasing goods, works, and services in a way that considers the social, environmental, and economic impact of the procurement activities, in addition to cost and quality. It involves taking into account the full life cycle of the products and services being procured, including the sourcing of raw materials, production, distribution, use, and disposal. The goal of sustainable procurement is to minimize negative impacts and maximize positive outcomes, such as reducing waste and emissions, promoting fair labor practices, and supporting local economies.

Bangladesh Hi-Tech Park Authority is a one of the government own organization. The organization build hi-tech related economic zones for the IT/ITES industry. The report on the **Prospect & Challenge of Sustainable Procurement in Bangladesh Hi-Tech Park Authority** highlights the potential benefits and challenges of implementing sustainable procurement practices in the Hi-Tech Park Authority. The report shows that sustainable procurement can result in cost savings, improved supplier relations, and increased competitiveness. However, the implementation of sustainable procurement practices also faces challenges such as a lack of awareness and limited capacity among suppliers, as well as regulatory and cultural barriers. The report recommends that the Hi-Tech Park Authority take steps to raise awareness and build capacity among suppliers, as well as engage in collaboration and dialogue with relevant stakeholders to overcome the challenges and fully realize the benefits of sustainable procurement.

Keywords: Sustainable; Prospect; Procurement; stakeholder; and awareness

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## List of Acronyms

Short Form	Abbreviation
ADB	Asian Development Bank
BADC	Bangladesh Agricultural Development Corporation
BEZA	Bangladesh Economic Zone Authority
BHTPA	Bangladesh Hi-Tech Park Authority
BCIC	Bangladesh Chemical Industries Corporation
BJMC	Bangladesh Jute Mills Corporation
BPC	Bangladesh Petroleum Corporation
BSEC	Bangladesh Steel & Engineering Corporation
BWDB	Bangladesh Water Development Board
CPTU	Central Procurement Technical Unit
CIPS	Chartered Institute of Procurement and Supply
CSR	Corporate Social Responsibility
DESCO	Dhaka Electric Supply Company
DPDC	Dhaka Power Distribution Company
DoFP	Delegation of Financial Powers
DBA	Doing Business As
DPHE	Department of Public Health Engineering
DPP	Development Project Proposal
DPM	Direct Procurement Method
EMS	Environmental Management System
ERD	Economic Relations Division
FGD	Focus Group Discussion
GCC	General Condition of Contract
GDP	Gross Domestic Product
GHG	Green House Gases
HOPE	Head of Procuring Entity
ISO	International Standard Organization

IT	Information Technology
ITES	Information Technology Enable Services
IMED	Implementation, Monitoring and Evaluation Division
MPSM	Master in Procurement and Supply Management
OECD	Organization for Economic Co-Operation and Development
KPI	Key Performance Indicators
LTM	Limited Tendering Method
MEAT	Most Economically Advantageous Tender
OTM	Open Tendering Method
PE	Procuring Entity
SP	Sustainable Procurement
SPP	Sustainable Procurement Policy
SRFP	Standard Request for Proposals
STDs	Standard Tender Documents
TBL	Triple Bottom Line
UN	United Nations
WLC	Whole Life Costing
WB	World Bank
Short Form	Abbreviation
PCC	Particular Conditions of Contracts
PDO	Project Development Objectives
PMO	Prime Minister Office
PPP	Public Private Partnership
PPR	Public Procurement Regulations
SCM	Supply Chain Management
SCMR	Supply Chain Management Review
SQL	Structured Query Language
STD	Standard Tender Documents
STEEPLED	Social, Technological, Economical, Environmental, Political, Legal, Ecological and Demographical

SWOT	Strength, Weakness, Opportunity, and Threats
TEC	Tender Evaluation Committee
TOC	Tender Opening Committee
UK	United Kingdom

# Chapter 1:

## Introduction & Conceptual Framework

### 1.1 Background of the Study

Sustainable Procurement (SP) is an approach to buying goods, services, and works that takes into account their economic, environmental, and social effects in addition to cost and quality. It involves taking into account the whole life cycle of the products and services being procured, including the sourcing of raw materials, production, distribution, use, and disposal. The goal of sustainable procurement is to reduce negative impacts and maximize positive outcomes, such as reducing waste and emissions, promoting fair labor practices, and supporting local economies. Sustainable Procurement (SP) connects to sustainable development; such as creating a green environment, a healthy society and advancing good governance. The United Nations procurement website states that procurement is deemed sustainable if it meets requirements and specifications that favor environmental protection, social progress and economic growth. This includes seeking resource efficiency, better quality products & services and ultimately cutting costs (UNGM, 2011). Through SP, organizations leverage their purchasing power to send a message to the market in support of sustainability, selecting goods, works & services based on:

**Profit:** profit refers to Best value for money, availability, price, functionality, quality;

**Planet:** Green procurement looks at the environmental impact of a product or service throughout its entire lifespan. and

**People:** Social variables are aspects of a society or area that influence people's lives; examples include human rights, labor conditions, health and wellbeing, access to social resources, and quality of life.

Bangladesh Hi-Tech Park Authority (BHTPA) has set up Software Technology Parks, Hi-Tech Parks, IT Training center & Incubation Centers across the country to attract domestic and foreign investors for the development of Hi-Tech/IT/ITES industry. It creates tremendous employment opportunities and skilled manpower. Hi-tech parks are full of opportunities to invest in hi-tech industries and promote businesses based on knowledge and capital. Information Technology, Software Technology, Biotechnology,



Figure 1: 3 P for Sustainable Procurement

Renewable Energy, Green Technology, IT Hardware, IT Enabled Services, R&D, etc. are major investment areas in Bangladesh's high-tech industry. Bangladesh Hi-Tech Park Authority is currently working to establish 92 (Ninety-Two) hi-tech parks through the country. These parks are going to be equipped with all sort of off-site infrastructure such as optical fiber, gas, electricity, water supply, sewerage lines, internal roads, streetlights and industrial building/business spaces etc. to support targeted hi-tech manufacturing and service industries.

Meanwhile, construction of 13.15 lakh sqft of space have been completed in various parks including Bangabandhu Hi-Tech City in Kaliakoir, Sheikh Hasina Software Technology Park in Jessore, Sheikh Kamal IT Incubation and Training Centre in Natore and 'Janata Tower Software Technology Park in Dhaka, Sheikh Hasina Institute of frontier Technology, Bangabandhu Sheikh Mujib Hi-Tech Park , Sylhet, Bangabandhu Sheikh Mujib Hi-Tech Park , Rajshahi . Among the ready spaces 5. 41 lakh sqft have already been

## **1.2 Problem statement:**

The Bangladesh Hi-Tech Park Authority (BHTPA) follows general Public procurement rules (2006) and Public Procurement Regulation (2008) of the country. So, the organization only follows as much as sustainability is referring in that. The problem statement of the report on the Prospect & Challenge of Sustainable Procurement in Bangladesh Hi-Tech Park Authority is to assess the potential benefits and challenges of implementing sustainable procurement practices in the Hi-Tech Park Authority, and to provide recommendations for overcoming the challenges and fully realizing the benefits. The report seeks to address the following questions:

1. What are the prospect & potential benefits of implementing sustainable procurement practices in the Hi-Tech Park Authority?
2. What are the main challenges faced by the Hi-Tech Park Authority in implementing sustainable procurement practices?
3. What steps can the Hi-Tech Park Authority take to overcome these challenges and fully realize the benefits of sustainable procurement?

The issues and opportunities faced by this organization are distinct from other government entities, due to the unique nature of its operations.

### **1.3 Objectives of the Report:**

The objectives of the report is to provide a comprehensive analysis of the opportunities and barriers to implementing sustainable procurement in the Bangladesh Hi-Tech Park Authority, and to offer practical recommendations for overcoming the challenges and realizing the benefits. For this organization, there are particular tasks to undertake and goals to reach, compared to other government agencies. In order to achieve success, we should make suggestions for overcoming any obstacles and implementing greater sustainability in BHTPA's procurement process.

### **1.4 Methodology:**

I have collected and analyzed both primary and secondary data for the purpose of creating my report and have taken steps to ensure that no variables will interfere with my findings. The methodology for the report on the prospect and challenge of sustainable procurement in the Bangladesh Hi-Tech Park Authority can be based on a combination of qualitative, quantitative and interview research methods, including:

- a) Literature Review: This will involve an extensive review of existing literature and relevant reports on sustainable procurement, particularly in the context of Bangladesh. This will provide an overview of the current state of sustainable procurement practices in Bangladesh and internationally.
- b) Stakeholder Interviews: Qualitative interviews with key stakeholders such as government officials, industry representatives, supplier, local sourcing, civil society organizations, and academic experts will be conducted to gain a deeper understanding of the challenges and prospects of sustainable procurement in the Bangladesh Hi-Tech Park Authority.
- c) Case Studies: Case studies of successful sustainable procurement initiatives in other countries or industries can be analyzed to identify best practices and potential solutions to the challenges faced by the Authority.
- d) Existing government rules and regulation analysis: Bangladesh Hi-Tech Park Authority is government own organization so the organization must follow the public procurement rules and regulation which is developed by Central Procurement Technical Unit (CPTU).
- e) Analysis of industry strength Identification Tools: Different identification tools like, STEEPLED, Focus Group Discussion (FGD), SWOT analysis, personal interview, meeting with project personnel associated with the procurement of the BHTPA.

f) Review of Special Documents: The following special document related to Standard Tender Document (STD) of CPTU and World Bank (WB) bidding documents.

The methodology should ensure the inclusion of diverse perspectives and the use of reliable and valid data sources, to produce a comprehensive and credible report on the prospect and challenge of sustainable procurement in the Bangladesh Hi-Tech Park Authority. secondary sources have been used to collect necessary data.

## **1.6 Hypothesis:**

The hypothesis of the prospect and challenge of sustainable procurement in the Bangladesh Hi-Tech Park Authority is that while the Authority is committed to implementing sustainable procurement practices, there are several challenges that need to be overcome in order to fully achieve this goal. These challenges include a lack of awareness and understanding of sustainable procurement, limited resources and capacity, a lack of political will and commitment, and inadequate legal and regulatory frameworks. A hypothesis is a proposed statement that is subject to experimental testing. It is used to seek out an accurate and valid explanation of a process or phenomenon through scientific research. Hypotheses provide guidance in carrying out the investigation and defining both the verification process and the inquiry procedure. Hypotheses are the focal point of any research, so they should be formulated in such a way that allows for testing, as well as forming new hypotheses. Despite these challenges, there are also significant prospects for sustainable procurement in the Authority. These prospects include the potential to reduce costs and improve efficiency, the ability to enhance the Authority's reputation and credibility, the opportunity to drive innovation and support local suppliers, and the potential to contribute to environmental and social sustainability goals.

The hypothesis should align with the research method, relate to existing theory, be specific and testable, have a straightforward concept and be empirically verifiable. For this research-

Hypothesis I: a better awareness among all relevant stakeholders including government, industry, civil society, and academia can confirm better sustainability of procurement.

Hypothesis II: To achieve the potential and confront the obstacles of sustainable procurement in the Bangladesh Hi-Tech Park Authority, a shift in key personnel's attitude and approach towards this issue could guarantee greater sustainability.

Hypothesis III: Improved responsiveness and accountability can help ensure greater sustainability in BHTPA procurement practice.



Hypothesis IV: This strategy should include capacity building and training, awareness raising and stakeholder engagement, policy and legislative support, and the development of partnerships and collaboration between relevant organizations and stakeholders.

### **1.7 Limitation of the Study:**

This research had two key limitations: one was conceptual, the other was technical. Due to a lack of practice, sustainability has a lower priority among key decision-makers in BHTPA. Moreover, there was minimal time available to gain a thorough understanding of such an expansive topic.

The study on the prospect and challenge of sustainable procurement in the Bangladesh Hi-Tech Park Authority is likely to face several limitations, including:

- a) **Data Availability:** The availability of reliable and up-to-date data on sustainable procurement practices in Bangladesh and specifically in the Authority may be limited.
- b) **Response Bias:** The results of the study may be influenced by response bias, especially in the case of self-reported data from stakeholders.
- c) **Limited Time and Resources:** The limited time and resources available for the study may impact the scope and depth of the research.
- d) **Cultural and Societal Factors:** The cultural and societal factors in Bangladesh may impact the implementation and success of sustainable procurement practices, and these factors may not be fully captured in the study.
- e) **Political Will:** The level of political will and commitment to sustainable procurement in the Authority may impact the implementation and success of sustainable procurement practices.
- f) **Methodological Challenges:** The use of multiple research methods and the analysis of complex data may pose methodological challenges, leading to limitations in the interpretation and generalization of the results.

Despite these limitations, the study can still provide valuable insights and recommendations on the prospect and challenge of sustainable procurement in the Bangladesh Hi-Tech Park Authority, and contribute to the broader understanding of sustainable procurement practices in Bangladesh.

# **Chapter 2**

## **Literature Review**

### **2.1 Introduction:**

A literature review of the Prospect and Challenge of Sustainable Procurement in Bangladesh Hi-Tech Park Authority would involve exploring the existing research and studies on sustainable procurement practices in Bangladesh and the role of the Bangladesh Hi-Tech Park Authority in promoting sustainable procurement. This chapter discusses the theoretical origins of sustainability and sustainable procurement. We examine the rise of sustainability, its relationship to the environment, development, procurement, and public procurement. Additionally, some useful ideas related to sustainable procurement are presented. To begin the research process, we conducted a thorough and critical review of the existing literature. The literature review would also analyze the research gaps and identify areas for future research, such as the need for more detailed studies on the economic benefits of sustainable procurement and the challenges facing organizations in implementing sustainable procurement practices in Bangladesh. The literature review would provide a comprehensive overview of the state of sustainable procurement in Bangladesh and the role of the Bangladesh Hi-Tech Park Authority in promoting sustainable procurement, and would inform the development of recommendations for improving sustainable procurement practices in Bangladesh. Below, the concept of sustainable development, sustainable/responsible procurement in the public sector, possible drivers and constraints of sustainable procurement were analyzed. Various books, magazines, publications, and websites (CPTU, E-Procure, etc.) have been reviewed for comprehensive knowledge. Bangladesh's Draft Sustainable Public Procurement (SPP) Policy-2023, Public Procurement Act 2006 and Public Procurement Regulations 2008 were also examined to confirm the analysis on procurement of sustainability.

### **2.2 Procurement & Public Procurement:**

Procurement is a strategic function of a business and includes a high level of skill with added value, purchasing, cost, inventory, quality, supply logistic etc. Procurement refers to the process of acquiring goods, services, or works from an external source. It involves the identification of a need, selection of suppliers, negotiation of terms and conditions, and the delivery of the goods or services. Procurement is a critical function in organizations, as it helps to ensure that goods and services are obtained in a timely, cost-effective, and efficient manner. Procurement can be well-defined as “The process of obtaining goods or services in anyway, including purchasing, hiring, leasing and borrowing”. In other words,

procurement is the acquisition of goods, works and services for the needs of an organization. According to CIPS, “Procurement describes all those processes concerned with developing and implementing strategies to manage an organization’s spend portfolio in such a way as to contribute to the organization’s overall goals and to maximize the value released and/or minimize the total cost of ownership” (CIPS Procurement Glossary). Procurement policies include insourcing, outsourcing, bidding, direct negotiation, and various other procurement strategies. Once the strategy is established, execution includes market exposure, Request for Interest (RFI) and Request for Proposal (RFP) issuance, and/or negotiation. After evaluating the supplier's offer, the ideal solution is selected and the corresponding contract is signed.

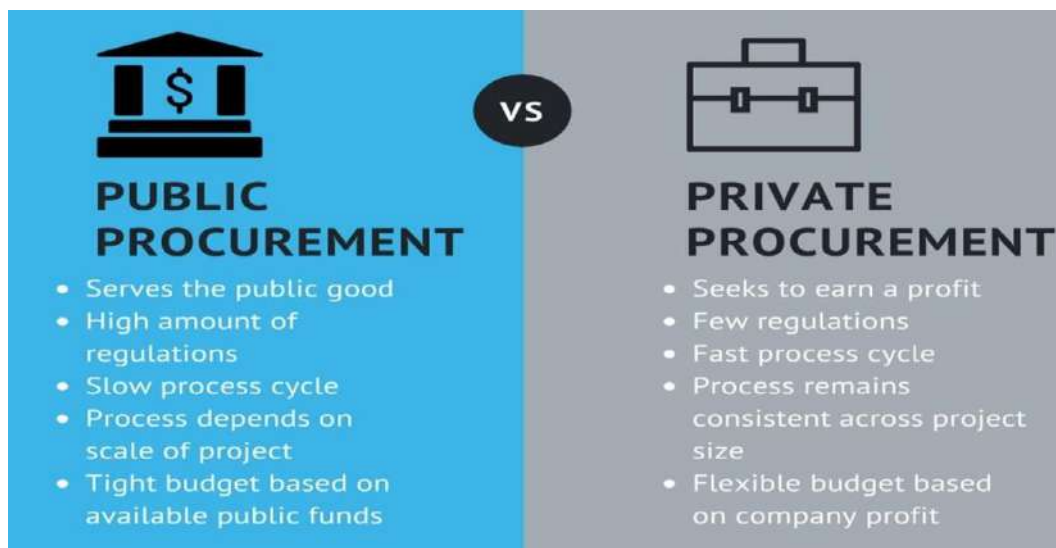


Figure 2: Public procurement vs Private procurement

Public procurement states to the function of procuring goods, works and services from an outside body with a contractual means by public bodies with government fund. According to PPR-2006 “The Public Procurement System is a function of government that involves using government resources (public funds) to obtain goods, works and services to meet the needs of the government as it carries out its responsibilities to the citizens”. Another way we say, “Public procurement is about spending tax payers "Money for the purchase of goods, works, and services necessary for public bodies to carry out their activities`. Public procurement is governed by a set of laws, regulations, and guidelines that are designed to ensure that the procurement process is fair, transparent, and competitive”. The goal of public procurement is to ensure that public funds are used in a manner that is consistent with the public interest and that the goods and services are procured in a manner that provides value for money.



Figure 3: public procurement process

Compared to private sector procurement & public procurement has extra challenges, such as the need to comply with rules & regulations and the obligation to maintain a high level of transparency and accountability. Public procurement also has a momentous impact on the economy, as public sector organizations are major purchasers of goods and services, and their procurement decisions can have a significant impact on the local economy. Public Procurement is facing new challenges, internationally: among these Strengthened focus on innovation, proportionality & “Fit for Purpose” and Integration of Modern procurement techniques.

### 2.3 The Concept of Sustainable Procurement:

Sustainable sourcing/Procuring is meeting business requirements for materials, goods, supplies and services in an environmentally friendly, responsible and ethical manner. Sustainable sourcing helps protect brand reputation as it requires companies to develop robust risk management. This allows us to better identify problematic suppliers and address vulnerabilities in their chain of supply that can cause scandals and bad reputations. It is therefore an approach that takes into account economic, ecological and social sustainability when making purchasing decisions. Sourcing of goods, construction work and services proficiently, with negligible risk and at the best possible cost is a central element of a buyer's job. Buyers should also consider the impact of how they buy and operate on their supply chain. For example, reducing lead times and purchase prices may seem like a good



Figure 4: 3P of SP

business strategy, but at the expense of labor standards further down the supply chain and the risk to a company's reputation from exploitation of workers. there is no.

Sustainable procurement is a procurement approach that considers the social, environmental, and economic impact of procurement activities, and aims to promote sustainable development. The concept of sustainable procurement is based on the principle that procurement activities should contribute to sustainable development, by taking into account the long-term impact of procurement decisions on the environment, society, and the economy. Sustainable procurement is about making the most of procurement opportunities to create positive environmental and social impact, while ensuring that procurement activities are economically viable and efficient. It is about balancing the traditional procurement priorities of cost, quality, and delivery with the principles of sustainability, such as reducing the environmental footprint, promoting ethical and responsible sourcing, and supporting local communities.

Sustainable procurement is becoming increasingly important as organizations face growing pressure to reduce their environmental impact, promote responsible sourcing, and support sustainable development. By adopting a sustainable procurement approach, organizations can improve their reputation, create business opportunities, reduce costs, and contribute to sustainable development.

The key elements of sustainable procurement include:

- a) Life-cycle thinking: considering the total life-cycle of the product or service, from production to disposal.
- b) Environmental impact: reducing the environmental footprint of procurement activities and promoting the use of environmentally-friendly products and services.
- c) Social impact: promoting ethical and responsible sourcing practices and supporting local communities.
- d) Economic viability: ensuring that procurement activities are economically viable and efficient.
- e) Whole Life Cycle Cost Analysis: Whole Life Cycle Cost Analysis (WLCA) is a procurement approach that considers the total cost of ownership of a product or service, including all costs associated with its procurement, use, maintenance, operation, overhead and disposal. It is a tool that helps organizations make informed procurement decisions by considering the long-term financial impact of their procurement activities. Sustainable procurement is an ongoing process,

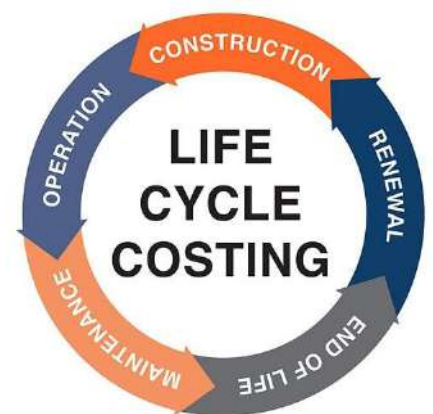


Figure 5: Whole Life Cycle Cost element

and organizations should continuously evaluate and improve their procurement practices to ensure that they are in line with sustainability principles.

Sustainable procurement has four main objectives. These are

- i) Minimize adverse effects throughout the life cycle and supply chain of goods, works or services;
- (ii) minimize the demand for non-renewable resources;
- (iii) ensure that fair contract prices and terms are applied and meet, at a minimum, ethical, human rights and labor standards;
- (iv) promote diversity and equality within the organization and across the supply chain; Possible routes to procurement functions for creating value through sustainability include:

	Triple Bottom Line or 3P	Consideration Issue
	Profit (Economic Value)	<ul style="list-style-type: none"> <li>- Cost and budget control.</li> <li>- ETI to support long-term financial sustainability.</li> <li>- Make sure for achieving Value for Money .</li> <li>- Effective investment evaluation and purchase of capital goods/equipment</li> <li>- Added value through efficiency, suppliers Commitment and quality improvement.</li> <li>-MEAT (Most Economically Advantages Tender)</li> </ul>
	Planet (Environmental Value)	<ul style="list-style-type: none"> <li>- Input into the design and specification of green products and services</li> <li>- Procurement of green equipment and resources</li> <li>- Reduce resource waste throughout the procurement cycle.</li> <li>- Manage logistics to minimize waste, pollution, greenhouse gas emissions, and environmental impact.</li> <li>- Application of 4R policy (rethink, reduce, reuse, recycle)</li> </ul>
	People (social value)	<ul style="list-style-type: none"> <li>- Promote diversity among procuring teams and suppliers.</li> <li>- Monitor supplier practices to ensure compliance human rights and labor standards (Health &amp; safety</li> </ul>

		<p>,child labor, forced labor, Working environment, occupational safety, equal opportunity, etc.)</p> <ul style="list-style-type: none"> <li>- Contribution to the safety and health of products and services</li> <li>- Fair and ethical trading initiatives (fair price, ethical power, ethical business performs)</li> <li>- Reduce transportation assistance by sourcing from local small businesses and local suppliers.</li> </ul>
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## 2.4 The Concept of Sustainable development and sustainable procurement:

Sustainability is a concept that refers to the ability of an economic, social, and environmental system to maintain its viability over time. It is a holistic approach to development that seeks to balance the economic, social, and environmental needs of present and future generations. According to university of Alberta “Sustainability means meeting our own needs without compromising the ability of future generations to meet their own needs. In inclusion to natural assets, we also need social and economic resources. Sustainability is not just about protecting the environment. Most definitions of sustainability also include concerns about social justice and economic development.”

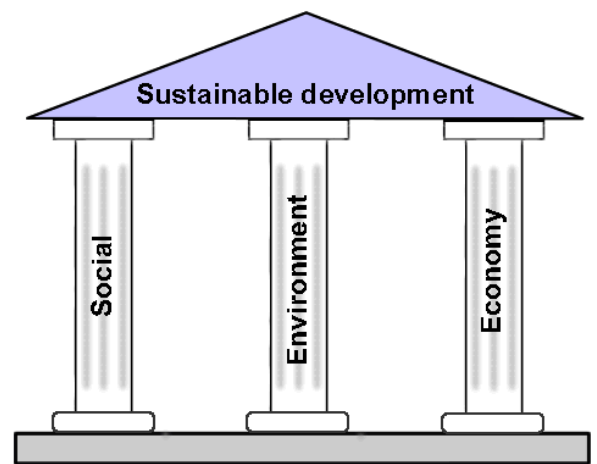


Figure 6: 3 Pillar of SP

Sustainability means taking actions today that won't detract from our future quality of life or plans. British Standard Institute's Sustainable Procurement Guide defines it as making decisions with a long-term outlook; we must consider our needs without hindering the needs of others present and future. The first discussion about sustainability was in 1972 at the United Nations Conference on the Human Environment. This was when environment concerns regarding development started to become more urgent. Notable disasters like Chernobyl and the Exxon Valdez oil spill brought environmental problems to the attention of the public, amplifying their political significance. The conference participants discussed more important matters. Economic development or environmental protection? At the same time, social justice issues have become a concern, especially in Africa where racial segregation is severe. Through ongoing discussions, the United Nations recognized that economic development and

environmental protection are closely linked and mutually reinforcing. Economic development is needed to improve living conditions and support investment in environmental protection and sustainable technology. At the same time, attempts to improve human welfare that threaten the environment were doomed to failure in the long run. Resource scarcity, environmental degradation and air, water and soil pollution affect the well-being and development potential of future generations. So the United Nations appointed a think tank chaired by Gro Harlem Brundtland to develop a strategy to enable sustainable economic development without damaging the environment. In 1987 the Brundtland Commission published the report "Our Common Future". The report defines sustainable development as 'development that meets the needs of the present without compromising the ability of future generations to meet their needs'. This idea was refined by the 1992 Rio Declaration on Environment and Development, adding, among other things, issues of social justice and human rights. This three-dimensional (economic, ecological, social) view of sustainability is widespread. In 1994, an accounting framework known as the Triple Bottom Line (TBL) for Sustainability was devised by John Ellington to allow countries and organizations to measure their performance in all three areas. TBL can be represented by 3P as Profit, People and Planet or 3E as Economics, Environment & Equity. In the 3Ps, Profit stands for economic performance, People for social sustainability, and Planet for ecological sustainability.

In recent years, these three dimensions have been the focus of a range of issues broadly relevant to business ethics and CSR, including corporate governance, fair trade, industrial relations, diversity, transparency, and the growing number of existing and emerging environmental issues such as climate change. We provide a framework. , renewable energy, pollution, genetic modification, etc.

Environmental Sustainability	We take into account the conservation of natural resources, ecosystems and biodiversity. Reduced ecological footprint. Ecological integrity is maintained and all of the earth's environmental systems are kept in balance, but the natural resources within them are being consumed at a rate that allows humans to replenish themselves.
Economic Sustainability	Integration of economic growth, full employment, effectiveness, social and environmental costs are considered. Human societies around the world can access the funds and other resources they need to remain self-reliant and meet their needs. The economic system is intact and activities are available to all, including safe living.



Social Sustainability	It works on human development, rights, education, poverty and inequality reduction, security and social inclusion. Universal human rights and basic needs are within the reach of all who have access to sufficient resources to maintain the health and safety of their families and communities. A healthy community has fair leaders who ensure that personal, labor and cultural rights are respected and that all people are protected from discrimination.
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Table-1: 3 areas of Sustainable procurement

Sustainable procurement is a procurement approach that considers the environmental, social, and economic impact of procurement activities, and seeks to minimize negative impacts and maximize positive contributions to sustainable development. It involves the integration of sustainability considerations into all aspects of the procurement process, including the identification of needs, selection of suppliers, negotiation of contracts, and management of suppliers. The goal of sustainable procurement

is to minimize the environmental footprint of procurement activities, promote social responsibility, and support economic growth in a manner that is consistent with the principles of sustainable development. This can include initiatives to promote environmentally friendly products, support local businesses and communities, and ensure that procurement activities are conducted in a manner that is fair, transparent, and competitive.

Sustainable procurement is increasingly being recognized as an important tool for organizations to contribute to sustainable development, and there is a growing focus on the need to improve sustainable procurement practices, both in the private and public sectors. This can include initiatives to raise awareness, provide training and support, and develop and implement sustainable procurement policies and procedures.

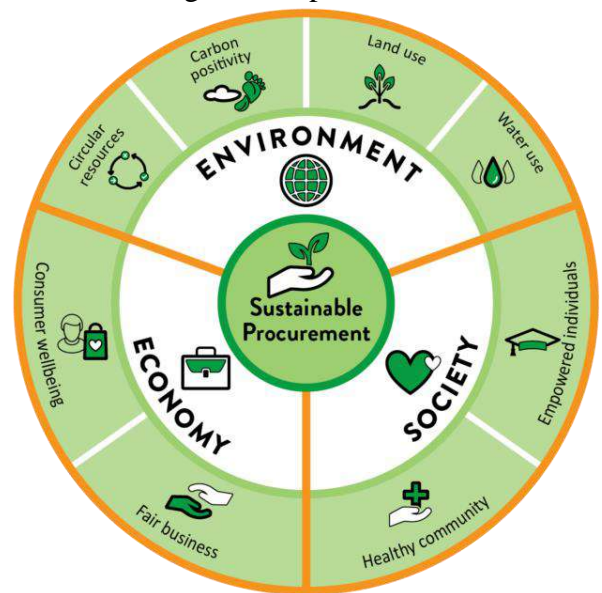


Figure 7: 3 approach that considers for SP

What are the 7 principles of sustainable procurement?

### **I. Sustainable Sourcing Policy**

- Compliance and Respect for International Standards.
- Respect for Human Rights.
- Environmental and Biodiversity Conservation, and Addressing Issues.
- Contribute to Solving Social Issues.
- Dialogue and Collaboration with Stakeholders.
- Utilization of New Technologies.

As per UNDP Sustainable procurement means making sure that the products and services we buy are as sustainable as possible, with the lowest environmental impact and most positive social results.

The 2015-17 UNDP Procurement Strategy represents a commitment by the organization to realize the benefits sustainable procurement offers. As part of the strategy, UNDP procurement will focus on: Incorporating sustainability criteria in the organization's purchasing evaluations; Developing monitoring mechanisms and assessments to promote vendor compliance in the UNDP supply chain; Stimulating innovation through crowd-sourcing, functional specifications and piloting other innovative technologies;

Better Integration of procurement at the project design stage; Promoting and utilizing public-private partnerships with companies that focus on innovation and sustainability; and Enhancing the already high transparency standards in UNDP's procurement activities.

### **2.5 Overview of sustainable procurement practices:**

Sustainable procurement mentions to the method of acquiring goods, works, and services in a way that takes into account social, environmental, and economic sustainability criteria. It involves integrating sustainability considerations into all aspects of procurement activities, from planning and specification to supplier selection and performance management. The goal of sustainable procurement is to create value for the organization, the suppliers, and the wider community, while minimizing negative impacts on the environment and society. Sustainable procurement practices typically include the following steps:

**Define Sustainability Objectives:** Organizations establish clear sustainability objectives and performance criteria for procurement activities.

**Plan and Specify Requirements:** Organizations specify sustainability requirements in procurement specifications and contracts, and assess the sustainability performance of suppliers.

Source and Select Suppliers: Organizations select suppliers based on their sustainability performance, and negotiate contracts that promote sustainability.

Monitor and Evaluate Performance: Organizations monitor supplier performance and evaluate the sustainability impacts of procurement activities, and take corrective action where necessary.

Continuously Improve: Organizations continuously improve their procurement processes and practices to achieve their sustainability objectives.

Sustainable procurement practices can have a significant impact on reducing the environmental and social impact of procurement activities, and can contribute to the broader goals of sustainable development. It requires a holistic and collaborative approach, involving all stakeholders in the procurement process, including suppliers, buyers, and other relevant organizations.

Some example of sustainable procurement practice in globally;

Ex-1: Freiburg, Germany

The Department of Schools and Education has leased an A-class copier for four years. No maintenance costs. 75 schools only pay for copies. Service cost reduced by 50%.

Ex-2: Kolding, Denmark

Denmark has changed its procurement policy almost 100% to include environmental considerations. 10% reduction in overall procurement budget.

Ex-3: Barcelona, Spain

All Barcelona's cleaning services (worth €16.2 Million) use nontoxic products

Ex-4: Zurich, Switzerland

Switzerland purchased 2,166 energy efficient computers = 127,114 kg of CO<sub>2</sub> saved, 45,081 m<sup>2</sup> of energy efficient and sustainable building materials standards, covered contracts worth €175.1 million, 390,000 Purchased EUR worth of organic food = 5.6% of total budget

Example-5:

Amaroucion/Kalitheia, Greece

Purchasing recycled paper in collaboration with several other authorities. Recycled paper costs less than plain paper.

## **2.6 Sustainable procurement in Bangladesh:**

Sustainable procurement in Bangladesh is an emerging area of interest, and the country is still in the early stages of integrating sustainability considerations into procurement activities. Bangladesh firmly

believes that the contemporary social and environmental challenges facing the world offer opportunities to make a difference while enhancing business. The BD Sustainability Strategy was developed to reflect our role in addressing the multiple challenges facing our industry, society and the planet. BD remains focused on creating shared value. More specifically, addressing unmet societal needs through business models and initiatives that also contribute to BD's commercial success. Now Bangladesh government expressed interest for sustainable procurement due to commitment of SDG's. However, there have been some recent initiatives and efforts to promote sustainable procurement practices in Bangladesh, including:

**Government Policy:** The government of Bangladesh has committed to promoting sustainable procurement practices, and has introduced policies and guidelines to support this effort. The CPTU has initiated Sustainable Public Procurement (SPP) Policy of Bangladesh in January, 2023. Sustainable Public Procurement (SPP) Policy of Bangladesh draft paper has already ready for stakeholder consultation.

**Private Sector Engagement:** The private sector in Bangladesh is becoming increasingly aware of the importance of sustainable procurement, and some organizations are taking steps to integrate sustainability considerations into their procurement activities. An example of sustainable procurement in the Bangladesh private sector is the Bangladesh Association of Software and Information Services (BASIS) working with its member organizations to encourage sustainable procurement practices in the IT industry. This includes the implementation of policies and procedures to ensure the procurement of environmentally friendly products and services, as well as engaging in partnerships with suppliers who adopt sustainable practices. BASIS also provides training and resources for its members to promote sustainable procurement, such as guidelines for assessing the sustainability of products and services, and information on sustainable procurement best practices.

- ❖ International Cooperation: Bangladesh is a signatory to international agreements and initiatives related to sustainable procurement, and is benefiting from international cooperation and support in this area.
- ❖ Civil Society Engagement: Civil society organizations in Bangladesh are actively engaged in promoting sustainable procurement practices, and are raising awareness of the benefits of sustainable procurement among stakeholders. Despite these efforts, there are still significant challenges to promoting sustainable procurement in Bangladesh, including:
- ❖ Limited Awareness: Awareness of sustainable procurement practices is limited among stakeholders, and there is a need for increased education and outreach efforts.

- ❖ **Lack of Capacity:** There is a lack of capacity among procurement practitioners and suppliers to implement sustainable procurement practices, and there is a need for capacity building and training programs.
- ❖ **Weak Implementation:** Implementation of sustainable procurement practices is weak in Bangladesh, and there is a need for stronger enforcement mechanisms and accountability frameworks.
- ❖ **Cost Considerations:** The cost of implementing sustainable procurement practices is a barrier for some organizations, and there is a need for financial and technical support to overcome this challenge. Despite these challenges, the potential benefits of sustainable procurement in Bangladesh are significant, and there is a growing recognition of the need for more sustainable procurement practices in the country. By overcoming the challenges and promoting sustainable procurement practices, Bangladesh can contribute to sustainable development and create value for all stakeholders.

## **2.7 Sustainable procurement in the Bangladesh Hi-Tech Park Authority:**

Bangladesh Hi-Tech Park Authority (BHTPA) is establishing Hi-Tech Park, Software Technology Park and IT Training & Incubation Centre throughout the country to attract the local and foreign investors for the development of Hi-Tech/ IT/ITES industries. It creates huge employment opportunities and skilled human resources. Hi-Tech park is full of opportunities to invest in Hi-Tec industry and promote business which are knowledge and capital-based. Information technology, Software Technology, Bio-Technology, Renewable Energy, Green Technology, IT Hardware, IT Enabled Services and R&D etc. are major areas of investment in Hi-Tech industry in Bangladesh. Bangladesh Hi-Tech Park Authority is currently working to establish 28 (twenty-eight) hi-tech parks across the country. These parks are going to be equipped with all sort of off-site infrastructure such as optical fiber, gas, electricity, water supply, sewerage lines, internal roads, streetlights and industrial building/business spaces etc. to support targeted hi-tech manufacturing and service industries. The Bangladesh Hi-Tech Park Authority (BHTPA) is a government agency responsible for the development and management of hi-tech parks in Bangladesh. The Authority is committed to promoting sustainable development and has taken steps to integrate sustainability considerations into its procurement activities. Bangladesh Hi Tech Park Authority is currently constructing all buildings that require less electricity. It is planning to collect natural water to meet the water demand of various hi-tech parks. Plans to refrain from purchasing activities that have an adverse impact on the environment. Sustainable procurement in the BHTPA is still in the early stages of development, but the Authority has already taken some steps to promote sustainable procurement practices, including:

- **Policy Development:** The BHTPA has not yet developed policies and guidelines for sustainable procurement but BHTPA actively promoting sustainable procurement practices among its stakeholders. BHTPA has been taken action to reuse the product and use environment friendly products.
- **Supplier Engagement:** The BHTPA is engaging with suppliers to promote sustainable procurement practices, and is working to increase awareness of the benefits of sustainable procurement among suppliers. BHTPA try to procure goods which is environment friendly.
- **Monitoring and Evaluation:** The BHTPA is monitoring the sustainability performance of its procurement activities, and is evaluating the impact of its procurement practices on the environment and society.

Despite these efforts, there are still challenges to promoting sustainable procurement in the BHTPA, including:

- **Limited Awareness:** Awareness of sustainable procurement practices is limited among stakeholders, and there is a need for increased education and outreach efforts.
- **Lack of Capacity:** There is a lack of capacity among procurement practitioners and suppliers to implement sustainable procurement practices, and there is a need for capacity building and training programs.
- **Cost Considerations:** The cost of implementing sustainable procurement practices is a barrier for some organizations, and there is a need for financial and technical support to overcome this challenge.
- **Weak Implementation:** Implementation of sustainable procurement practices is weak in the BHTPA, and there is a need for stronger enforcement mechanisms and accountability frameworks.

Despite these challenges, the BHTPA has the potential to play a significant role in promoting sustainable procurement practices in Bangladesh, and can contribute to sustainable development and create value for all stakeholders. By overcoming the challenges and promoting sustainable procurement practices, the BHTPA can help to create a more sustainable future for Bangladesh.

## **2.8 Sustainable Consumption and Production:**

Sustainable Consumption and Production (SCP) is a global strategy aimed at promoting economic growth, social well-being and environmental protection by using resources in a more sustainable and efficient manner. SCP involves a transition to a more sustainable and equitable pattern of consumption

and production, with a focus on reducing waste, increasing resource efficiency and reducing negative impacts on the environment. It promotes the use of products and services that are environmentally friendly, socially responsible and economically viable, while reducing the use of finite resources, such as energy, water and materials. The key objectives of SCP are to reduce the use of natural resources, reduce pollution and waste, and create more sustainable production processes and products. The ultimate goal is to create a more sustainable, low-carbon economy and improve the quality of life for all. “ Sustainable consumption and production” is the term used to define this aspect of sustainable development.

Production term can be used to describe various actions performed in the process of transporting raw materials, resources, and different inputs to finished goods and offerings as outputs. Activities within the process include product and service design, procurement and delivery, logistics, resource consumption, processing, manufacturing, assembly or service provision, waste management, technology management, facility management, human resource management, outsourcing and offshoring. etc. Due to the influence of production activities, it may have a negative impact on the environment and society.

## Key Elements of Sustainable Consumption and

**Production Source:** As per UNEP (2010) there are 9 key elements of Sustainable Consumption and Production Source. These are;

1. Sustainable resource management
2. Design for sustainability
3. Cleaner production & resource efficiency
4. sustainable transport
5. Eco-labelling & certification
6. Sustainable procurement
7. Sustainable marketing
8. Sustainable lifestyle
9. Waste management



Figure 8: elements of Sustainable Consumption and Production

Source: [https://www.researchgate.net/figure/Key-Elements-of-Sustainable-Consumption-and-Production-Source-UNEP-2010\\_fig3\\_320464172](https://www.researchgate.net/figure/Key-Elements-of-Sustainable-Consumption-and-Production-Source-UNEP-2010_fig3_320464172)

Some key sustainability concerns of production process are-

- (i) Reduction of environmental pollution and destruction;
- (ii) Disposal of waste from manufacturing, packaging and waste;

- (iii) Reduction of greenhouse gas and CO<sub>2</sub> emissions
- (iv) Reducing the use of non-renewable resources;
- (v) Design environmentally friendly products.
- (vi) Designing or adapting environmentally friendly production methods;
- (vii) Reduce the negative impact of doing business on communities and social institutions;
- (viii) Ethical and responsible treatment of workers should be ensured;

Sustainable consumption is the use of products and services in a manner that promotes environmental sustainability and social responsibility. Here are some examples of sustainable consumption that organizations can implement:

- a) Reducing energy consumption: Organizations can reduce their energy consumption by using energy-efficient equipment, optimizing energy use in buildings, and implementing a comprehensive energy management program.
- b) Using eco-friendly products: Organizations can use eco-friendly products, such as biodegradable or recycled materials, in their operations to lessen the environmental impact of their consumption.
- c) Encouraging carpooling or public transportation: Organizations can encourage employees to carpool or use public transportation to reduce the environmental impact of their commuting.
- d) Implementing a waste reduction program: Organizations can implement a waste reduction program to reduce the amount of waste generated and to promote recycling.
- e) Encouraging sustainable purchasing: Organizations can encourage employees to make sustainable purchasing decisions, such as buying products made from recycled materials or products that are produced in an environmentally responsible manner. Buy energy efficient appliances and machinery to reduce energy consumption. Purchasing re-usable, recyclable and biodegradable product.
- f) Implementing a sustainable supply chain management program: Organizations can implement a sustainable supply chain management program to promote environmentally responsible practices throughout the supply chain. Reduction of unnecessary transport kilometers, fuel consumption and CO<sub>2</sub> emissions.

By implementing these examples of sustainable consumption, organizations can play an important role in promoting sustainable consumption and production and reducing the environmental impact of their operations. Additionally, they can help to build a more responsible and equitable supply chain, which can improve the quality of life for all.



## 2.9 Benefits of Sustainable Procurement:

Society can reap significant benefits by paying attention to sustainability in the time sourcing/procuring. Buyers typically have a lot of authority and control over what is made and how it is made, as they set the specifications for the product they want. Buyers actually "select" the manufacturer of the product each time they purchase it. If you purchased a product from an ethically irresponsible company. Companies that exploit their employees and harm the environment through their operations, companies that engage in such unsustainable practices are encouraged to continue. It should not be happening.



Figure 9: Benefits of Sustainable Procurement

Governments with the greatest purchasing power should therefore support companies that produce sustainable products. Public procurement therefore needs to take sustainability aspects into account in its procurement process. This ensures that development goals are achieved through the purchase of goods, works and services without causing great harm to society or the environment. Sustainable sourcing aims for long-term impact on economic, social and environmental issues

- (i) Achieve value for money;
- (ii) Promote innovation and differentiation;
- (iii) Improve ethical behavior, especially of suppliers/contractors;
- (iv) Improving Working Conditions – Health and Safety, Labor Standards
- (v) Increase sales
- (vi) Improve the situation of disadvantaged groups within the country;
- (vii) Reducing hazardous emissions and waste generation;
- (viii) Increase procurement indicators
- (ix) Reduce overall cost
- (x) Air, water and soil improvement;
- (xi) Encourage local industries to apply sustainable procurement practices;
- (xii) Increase brand value & reputation
- (xiii) Achieving competitive advantages

## 2.10 Potential Drivers for Sustainable Procurement:

We have already discussed the main reasons for the growing interest in sustainability in procurement. Sustainability enablers have his two main types: drivers and enablers. Drivers are the forces exerting pressure to develop and implement sustainable procurement strategies. Enablers are factors that create

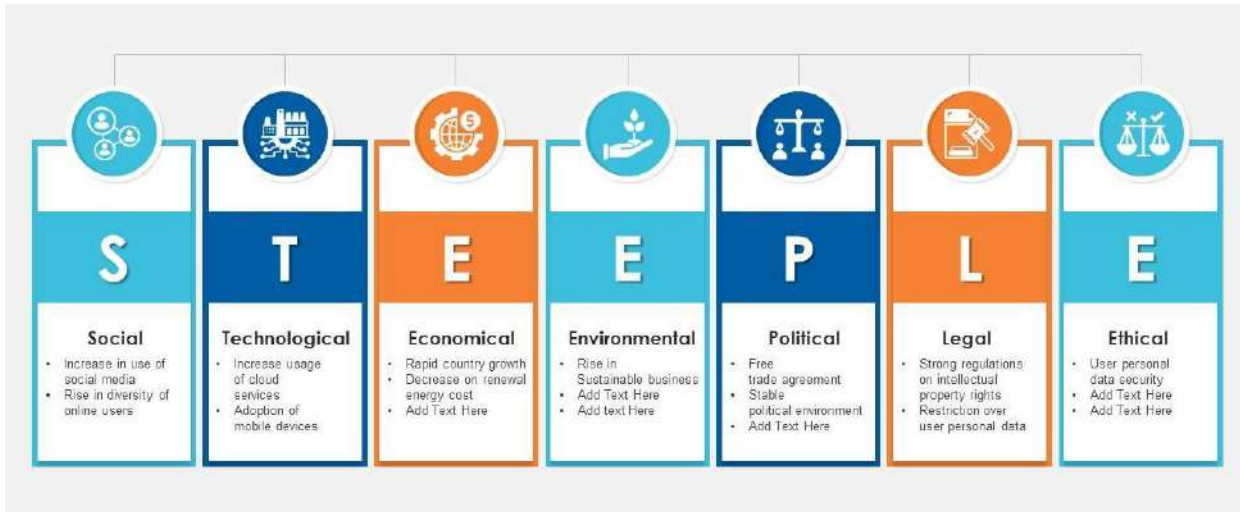


Figure 10: STEEPLE factors

the conditions for a sustainable procurement strategy. Key factors include lack of resources, legislation, reputational risks/opportunities, and shareholder pressure. Potential drivers for sustainable procurement can be analyzed using STEEPLE factors, which are the political, social, economic, technological, environmental, legal, and ethical dimensions of sustainability.

Factors	Description
Social	The public can drive sustainable procurement by demanding environmentally friendly products and services and by supporting organizations that adopt sustainable procurement practices.
Technological:	The development of new technologies can drive sustainable procurement by making it easier and more cost-effective to adopt environmentally friendly products and services.
Economic:	Organizations can drive sustainable procurement by realizing the economic benefits of sustainable procurement, such as reduced costs and increased competitiveness. Currently, the market demand for unsustainable products/services is lost and the market demand for sustainable products/services is increasing. Consumers are demanding more environmentally friendly products.

Environmental:	Environmental concerns, such as climate change, can drive sustainable procurement by increasing the demand for environmentally friendly products and services. A growing awareness of environmental issues and the need to reduce the negative impact of consumption and production on the planet has driven companies to adopt sustainable procurement practices.
Political:	Governments and public agencies can drive sustainable procurement through regulations and policies that require the use of environmentally welcoming products and services, and by providing financial motivations to organizations that adopt sustainable procurement practices. This includes government policies, goals and standards, incentives and penalties, and government practices as buyers/suppliers and employers.
Legal:	Laws and regulations can drive sustainable procurement by requiring organizations to adopt environmentally friendly products and services. National and international laws/regulation on sustainability, waste, emissions, pollution, health and safety, consumer rights, labor rights, corporate governance, public sector procurement, etc.
Ethical:	Organizations can drive sustainable procurement by considering the ethical implications of their procurement practices, such as the impact on workers, communities, and the environment.

Table-2: STEEPLE analysis

By considering these STEEPLE factors, organizations can identify the drivers that are most relevant to their sustainable procurement program and take steps to address them. By doing so, they can promote

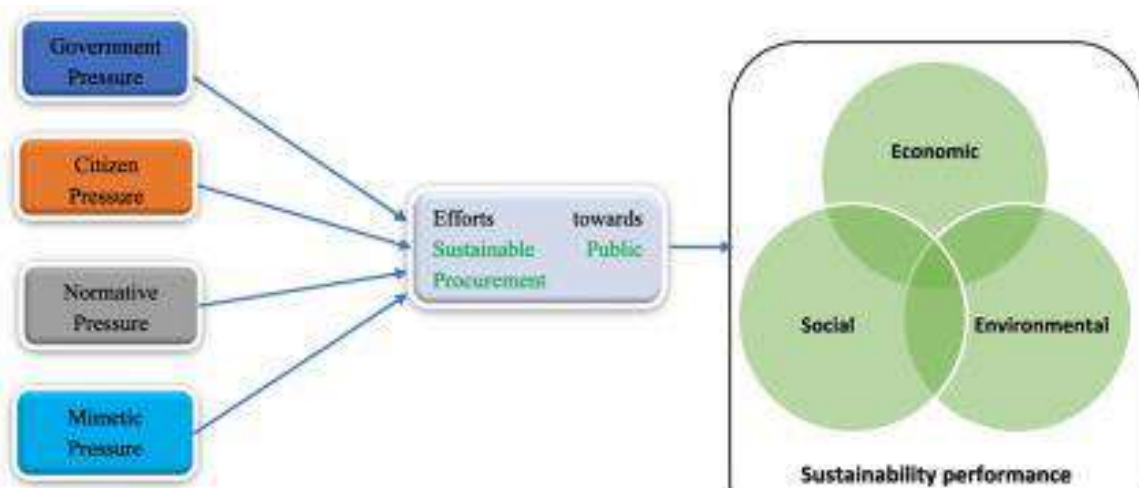


Figure 11: Equitable supply chain

sustainable consumption and production, reduce the environmental impact of their operations, and build a more responsible and equitable supply chain.

There are several potential drivers for sustainable procurement, which include:

**Market demand:** Consumers are becoming more environmentally conscious and are increasingly looking for products and services that are sustainable and socially responsible. This has created a demand for sustainable procurement, which companies are responding to in order to remain competitive.

**Cost savings:** Sustainable procurement can result in cost savings by reducing waste, reducing energy consumption and increasing resource efficiency.

**Reputation:** Companies that adopt sustainable procurement practices are viewed more positively by consumers, investors, and stakeholders. This can enhance the reputation of the company and increase its competitiveness in the market.

**Supply chain responsibility:** Companies are increasingly aware of their responsibility to ensure the sustainability of their supply chain and to ensure that their suppliers adopt sustainable practices.

## **2.11 Challenges to Sustainable Public Procurement:**

Sustainable public procurement is a complex and challenging process that requires the integration of environmental, social and economic considerations into procurement decision-making. Despite the benefits, there are several challenges that can impede its implementation, including:

**Lack of leadership and commitment:** A lack of leadership and commitment from senior management can be a major challenge for sustainable public procurement. Without a clear commitment from the top, it can be difficult to secure the resources, support, and buy-in needed to implement a successful program. Sustainable public procurement is often a cross-functional initiative that requires the involvement of multiple departments. This can lead to confusion about who is responsible for the program and can make it difficult to coordinate efforts.

### **Supply Chain Traceability:**

In terms of transparency and visibility, it is becoming increasingly important for companies to be able to understand exactly the ecological footprint of the products they purchase and ethically know where they came from.

**Lack of Awareness:** Many public procurement officials lack the knowledge and expertise needed to implement sustainable procurement practices, leading to a lack of interest or action in this area.

**Labelling and measuring carbon impact:**

Many companies are questioning future labeling and future sustainability challenges. Like today's allergen and nutrition information, it is not unlikely that one day the measurement of CO2 emissions will be mandated. This has a ripple effect, shaping industry behavior and influencing organizations that only produce products below a predetermined number of his CO2 levels. It could also attract more attention from existing manufacturers who need to change their production methods and record them. Carbon footprint compliance, such as palm oil.

**Cost:** Sustainable products and services can be more expensive than their conventional counterparts, making them less attractive to public procurement officials who may be under pressure to reduce costs.

**Procurement technology and automation:**

The only way to get comprehensive information is to have data at every stage of the supply chain. The best way to do this is with dedicated technology and automation. When this information is collected properly, organizations can make more informed decisions, reducing team management and time pressure.

**Limited Availability of Sustainable Products:** There is a limited availability of sustainable products and services, particularly in developing countries, which can make it difficult for public procurement officials to find suitable options.

**Resistance to Change:** There can be resistance to change within procurement organizations, with some officials being skeptical of the benefits of sustainable procurement and hesitant to implement new processes and procedures.

**Customer demand for sustainability:**

Sustainability transfers to the majority. There is a growing consumer demand for companies to track their environmental footprint, and for many companies this also means through their supply chains. We are not yet at the point where this coarser level of traceability discourages mass consumer purchases or facilitates mass buying decisions, but it will in the near future. Consumers are becoming more and more environmentally conscious. They are prioritizing brands that are already on the sustainability path. Tracking sustainability certifications should therefore be proactive and top-down. We will see meaningful change for the future only when laws and direct consumption habits require it.

**Limited Data and Information:** There is limited data and information available to support sustainable procurement decision-making, which can make it difficult for public procurement officials to assess the sustainability of different products and services.

**Complexity of integrated process:** The integration of environmental, social and economic considerations into procurement decision-making can be complex, requiring a high level of technical expertise and resources.

**Complex procurement processes:** Procurement processes can be complex, and incorporating sustainability considerations into these processes can add additional layers of complexity.

Despite these challenges, sustainable public procurement is a crucial step towards promoting sustainable consumption and production, and can help governments to meet their environmental and social responsibilities.

## **2.12 Sustainability and Public Procurement:**

Sustainability and public procurement are closely linked as public procurement can play a significant role in promoting sustainable consumption and production. Public procurement refers to the purchase of goods, services and works by public sector organizations, such as government agencies and public institutions. Sustainability in public procurement refers to the integration of environmental, social and economic considerations into procurement decision-making, with the goal of promoting sustainable consumption and production. The benefits of incorporating sustainability into public procurement include reducing the environmental impact of consumption and production, promoting the use of environmentally friendly products and services, and supporting the development of a low-carbon, sustainable economy. In addition, sustainable procurement can help to reduce costs, increase resource efficiency, and improve the reputation and competitiveness of public sector organizations. Environmental issues have now been on the international agenda for decades, and both the public and private sectors are concerned about the role they play in these issues. Although common in the country, sustainable sourcing awareness and implementation is still relatively low in most developing countries. The concerned point of Public procurement is how public sector organizations spend tax payers' money on goods, works and services. Government procurement is directed by principles of transparency, accountability, and achieving value for money for citizens and tax payers. Government expenditure is significant often the single biggest customer within a country, and government can theoretically use this purchasing power to stimulate the behavior of private sector organizations.

## **2.13 Role of the Bangladesh Hi-Tech Park Authority in Promoting Sustainable Procurement:**

The Bangladesh Hi-Tech Park Authority (BHTPA) plays an important role in promoting sustainable procurement in the technology sector in Bangladesh. The BHTPA is responsible for the development and management of the country's hi-tech parks, which provide a platform for technology-based businesses to grow and thrive.

The BHTPA can promote sustainable procurement in several ways, including:

a) **Developing policies and procedures:** The BHTPA can develop policies and procedures for sustainable procurement that promote the use of environmentally friendly products and services, reduce waste, and increase resource efficiency.

b) **Providing training and resources:** The BHTPA can provide training and resources to businesses operating in the hi-tech parks to help them adopt sustainable procurement practices, such as guidelines for assessing the sustainability of products and services, and information on sustainable procurement best practices.

c) **Engaging with suppliers:** The BHTPA can engage with suppliers to encourage the adoption of sustainable procurement practices, such as reducing waste, reducing the use of hazardous materials, and increasing the use of renewable energy.

d) **Encouraging sustainable product development:** The BHTPA can encourage technology-based businesses to develop sustainable products and services, and provide support and resources to help them achieve this goal.

e) **E waste Management Plant:** The BHTPA initiate to set up E-waste Management Plant for disposal e-waste for reducing environment pollution.

f) **Prefer sustainable conscious company for considering land allotment:**

By promoting sustainable procurement, the BHTPA can help to create a more sustainable and environmentally friendly technology sector in Bangladesh, which can contribute to the country's economic growth and development. Additionally, it can help to build a more responsible and equitable supply chain, which can improve the quality of life for all.

## **2.14 Best Practices and Lessons Learned to Implementing Sustainable Procurement:**

Implementing sustainable procurement is a complex and challenging process, but it can be done effectively with the right approach. The following are some best practices and lessons learned for implementing sustainable procurement:

**Develop a strategic plan:** Develop a strategic plan that outlines the goals and objectives of the sustainable procurement program, and outlines the steps that will be taken to achieve these goals.

**Involve stakeholders:** Engage stakeholders, including suppliers, customers, and employees, in the sustainable procurement process to ensure their support and to identify opportunities for improvement.

**Assess the sustainability of products and services:** Conduct an assessment of the sustainability of products and services to determine their environmental impact and to identify opportunities for improvement.

**Engage with suppliers:** Engage with suppliers to encourage them to adopt sustainable practices, such as reducing waste, reducing the use of hazardous materials, and increasing the use of renewable energy.

**Implement sustainable procurement policies and procedures:** Implement policies and procedures for sustainable procurement that promote the use of environmentally friendly products and services, reduce waste, and increase resource efficiency.

**Measure and report on results:** Measure and report on the results of the sustainable procurement program to demonstrate its impact and to identify areas for improvement.

**Continuously improve:** Continuously improve the sustainable procurement program by reviewing and updating policies and procedures, engaging with stakeholders, and evaluating the results of the program.

By implementing these best practices and lessons learned, organizations can effectively implement sustainable procurement and encourage sustainable consumption and production. Additionally, they can help to build a more responsible and equitable supply chain, which can improve the quality of life for all.



## Chapter 3

### Public Procurement & Bangladesh Hi-Tech Park Authority (BHTPA)

#### 3.1 Introduction

This chapter tells about public procurement in Bangladesh. It explains what public procurement is, and how it works. It also explains the law that governs public procurement in Bangladesh. This chapter also presents a familiar history to public procurement and its records and future development. It offers a whole photograph of public procurement in Bangladesh via combining the legal framework underneath which public procurement is implemented and regulated with the popular ideas and traits of public procurement currently in practice. The Public Procurement Act 2006 (PPA 2006) defines the term “procurement” as “purchase or hire of goods, or acquisition of goods by buy and lease, and performance of work and provision of offerings by means of contractual means”. Public procurement can be greatly described as the purchase, acquisition or procurement of goods, works or offerings by using the public zone underneath contract. Rather, public procurement refers to the procurement of goods, development work, or services where the acquisition is made with capital from public funds. Governments round the world want to make sure necessary offerings for their people, such as health, education and protection infrastructure. To meet the demand for these services, governments purchase goods, works and offerings on the open market.

The Bangladesh Hi-Tech Park Authority (BHTPA) is responsible for the development and management of the Hi-Tech Park in Bangladesh. The Hi-Tech Park is an important part of the country's economic development and is designed to support the growth of the technology and IT industries. As a result, the BHTPA plays an important role in promoting sustainable procurement in Bangladesh. The BHTPA can promote sustainable procurement by setting procurement policies that require the use of environmentally friendly products and services, and by providing incentives for organizations that adopt sustainable procurement practices. Additionally, the BHTPA can provide training and resources to organizations that are looking to implement sustainable procurement practices, and can help to create a supportive environment for sustainable procurement. By promoting sustainable procurement, the BHTPA can help to reduce the environmental impact of the Hi-Tech Park, and can help to build a more responsible and equitable supply chain. This can lead to increased efficiency, reduced costs, and improved sustainability outcomes for the organizations that are located in the Hi-Tech Park. Additionally, by promoting sustainable procurement, the BHTPA can help to support the broader goals of sustainable development and economic growth in Bangladesh.

### **3.2 Legal framework of public procurement in Bangladesh:**

In 1999, the World Bank and ADB jointly reviewed country portfolio performance and developed the Government Procurement Action Plan. His CPAR 2002, prepared by WB in agreement with GoB, identified several deficiencies in procurement system of GoB's.

- a) Lack of a robust legal framework for public procurement
- b) Complex bureaucratic procedures leading to delays
- c) Lack of adequate professional competence in staff managing public procurement
- d) Generally Poor Quality of Offer Documents and Offer Evaluations
- e) Invalid contract management
- f) Lack of adequate mechanisms to ensure transparency and accountability

In the CPAR-2002, the World Bank made several recommendations aimed at incorporating public procurement systems into a broader legal framework. Recommendations include:

- a) Establishment of Public Procurement Policy Department
- b) Issuance of Regulations on Public Procurement
- c) Streamline your processes. Process and financial delegation authority
- d) Development of Procurement Management Capabilities
- e) Issue of Contract Awards
- f) Establish grievance procedures

Public Procurement Reforms & legal frameworks: Now Bangladesh government has developed the following legal framework

- Public Procurement Regulations 2003
- Public Procurement Act, 2006
- Public Procurement Rules, 2008
- e-GP Guidelines, 2011
- Standard Tender Documents (STDs)
- Delegation of Financial Powers
- Procurement Processing and Approval Time table

In Bangladesh, the government procurement system is decentralized. Pursuant to the 2008 PPR, using standard tender documents and standard proposal requirements prepared by CPTU, various departments and departments under various ministries and agencies from national level to upazila level will carry out the actual procurement functions. At the central level, ministries have few procurement functions, mainly grain, printing and stationery (World Bank, 2002).

### **3.3 Public Procurement Techniques in Bangladesh:**

The fundamental philosophies of Public procurement that is a built-in system are outlined in the intent for the performing of the Public Procurement Act, 2006 as says that it is an Act to provide for tactics to be accompanied for ensuring transparency and accountability in the buying of goods, works and services using public money and assure equal therapy and free and truthful opposition among all events wishing to participate in such procurements. The Challenges for procurement officers are to make certain

- a) Economy, efficiency, “value for money”
- b) Compliance with Act & Rules for make certain Competition, transparency, equality
- c) Assure Public pastime with the aid of Employment, social exclusion, monetary development, environment

The Public Procurement Rules, 2008 prescribes several techniques of procurement, dividing the procurement into home and global classes. For the country wide procurement, the most preferred method is the Open Tendering Method (OTM) which ensures equal danger to all tenderer, open competition and perfect advertisement. However, a wide variety of procurement techniques preferences to the OTM are additionally allowed under certain circumstances. These strategies must be life like on technical and financial justification. With Prior permission of the Head of Procuring Entity (HOPE) has to be required for techniques different than the OTM. There are some necessary stipulations that want to be considered when applying the choice methods. These other methods for procurement of goods and works include-

	Procurement Method	Description
i	Open Tendering Method (OTM)	Open Tendering Method (OTM) which guarantees the same chance to all tenderer, open competition and appropriate advertisement in publicly.
ii	Limited Tendering Method (LTM)	LTM can be used when there are a limited number of suppliers, or when the time and cost of obtaining and evaluating bids exceeds the order value, or when the situation is urgent.
iii	Two Stage Tendering Method (TSTM)	Two Stage Tendering Method use for complex and large projects, or where a full technical specification cannot be produced in one stage, or alternative solutions are available but the procuring entity is unknown due to rapidly changing technology bidding methods are available.
iv	One Stage Two Envelope Tendering Method (OSTEM)	One stage tendering method use for large projects or when preparing whole technical specifications is not possible at one stage or where different solutions may be available but not known to the procuring entity due to swiftly changing technology
v	Request for Quotation Method (RFQM)	RFQM can be used for standard, low-value, off-the-shelf goods, or low-value work or physical services, if the value is within a given threshold.
vi	Direct Procurement Method (DPM).	DPM are used when goods are sourced from a sole proprietorship under patent or copyright, or when additional goods or services are sourced from the original supplier/manufacturer, or when goods are purchased from a retailer or manufacturer. or where special types of goods are supplied by local manufacturers, or for the procurement of goods, works or services of a very urgent and essential nature. If so, the above methods are also applicable, but with certain differences to maintain standards and competition.

Table-3: Public Procurement Method

**Methods of procurement for Services depend on the conditions to meet the Procuring Entity’s specific needs**

- Quality & Cost Based Selection (QCBS): Consider the quality & cost of the services
- Fixed Budget Selection (FBS): Available budget is fixed
- Least Cost Selection (LCS)
- Community Service Organization Selection (CSOS)
- Single Source Selection (SSS)
- Individual Consultant Selection (ICS)
- Selection Based on Consultants Qualifications (SBCQ)
- Design Contest Selection (DCS)

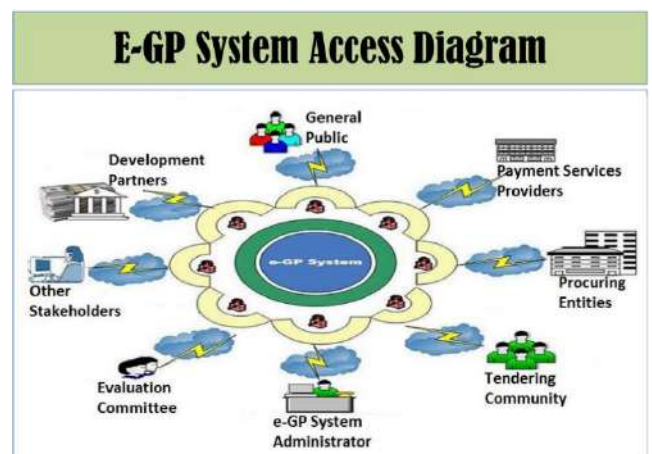
**Section 65, PPA-2006: E- Government Procurement**

- (1) For carrying out the purposes of this Act, any or all government procurement under this Act may be undertaken using electronic processing system.
- (2) The electronic processing system and the principles governing such system shall be prescribed by the Government

Embracing information technology in public procurement will greatly help in facing the challenges.

**E-GP System:**

Electronic – Government Procurement (E-GP) is the use of records and Communications Technology (especially the internet) through authority’s groups and other actors of the procurement community in conducting all activities of Government Procurement Process Cycle for the acquisition of goods, works, and services with good governance in procurement management.



*Figure 12: E-GP System*

### 3.4 Towards the sustainable procurement:

Public procurement is greater than just a simple act of buy by using government. It is an essential economic undertaking and it bills for the biggest share of government spending without wages. It can also be used as a public coverage tool to foster specific economic and social outcomes. Procurement practices decide the closing destination and beneficiary of a massive share of public spending (Ellmers, 2011). As the authorities of any country is the single biggest purchaser of goods, works or services, this buying strength of the public sector could play a considerable function in initiating the sustainable procurement practices each in public and non-public sector. By doing so, the public quarter can set an instance and act as an important “norm setter” towards a sustainable development. The recent spectrum of attitudes have shifted toward the adaptation of a more environmentally and socially responsible ethos. Sustainable procurement is a broad coverage idea and a basic price that is gaining legitimacy in commercial enterprise practices. Environmental pressures are increasingly turning into recognized as new market possibilities in which top environmental performance will be viewed as a pre-requisite for true administration practices. So, it is not enough to put solely the fee and best criteria in procurement, it is equally important to put sustainability criteria in procurement.

There are several techniques that can be used in Bangladesh to promote sustainable public procurement:

**Life Cycle Assessment (LCA):** This is a tool used to evaluate the environmental impact of products and services over their entire life cycle, from production to disposal. LCAs can be used to make informed decisions about procurement, and to identify opportunities to reduce the environmental impact of procurement practices.

**Green procurement:** This is the process of purchasing products and services that are environmentally friendly, such as products made from recycled materials, or products that have a lower carbon footprint.

**Supplier engagement:** This involves working with suppliers to encourage them to adopt sustainable practices and to incorporate sustainability considerations into their procurement practices.

**Contract management:** This involves incorporating sustainability considerations into contracts with suppliers, and monitoring and reporting on the performance of suppliers in relation to sustainability.

**Training and awareness:** This involves providing training and resources to procurement staff and other stakeholders to help them understand the importance of sustainable procurement and to learn about best practices for implementing sustainable procurement.

By using these techniques, public procurement organizations in Bangladesh can promote sustainable procurement and reduce the environmental impact of their operations. Additionally, by promoting sustainable procurement, public procurement organizations can help to support the broader goals of sustainable development and economic growth in Bangladesh.

### **3.5 Sustainable procurement & Sustainability addressed in Public Procurement Documents:**

Bangladesh government committed to achieve SDGs. Bangladesh expends about \$25 billion on public procurement annually -equal to about 40% of its yearly budget. Effective Public procurement is key to ensuring timely and quality public service delivery to the people. -Whilst existing procurement framework and practices are pursued to choose the 'lowest-cost' contract with some 'quality' check, lowest-cost purchase does not necessarily ensure maximum benefit in the long run. Traditional procurement does not consider the cost of other attributes of procurement. This section deals with sustainability issues that are included in the current state of public procurement. Public procurement in Bangladesh is governed by the Public Procurement Act 2006 and the Public Procurement Regulations 2008. In addition, this CPTU has developed a set of Standard Tender Documents (STD) for Goods and Works and Standard Request for Proposal (SRFP) for Services, depending on the type, scale or volume of procurement. Table 3.5.1 shows the sustainability factors covered in the Procurement Document – Service Sector Items Relevant to the Procurement Document Economic Sustainability

- (a) the availability of relevant products in the local market;
- (b) the quality, origin and brand of goods available on the local market;
- (c) the price level of the designated goods;

<b>Area of Performance: Economic Sustainability</b>	
Article relevant to procurement document	Description
[Rule 15(2), PPR, 2008]	<p>The procuring authority shall consider:</p> <p>Determining how to procure and consolidate goods package:</p> <p>a) Availability of relevant goods in the local market.</p> <p>b) the quality, origin and brand of the goods available on the local market;</p> <p>c) price level of the designated goods;</p> <p>d) shipping risks in domestic and international markets;</p> <p><a href="https://cptu.gov.bd/procurement-policy-and-procedure-documents.html">https://cptu.gov.bd/procurement-policy-and-procedure-documents.html</a></p>
[Rule 15(7), PPR, 2008]	<p>When deciding how to receive an order for construction work, The procuring authority considers:</p> <p>(a) General Contract Industry Terms.</p> <p>b) anticipated competition;</p> <p><a href="https://cptu.gov.bd/procurement-policy-and-procedure-documents.html">https://cptu.gov.bd/procurement-policy-and-procedure-documents.html</a></p>
[Rule 29(2), PPR, 2008]	<p>The technical specifications prepared by the procuring authority shall:</p> <p>(a) expressed in terms of performance or output requirements rather than specifications directly related to design or descriptive characteristics that tend to limit competition;</p> <p><a href="https://cptu.gov.bd/procurement-policy-and-procedure-documents.html">https://cptu.gov.bd/procurement-policy-and-procedure-documents.html</a></p>
[Rule 29(3), PPR, 2008]	<p>Technical specifications for goods must not refer to specific brand or trade names, designs, patents or types, country of origin, manufacturers or service providers.</p> <p><a href="https://cptu.gov.bd/procurement-policy-and-procedure-documents.html">https://cptu.gov.bd/procurement-policy-and-procedure-documents.html</a></p>
<b>Area of Performance: Environmental Sustainability</b>	
Article relevant to procurement document	Description
[GCC 26.1, STD-PW3]	<p>During the execution and completion of work and correction of defects therein, the contractor must:</p>



	<p>c) to protect the environment in and around the site and to avoid injury or nuisance to persons or the public or other property caused by pollution, noise or other causes resulting from the contractor's working methods; We will take all reasonable steps.</p> <p><a href="https://cptu.gov.bd/standard-documents/standard-tender-document.html">https://cptu.gov.bd/standard-documents/standard-tender-document.html</a></p>
[GCC 28.2, STD-PW3]	<p>In particular, the Contractor shall, in accordance with relevant regulations, ordinances and governmental orders, comply with all necessary sanitary requirements and disease prevention, adequate accommodation of workers at construction sites, adequate water supply, drainage, and sewage treatment.</p> <p><a href="https://cptu.gov.bd/standard-documents/standard-tender-document.html">https://cptu.gov.bd/standard-documents/standard-tender-document.html</a></p>
<b>Area of Performance: Social/Ethical Sustainability</b>	
Article relevant to procurement document	Description
[Rule 15(2), PPR, 2008]	<p>Social/ethical sustainability</p> <p>The Facility must consider the following when determining how to procure and consolidate bundles of goods:</p> <p>(a) the local supplier's ability to supply the required quantity;</p> <p>(b) the capabilities of the domestic industry and the quality of its products;</p> <p>(c) market conditions and anticipated competition;</p> <p><a href="https://cptu.gov.bd/procurement-policy-and-procedure-documents.html">https://cptu.gov.bd/procurement-policy-and-procedure-documents.html</a></p>
[Rule 15(7), PPR, 2008]	<p>In determining how to procure construction services, facilities must consider:</p> <p>(a) domestic contractor capacity;</p> <p><a href="https://cptu.gov.bd/procurement-policy-and-procedure-documents.html">https://cptu.gov.bd/procurement-policy-and-procedure-documents.html</a></p>
[Rule 29(5), PPR, 2008]	<p>Where possible, the procuring authority shall develop the specifications in close cooperation with the users or beneficiaries of the relevant goods, works or services.</p> <p><a href="https://cptu.gov.bd/procurement-policy-and-procedure-documents.html">https://cptu.gov.bd/procurement-policy-and-procedure-documents.html</a></p>
[Rule 83(1)(e), PPR, 2008]	<p>Tender documents may recognize internal priorities in accordance with Annex II. I offer local manufacturers, suppliers and</p>

	<p>contractors a price advantage over international competitors to promote local products and industries.</p> <p><a href="https://cptu.gov.bd/procurement-policy-and-procedure-documents.html">https://cptu.gov.bd/procurement-policy-and-procedure-documents.html</a></p>
[GCC 27.1, STD-PW3]	<p>Environmental Suitability Through the performance and completion of work and the correction of defects therein, the contractor must:</p> <p>(a) take all reasonable steps to protect the environment on and around the Site and to avoid injury or nuisance to public persons or property or consequences of contractor's work practices;</p> <p><a href="https://cptu.gov.bd/standard-documents/standard-tender-document.html">https://cptu.gov.bd/standard-documents/standard-tender-document.html</a></p>
[GCC 29.2, STD-PW3]	<p>In particular, the Contractor shall, in accordance with relevant regulations, ordinances and governmental orders, comply with all necessary sanitary requirements and disease prevention, adequate accommodation of workers at construction sites, adequate water supply, drainage, and sewage treatment.</p> <p><a href="https://cptu.gov.bd/standard-documents/standard-tender-document.html">https://cptu.gov.bd/standard-documents/standard-tender-document.html</a></p>
[GCC 26.1(a), STD-PW3]	<p>Through the execution and completion of work and the correction of defects therein, the Contractor shall:</p> <p>(a) take all practical measures to protect the health and safety of all workers and others authorized to be on the site and to keep the site in order;</p> <p><a href="https://cptu.gov.bd/standard-documents/standard-tender-document.html">https://cptu.gov.bd/standard-documents/standard-tender-document.html</a></p>
[GCC 27.1, STD-PW3]	<p>The contractor shall not work on-site during weekends, nights, outside normal working hours, or on religious or public holidays without the prior written consent of the Project Manager.</p> <p><a href="https://cptu.gov.bd/standard-documents/standard-tender-document.html">https://cptu.gov.bd/standard-documents/standard-tender-document.html</a></p>
[GCC 28.1, STD-PW3]	<p>The contractor will comply with all relevant labor laws applicable to Contractor Personnel regarding employment, health, safety, benefits, and immigration and grant all legal rights.</p> <p><a href="https://cptu.gov.bd/standard-documents/standard-tender-document.html">https://cptu.gov.bd/standard-documents/standard-tender-document.html</a></p>

[GCC 28.3, STD-W3]	<p>In particular, contractors must pay workers reasonable and timely wages. If payments are delayed, the procuring agency may impact worker payments and recover costs from contractors.</p> <p><a href="https://cptu.gov.bd/standard-documents/standard-tender-document.html">https://cptu.gov.bd/standard-documents/standard-tender-document.html</a></p>
[GCC 29.1, STD-PW3]	<p>Contractors shall not be economically exploited, or have children's education, health or physical, mental, spiritual, moral, or social Children must not be used for work that could jeopardize or impair their development.</p> <p><a href="https://cptu.gov.bd/standard-documents/standard-tender-document.html">https://cptu.gov.bd/standard-documents/standard-tender-document.html</a></p>
[GCC 36.1, STD-PW3]	<p>Contractor shall jointly provide Procurement and Contractor jointly insurance for defects and deductibles in amounts specified in the PCC from the start date to the end date of the period of liability for the events resulting from the following Contractor Risk:</p> <p>(d) personal injury or death;</p> <p><a href="https://cptu.gov.bd/standard-documents/standard-tender-document.html">https://cptu.gov.bd/standard-documents/standard-tender-document.html</a></p>

Table 4:- Sustainability aspects addressed in Public Procurement Documents.

### 3.6 Bangladesh Hi-Tech Park Authority (BHTPA)'s procurement technique:

The Bangladesh Hi-Tech Park Authority, under the Ministry of Posts, Telecommunications and Information Technology, is a pioneer in the high-tech construction industry in Bangladesh. For about 10 years, BHTPA has successfully set the trend and standards for the development of high-tech structures in the country. BHTPA has highly qualified and experienced professionals forming a multidisciplinary team of civil, electrical and mechanical engineers, architects and various types of services. Bangladesh Hi-Tech Park Authority is an autonomous body headed by Managing Director (MD). It has a separate procurement department for sourcing. Bangladesh Hi-Tech Park Authority has about 10 projects to develop hi-tech parks in 64 districts of Bangladesh. Its activities span the length and breadth of the country, including remote areas and difficult terrain. The main tasks of BHTPA are listed below. -

- Design and Construction of Hi-Tech and Software technology park in the country.
- Repair and Maintenance of Hi-Tech and Software technology park
- Acquisition and Requisition of Land for Hi-Tech and Software technology park
- Feasibility study for establishment of Hi-Tech and Software technology park
- Startup mentoring Services for the startup company

- Appoint consultancy firms and intellectual consultancy services for marketing for an investment opportunity in Bangladesh.
- Arrange IT/ITES/ SOFTWARE expo in Bangladesh.

Bangladesh Hi-Tech Park Authority follows Public Procurement Act, 2006, and the Public Procurement Rules, 2008 for procurement and sourcing. BHTPA also follow E-GP guideline (2011) for E-procurement. Bangladesh Hi-Tech Park Authority follows the following procurement method for Goods & Works:

- Limited Tendering Method (LTM)
- Open Tender Method (OTM)
- Two Stage Tendering Method (TSTM)
- One Stage Two Envelope Tendering Method (OSTEM)
- Request for Quotation Method (RFQM) and
- Direct Procurement Method (DPM).

Bangladesh Hi-Tech Park Authority follows the following procurement method for Services:

- Quality & Cost Based Selection (QCBS): Consider the quality & cost of the services
- Fixed Budget Selection (FBS): Available budget is fixed
- Least Cost Selection (LCS)
- Single Source Selection (SSS)
- Individual Consultant Selection (ICS)
- Design Contest Selection (DCS)

### **3.7 Scope of procurement technique for establishment of SP in BHTPA:**

#### **i) During the supplier appraisal:**

Supplier appraisal or primary supplier selection is the very important task for ensuring sustainable procurement. In the time of supplier appraisal procurement professional can advise to the management to follow the carter 10 c's for best supplier who can follow the sustainable procurement guideline. In the time of primary selection of supplier is the most appropriate time to follow the sustainable procurement.

#### **ii) During selection of the supplier:**

When a procurement professional evaluates the supplier for final selection he should advice to the management to prefer the that supplier who follow the sustainable procurement guideline. In the time of evaluation set the evaluation criteria for sustainable procurement.

**iii) During manufacturing or processing:**

manufacturing or processing time execution stage for sustainable procurement. When a company collect raw materials from the supplier. Procurement professional monitor the whole process of raw materials Supplier. procurement professional also monitor the whole supply chain network of the supplier. procurement professional can monitor where sustainability breaks for collect raw materials.

**iv) During storage and inventory management:**

Storage and inventory system also affect the sustainable procurement. When collect raw materials and make finish goods both time need storage and inventory system. A procurement professional can monitor what the product use during storage and inventory management system. Are these products environment friendly, economically, suitable for human?

**v) During carrying and transport:**

Transportation systems can very much impact on environment. Transport system emitted toxic gases which is responsible for environment pollution. Transportation contributes to detrimental emissions, noise, and climate change. About 15% of the total greenhouse gases and 22% of the CO<sub>2</sub> radiations are attributed to transportation. So a procurement professional can choose environment friendly transport method. Sustainable transportation refers to low- and zero-emission, energy-efficient, affordable modes of transport, including electric and alternative-fuel vehicles, as well as domestic fuels. Sustainable transport system may save cost, increase brand reputation.

**vi) At the time of disposal and end of life:**

Every product has and end of life. Most of the product are to become a hazardous product in the end of life. a procurement professional can advise to sustainable disposal system for sustainable environment. At the time of disposal procurement professional can suggest the following way for sustainability.

- Recycling: The first and most apparent way is recycling.
- Composting: Composting turns food waste into garden fuel and is suitable for all types of gardens.
- Reusing: Maximum try to reuse the product for maximum utilization of the natural resources.
- Anaerobic Digestion: some product may disposal by bacterial digestion.

**vii) Set sustainable standard for sustainable procurement:**

For sustainable procurement many standards are present. For selection and evaluation, the best supplier who follow the international standard such as ISO, Fair business, labor standard, sustainable procurement standard, environment standard.

**viii) Sub-tier Supplier Visibility:**

One of the first action a procurement team can take is to create more visibility into the extended supply. Some supplier may take sub-tier supplier, a procurement professional should monitor the sub –tire supplier for sustainability.

## Chapter 4

### SDG, MDG, Sustainable Procurement & Circular economy

#### 4.1 Relationship among SDG, MDG & Sustainable Procurement:

The Millennium Development Goals (MDGs)The Sustainable Development Goals (SDGs) and are intently related to sustainable procuring. Adopted by the United Nations in 2015, the SDGs are a set of 17 goals designed to promote sustainable development and address various global challenges such as inequality, poverty and environmental degradation. Sustainable sourcing is an important tool that helps achieve many of the SDGs, such as SDG 12 (Responsible Consumption and Production) and SDG 13 (Climate Action). Adopted by the United Nations in 2000, the MDGs were a set of eight goals to reduce poverty and promote sustainable development. The MDGs blossomed with the SDGs, but many of them, such as MDGs 7 (Ensuring Environmental Sustainability), are still relevant and continue to be important

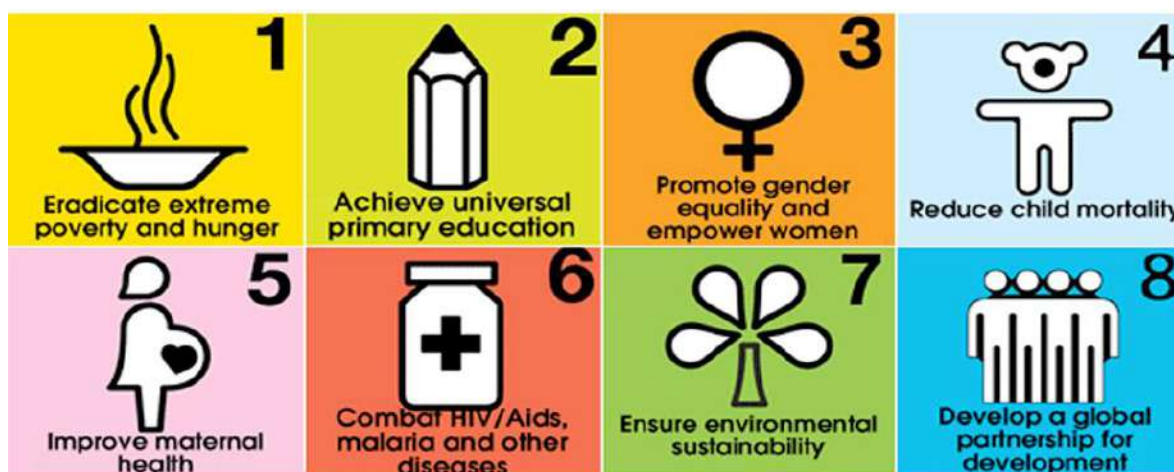


Figure 13 MDG's

in promoting sustainable development. Sustainable procurement is critical in supporting the success of both the SDGs and MDGs by reducing the environmental impact of procurement performance,

promoting responsible consumption and production, and supporting sustainable development. can play a role. By integrating sustainability considerations into the procurement process, a public procurement company can help her achieve the SDGs and MDGs and support the transition to a more sustainable and equitable future.



Figure 14: SDG's

➤ Recent trends and considerations continue to focus on the 'competitiveness' of global sourcing, especially from low-cost countries. Recent concerns include:

- Raising labor standards and abolishing forced labor
- Payment of wages and social security
- Eliminate inequality and gender discrimination among workers;
- Safety and health standards, improvement of working environment
- economic use of resources;
- Waste and water management
- Climate revolution and reduction of 'carbon footprint'.

Among the initiatives, each country wide and worldwide challenges have been made to remedy those issues. According to 'Responsible Purchasing Initiative', the first step for purchasing corporations wishing to have a fair and wonderful effect on their furnish chains is to confirm that sourcing is in line with –

- The country wide laws
- And the global agreements (such as ILO conventions, international environmental protocols)

A number of codes and legal guidelines have been developed for sustainable procurement initiatives, including: B. ILO Conventions, ETI Base Code, Ethical Trade in Agriculture Initiative, Social Accountability (SA) 8000: 2001 Standard, Fair Trade Standard, ISO35 14001, ISO 14020+: Environmental Label Standard, Eco-Management and Audit Scheme (EMAS), PAS36 2050: 2011, UN Global Compact, ISO 26000: 2010 Social Responsibility Guidelines, BS37 8903: 2010 Sustainable Procurement, etc. UNDP Sustainable Development Goals (SDGs) and Global Goals At the United Nations Sustainable Development Summit on 25 September 2015, world leaders announced the 17 Sustainable Development Goals (SDGs). adopted the 2030 Agenda for Sustainable Development, which sets out Ending poverty, fighting inequality and injustice, and tackling climate change will alternate with support from 2030. The Sustainable Development Goals, also known as the Global Goals, are based on the Millennium Development Goals (MDGs), eight poverty reduction goals that the world has committed to achieve by 2015. development and sustainable sourcing.

### **“Goal 12. Ensure sustainable consumption and production patterns”**

Goal no.12 has its sub-clause 12.7, which is devoted for sustainable procurement, is indicating that sustainable procurement is a part of sustainable development. The clause is as below:

#### **“12.7: Promote public procurement practices that are sustainable, in accordance with national policies and priorities.”**

Therefore, there is no doubt that the issue of sustainable sourcing will be important in the upcoming days. As the world's leading organization, UNDP is focused on promoting sustainable sourcing practices and policies to ensure sustainable production and consumption shapes.

### **4.2: Initiative of Bangladesh:**

Bangladesh 2021 Targets In the practicable graph of Bangladesh for 2010-2021, Bangladesh holds her vision for sustainable development. The layout declares that, “Nothing ought to be done nowadays which will compromise the well-being of future generations”. The method of financial growth have to be equitable as properly as environmentally sustainable. The environmental effectiveness deteriorates when the environment is tarnished and the environmental balance bothered through overuse, pollution, deforestation, and the significances of greenhouse gas emissions. Environmentally sound development calls



for movements to restore and hold environmental health whilst pursuing socio economic development. Internationally, there is vast consensus that the surroundings and manufacturing structures must be tailored to reduce harm to the environment to ensure the sustainability of development. The authorities has set up Bangladesh Climate Change Strategy and Action Plan (BCCSAP) and National Adaptation Program of Action (NAPA) in 2009 to reply to climate change-induced improvement risks and National Plan for Disaster Management (NPDM) in 2010 to respond to disaster risks. GoB has additionally delivered National Environment Policy (NEP) in 1992, National Forest Policy (NFP) 1995, National Sustainable Development Strategy (NSDS) and other relevant policies for environmental conservations. The simple strategies in BCCSAP, NAPA, NPDM, NEP, NFP and NSDS are to sensible use of natural resources, disaster and local weather resilient improvement initiative, pro-poor adaptation and mitigation strategies, inexperienced growth, eco-system primarily based disaster hazard reduction, all chance resilient city improvement and pollution management. GoB dictates it's one of the method regarding paying for improvement projects as follows: "All development initiative wishes to be pro-poor, environmental sustainable, climate alternate and catastrophe resilient. Therefore, Planning Commission and relevant agencies will develop proper capacity building mechanism to ensure that development projects are designed in a sensible way to increase country's resilience". It is very clear that the Government of the People's Republic of Bangladesh has the mandate to ensure that all of its development projects and operations are sustainable. At a minimum, project and procurement processes and procedures should comply with national laws and international guidelines on sustainability. To achieve this goal, governments are also trying to integrate global obligations into national plans and incorporate globally accepted sustainability guidelines and procedures into national activities. [Future Planning of Bangladesh, 2010-2021, Planning Commission, Ministry of Planning, Government of the People's Republic of Bangladesh] . Bangladesh has integrated the Millennium Development Goals (MDGs set by UNDP) into the economic and social goals of the 6th Five Year Plan (2011-15). The Planning Commission's General Economic Division (GED) monitors and reports on her MDG progress through the Millennium Development Goals.

The latest MDGs progress report (2012) reveals that Bangladesh has already achieved some of her MDGs goals. In Bangladesh, the first round of country consultations since 2015 has allowed the country to reflect on and draw on its experience with the MDG framework, increase its voice in formulating new global development goals, and strengthen its relationship with Bangladesh's development. It provided an opportunity to ensure that the goals set were contextual. To this end, the

Government of Bangladesh (GoB) is dedicated to guiding the national consultation process in an inclusive and participatory manner. On 10 November 2012, the government held the first national consultation meeting at the expert level to 'launch' the national consultation process. The purpose of the meeting was to identify existing gaps and challenges in relation to sustainable development and to develop ideas for interim goals, targets and indicators for the post-2015 development agenda. A summary report of the first national conference provided a motion for subsequent consultations. A series of consultation seminars were held from November 2012 to May 2013 to develop a draft framework. These discussions were held at national and local levels and were accompanied by representatives from relevant ministries, UN agencies, development partners, civil society and the media. The draft framework was revised by various UN system experts in May 2013 before final consultations with Honorary Prime Minister Sheikh Hasina and Minister of Finance, Planning and Foreign Affairs. Bangladesh's national document contains 11 goals, 58 targets and 241 indicators. Therefore, Bangladesh is committed to the Rio+20 conference instructions and the "Transforming our world: 2030 Agenda for Sustainable Development". Introduced the Sustainable Development Goals to the Post-20 Agenda (a proposal to the United Nations with 11 goals). Beneath the goal of "promoting sustainable production and consumption", measures were planned to ensure sustainable use of real estate for production and consumption patterns and further efficiency.

### **4.3 Circular economy and sustainable procurement:**

The circular economy is a concept that seeks to create a closed-loop system for the production and consumption of goods, in which waste and pollution are minimized, and resources are used in a more sustainable and efficient manner. The circular economy is becoming increasingly important in the context of sustainable procurement, as it provides a framework for creating a more sustainable supply chain.

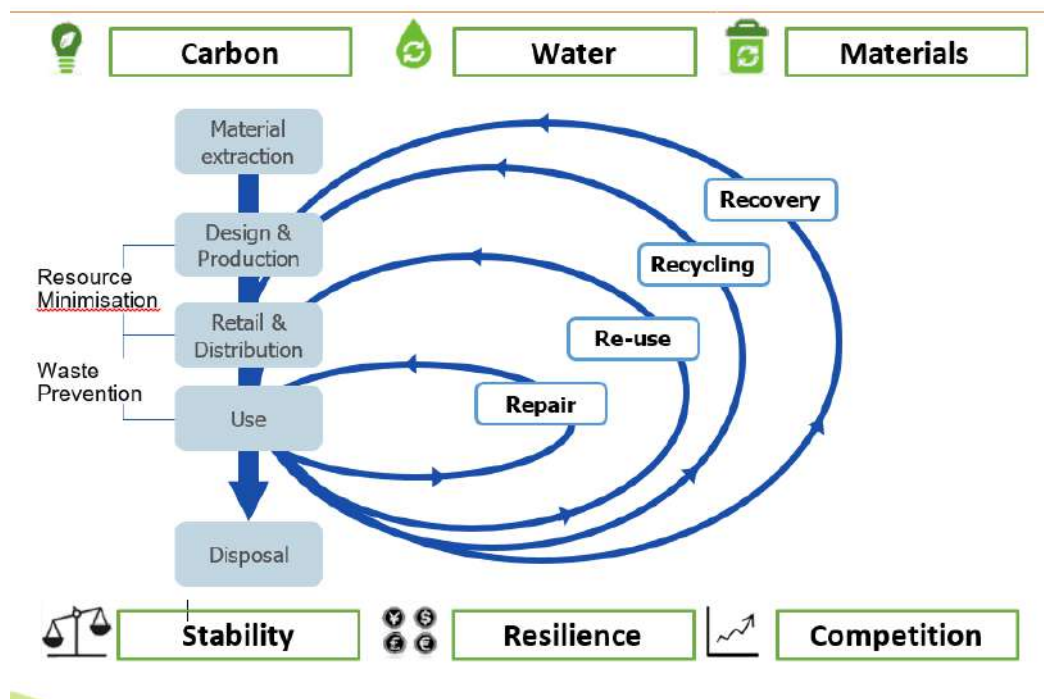


Figure 15: Circular economy Process

Sustainable procurement in a circular economy context involves purchasing products and services that are designed to be reused, repaired, refurbished, or recycled, and avoiding products and services that are designed for obsolescence. It also involves engaging with suppliers to promote the adoption of circular economy principles and practices, and developing contracts that incentivize sustainable practices and reward the use of recycled materials. By adopting circular economy principles and practices, organizations can reduce their environmental impact, increase resource efficiency, and reduce costs. Additionally, by promoting the circular economy, organizations can contribute to the development of a more sustainable and equitable future, and support the broader goals of sustainable development. Therefore, incorporating circular economy principles into procurement practices can be an effective way to promote sustainable procurement and support the transition to a more sustainable future.

The circular economy is a concept that seeks to create a closed-loop system for the production and consumption of goods, in which waste and pollution are minimized, and resources are used in a more sustainable and efficient manner. The main concept of the circular economy is to move away from the traditional linear model of production and consumption, in which resources are extracted, used to produce goods, and then disposed of as waste, to a model in which resources are kept in use for as long as possible, and waste is minimized. The circular economy is based on several key principles, including:



Figure 16: Circular procurement opportunities

- **Designing out waste and pollution:** This involves designing products and services in a way that minimizes waste and pollution, and maximizes their reuse, repair, refurbishment, and recycling potential.
- **Keeping products and materials in use:** This involves maximizing the use of products and materials by repairing, refurbishing, and recycling them, rather than disposing of them as waste.

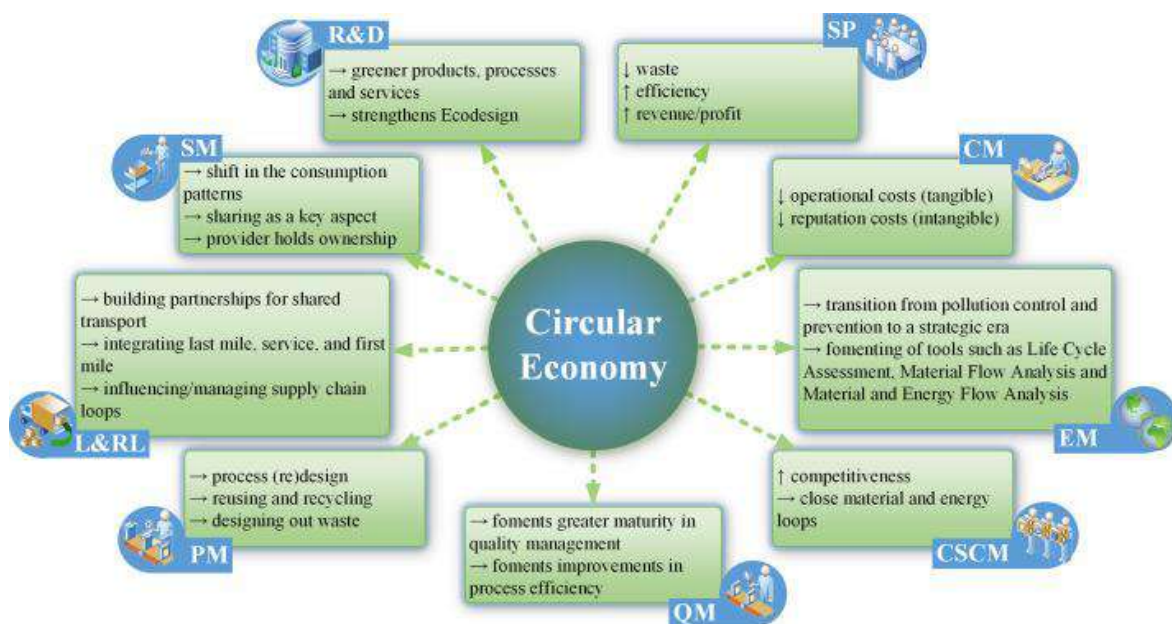


Figure 17: Circular business models

- Sharing and circular business models: This involves promoting sharing, leasing, and circular business models, such as product-as-a-service, in which products are used by multiple customers over their lifetime, rather than being owned by a single customer.
- Regenerating natural systems: This involves restoring and regenerating natural systems, and minimizing the environmental impact of production and consumption.

By adopting these principles, the circular economy seeks to create a more sustainable and equitable future, in which resources are used in a more sustainable and efficient manner, and waste and pollution are minimized.

Sustainable procurement and the circular economy are closely related, as both aim to promote more sustainable and efficient use of resources, and minimize waste and pollution. Circular economy principles, such as designing out waste and pollution, keeping products and materials in use, and promoting sharing and circular business models, can be applied to procurement practices to promote sustainable procurement. By incorporating these principles into procurement practices, organizations can reduce their environmental impact, increase resource efficiency, and reduce costs. Sustainable procurement, in turn, can support the development of the circular economy by promoting the use of products and services that are designed to be reused, repaired, refurbished, or recycled, and by engaging with suppliers to promote the adoption of circular economy principles and practices. In this way, the

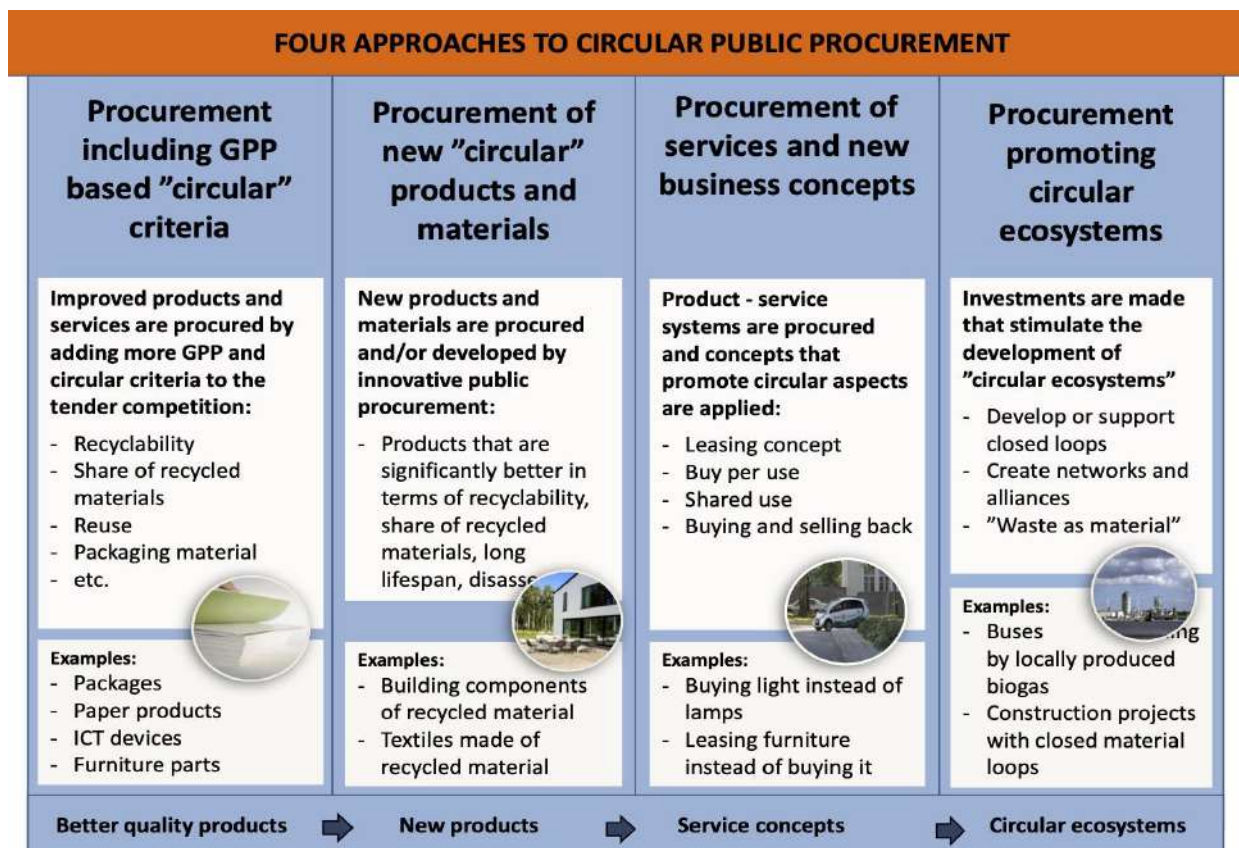


Figure 18: Approaches Circular Public Procurement

circular economy and sustainable procurement are complementary and mutually reinforcing. By adopting both principles, organizations can create a more sustainable and equitable future, and support the broader goals of sustainable development.

## **Chapter 5**

### **Data Collection, Analysis & Findings**

#### **5.1 Introduction:**

Data Collection and Data Analysis are critical components of a report, as they provide the foundation for the findings and recommendations of the report. In this section, we will describe the data collection and data analysis processes used in the report on Prospects & Challenge of Sustainable Procurement in Bangladesh Hi-Tech Park Authority.

**Data Collection:** To gather data for this report, a combination of qualitative methods were used. Interview was designed and distributed to a sample of employees and suppliers of the Bangladesh Hi-Tech Park Authority. The questionnaire consisted of a mix of open-ended and closed-ended questions, and was designed to gather information on the level of awareness of sustainable procurement practices, the integration of sustainable procurement into procurement processes, engagement with suppliers, initiatives and projects to promote sustainable procurement, challenges, and future plans for promoting sustainable procurement.

**Data Analysis:** The data collected from the interview was analyzed using qualitative methods. Qualitative data was analyzed by coding and categorizing the responses into themes and patterns. The data was then used to draw conclusions and make recommendations for promoting sustainable procurement in the Bangladesh Hi-Tech Park Authority.

By using a combination of data collection and data analysis methods, this report provides a comprehensive understanding of the prospects and challenges of sustainable procurement in the Bangladesh Hi-Tech Park Authority, and informs the development of strategies and initiatives to promote sustainable procurement more effectively.

On average, the procurement portfolio from BHTPA consists of 70% work, 20% goods, and less than 10% services. On average, the construction work consists of 75% new construction work and 25% repair work. Some of them are not directly involved in procurement, but are responsible for planning and design, including many sustainability aspects.

## **5.2 Interviews and Focus Group Discussion:**

Interviews are conducted face to face even though questions may be as standardized as those in a survey. a focus group is a kind of interview conducted with a small group of people to obtain information in an area of interest to the organization.

### **a) Internal stakeholder interview:**

Bangladesh Hi-Tech Park Authority is an important organization of the government which has revolutionized the IT/ITES sector by building hi-tech parks at different districts in the country. Sustainability is being given importance in completing the procurement process of the authority. In this case, interviews have been conducted with stakeholders from different levels of the institution. Various questions are asked during the interview. There are different department of the authority among these

Procurement wing, Planning wing , O&M wing, Administrative Wing. The following questions are asked to the internal stakeholders of the organization for initiating sustainable procurement:

1. Respondent hear Sustainable procurement any time
2. Awareness of sustainable procurement practices within the Bangladesh Hi-Tech Park Authority.
3. Support or resources does the authority need to promote sustainable procurement more effectively.
4. There have been any initiatives or projects to promote sustainable procurement within the authority.
5. What measures has the authority taken to assess the impact of its sustainable procurement practices?
6. BHTPA keeps in mind sustainability issues while designing, planning and implementing the project.
7. How does the authority engage with suppliers to promote sustainable procurement?
8. Any possibility to apply sustainable procurement BHTPA & Bangladesh.
9. challenges has the BHTPA faced in promoting sustainable procurement.

Stakeholders expressed their different opinions. Interviews were conducted with various officials of Bangladesh Hi-Tech Park Authority. The higher officials of the organization were asked to know their attitude. Various discussions were also held on what kind of role they will play in this regard.

### **b) Supplier engagement & Interview:**

Bangladesh Hi-Tech Park Authority conducts various types of procurement. There is a high volume of work purchases. In this kind of tender, various types of small and large tenderer participate. The

most important for the implementation of sustainable procurement is Supplier involvement. It is not possible to implement without Supplier Involvement. For this reason, sustainability is discussed with all types of contractor tenderer. Their opinions & experience on sustainable procurement are discussed in detail. What kind of co-operation they will have on sustainable procurement is also discussed in the time interview. In the discussion, they expressed various challenges and possibilities for implementation of sustainable procurement. A variety of questions are asked from the contractor organizations and discussed in detail regarding sustainable procurement.

**c) External Stakeholder interview:**

Another important issue for the implementation of sustainable procurement is the law and regulations. Everything can be regulated by laws and regulations. It is the first step to implementing anything. Sustainable procurement was discussed with some representatives of CPTU, which is the government-responsible institution for procurement. After fruitful discussion find out that, The government has taken some steps for implementing sustainable procurement. From there it is known that the government has started various plans on sustainable procurement. The work of preparing the law is already underway. One of the step is initiating sustainable public procurement policy. The government is considering the matter seriously and taking various plans. Many official think that implementation of sustainable procurement is not possible with the current tender evaluation procedure. Therefore, discussions have already started in various seminars on the issue of determining how tender evaluation will be done in existing PPA & PPR.

**d) Local stakeholder interview:**

Many high executive and specialist feels that the project area will play an important role in implementing sustainable procurement in BHTPA. What needs to be taken into consideration in determining the project area should be determined in advance. Besides, implementation of Sustainability will never be possible. It is necessary to take into consideration the risk of damage to the local people and environment of the project area. The Bangladesh Hi-Tech Park Authority discussed Sustainability with the local residents of all the districts in which Hi-Tech Park is being constructed. The effect of such construction work of the government on the project area and the environment are discussed & should be considered.

**e) Donor Funded stakeholder analysis:**

Various projects of Bangladesh Hi-Tech Park Authority are completed with the financing of World Bank and JETRO. Donor organizations can also play a leading role in implementing sustainable procurement in BHTPA. Therefore, the procurement guidelines of the World Bank and JETRO are



seen and the sustainable procurement is discussed with the representatives of all the projects that are being financed by donor organizations.

### **5.3 Observation:**

This is observing behavior or interaction of individuals, groups, events or physical conditions of an environment. Observation done well gives first hand unbiased, valid information. Bangladesh Hi-Tech Park Authority established hi-tech park & software parks in different district of Bangladesh. I visited that location physically. I observe the demographic location & environmental condition. Local people have no idea about sustainable procurement sustainable environment. No knowledge was observed among the local contractors to implement sustainable procurement.

### **5.4 Record Review:**

This form of data collection is where official records are analyzed to find out the necessary information, for example financial documents, monthly reports, activity log, purchase order or customer review. Bangladesh Hi-Tech Park Authority's procurement process has been directly observed for several years. It can be seen that the Bangladesh Hi-Tech Park Authority completes almost all types of purchases such as goods, works & service. Sustainable procurement has not been seriously considered in any procurement process. The procurement processes have been completed in strict compliance with PPA-2006 & PPR- 2008. In PPR-2008, there is no opportunity to evaluate the tender by considering the issue of sustainable procurement with utmost importance. As part of the implementation of the SDGs by the Government of Bangladesh, the issue of environment has been given importance. Bangladesh Hi-Tech Park Authority has taken initiative to construct an e-waste management plant at Bangabandhu Hi-Tech City. An STP has already been constructed. In accepting the project, the instructions of the Ministry of Planning are duly followed.

### **5.5 Findings:**

As is evident from the above analysis, BHTPA officials are aware of sustainability issues, but there is no organizational culture associated with this. We also learned that sustainability aspects are reflected in procurement documents and in the planning and design stages. All stakeholders made it clear that with the right training and a dedicated cell to monitor sustainability throughout the sourcing stage, a corporate culture could be developed in which everyone has an eye on this issue. increase. By conducting this questionnaire and analysis, the report can provide a comprehensive understanding of the prospects and challenges of sustainable procurement in the Bangladesh Hi-Tech Park Authority,

and inform the development of strategies and initiatives to promote sustainable procurement more effectively.

1. An analysis of the current level of awareness of sustainable procurement practices within the Bangladesh Hi-Tech Park Authority, and the factors that may be contributing to this level of awareness.
2. An analysis of the steps that the authority has taken to promote sustainable procurement, and the impact that these steps have had on the authority's operations and the wider community.
3. An analysis of the authority's engagement with suppliers, including the nature and effectiveness of this engagement, and any barriers that may be preventing more effective engagement.
4. An analysis of the challenges that the authority has faced in promoting sustainable procurement, and the factors that may be contributing to these challenges.
5. An analysis of the support and resources that the authority needs to promote sustainable procurement more effectively, and the potential impact of these resources on the authority's operations and the wider community.

The respondents also comment the barriers of sustainability implementation in BHTPA

Some Barriers are,

- Political person working as bidder
- Repeated change of requirement
- Inappropriate DPP
- Time and Cost Limitations
- Lack of relevant knowledge
- Absence of specialized sustainable procurement unit
- Lack of expertise in this sector
- Lack of sustainable culture.
- Lack Training for sustainable procurement training
- Lack of policy & proper documentation

## Chapter 6

# Recommendations

### 6.1 Sustainability is Future:

Sustainability is the future of our planet and its inhabitants. The concept of sustainability is based on the idea that we must meet the needs of the current without negotiating the ability of upcoming generations to meet their own needs. It is about creating a balance between economic growth, social development, and environmental protection. Sustainability is becoming increasingly important as we face growing environmental and social challenges, such as climate change, resource depletion, and social inequality. By adopting sustainable practices, we can reduce our environmental impact, promote social and economic development, and create a better future for ourselves and future generations. Sustainability is not just a responsibility; it is also an opportunity. By adopting sustainable practices, businesses can reduce their costs, improve their reputation, and create new opportunities for growth and innovation. Consumers are also increasingly demanding sustainable products and services, creating new markets and opportunities for businesses that are committed to sustainability.

The future of our planet and its inhabitants depends on our ability to adopt sustainable practices and promote sustainable development. It is not just about the environment, it is about creating a better future for ourselves and future generations. By working together and adopting sustainable practices, we can create a sustainable future for all. Sustainability is the next big issue. Short-term benefits alone are no longer possible. There is a global trend towards sustainability issues. BHTPA is a pioneering organization in the country's building and construction sector, so it has to set its own standards when it comes to sustainability issues. The Bangladesh government also takes this issue seriously. Sustainable sourcing is no longer just a word. Part of sustainable sourcing at BHTPA is already established. Now find a way to improve your scenario.

### 6.2 Recommendation & Proposals

Based on the interview, data and analysis, the report on the prospects and challenges of sustainable procurement in the Bangladesh Hi-Tech Park Authority can provide the following recommendations:

**a. Increase Awareness:** Increase awareness and education about sustainable procurement practices among employees and suppliers, through training and communication programs.

**b. Integrate Sustainability into Procurement Processes:** Integrate sustainable procurement criteria into the procurement processes and procedures of the authority, to ensure that sustainability considerations are taken into account when making procurement decisions.

**c. Engage with Suppliers:** Encourage suppliers to adopt sustainable procurement practices through regular engagement and communication, and establish a supplier sustainability program to recognize and reward suppliers that meet sustainability standards.

**d. Considering Whole Life Costing Method Instead of Lowest Price Criteria:** Whole life costing (WLC) or life cycle costing (LCC) can be a step towards sustainability. WLC gives you a more complete picture of the total cost of purchasing goods or services, rather than just the purchase price. They consist of planning costs, acquisition costs, operating and maintenance costs, disposal and decommissioning costs. WLC provides better budgeting over the life of the asset. The WLC should be used instead of the existing lowest price scheme. MEAT (Most Economically Advantageous Tender) is the best method of public procurement.

**e. Promote Sustainable Procurement in the Wider Community:** Play an active role in promoting sustainable procurement in the wider community, through public awareness campaigns and partnerships with other organizations.

**f. Training and induction:** All officers in the department should be properly trained to give clear insight into this matter. The training aims not only to educate about sustainability issues, but also to develop mindsets around them.

**g. Develop and implement sustainable procurement policy:**

BHTPA has **specific types** of work and **their procurement**, so you can develop **your** own sustainable procurement policy and ensure it is **properly implemented**.

**h. Collaborate with Other Organizations:** Collaborate with other organizations, such as government agencies, NGOs, and private sector organizations, to promote sustainable procurement and share best practices.

**i. Monitor and Evaluate:** Monitor and evaluate the impact of sustainable procurement practices, and make improvements as necessary to ensure that they are effective and efficient.

**j. Use following contract clauses:**

in case of goods procurement, the following clauses Contract conditions can be used to reduce the environmental impacts of packaging and transport of goods:

- Requiring delivery of products in bulk and outside peak hours
- Requiring the removal of non- recyclable containers
- Requiring a minimum percentage of recycled materials in packaging

in case of works procurement In contracts for construction works, provisions should be used to guarantee the respect of workers' right and health and safety rules:

- Prevailing wages and working conditions in the particular location should be complied with to avoid companies underbidding by cutting labour costs
- Applicable legislative and other requirements governing staff health and safety issues should be applied.

in case of service procurement Contract conditions can be used in service contracts to improve health and safety conditions and reduce environmental impacts:

- Including clear instructions and training to staff of the supplier on the correct amount of chemicals to be used for cleaning
- Ensuring that such staff are trained on safety concerns in using these chemicals and on the sustainability impacts of the service they are delivering.

## References

- <http://www.futureearth.org/themes/transformations-towards-sustainability>
- Blackburn, W. R, 2007. *The Sustainability Handbook*.
- PPA, 2006: *Public Procurement Act, 2006*.
- PPR, 2008: *Public Procurement Rules, 2008*.
- UNGM, 2011, *United Nations Global Marketplace*. Retrieved 09 October 2011 from <http://www.ungm.org/sustainableprocurement/default.asp>
- Wikipedia: Retrieved 10 November 2011 from <http://en.wikipedia.org/wiki/Procurement>
- World Bank, 2002. "Bangladesh: Country Procurement Assessment Report."
- <https://www.eprocure.gov.bd>
- Soar and Jianming. (2012). *Role of Public e-procurement Technology to Reduce Corruption in Government Procurement*. 2012 International Public Procurement Conference, August 17-19, Seattle, Washington.
- Erridge, A., Greer, J. (2002). *Partnerships and public procurement: building social capital through supply relations*. *Public Administration*, 80(3): 503-522. [Online] Available from: <http://onlinelibrary.wiley.com/doi/10.1111/1467-9299.00315/abstract> (Accessed 24 February 2016).
- *CIPS Guide book*, <https://www.cips.org>
- *Draft sustainable public procurement policy of Bangladesh, January, 2023*.
- <https://www.worldbank.org/>, *Project Procurement - Policies, Guidelines, Documents for Projects*.
- *UNDP Procurement Strategy (2015-17)*, [Procurement | United Nations Development Programme \(undp.org\)](http://www.undp.org)
- <https://sdgs.un.org/goals>, *Sustainable Development Goals (SDGs)*
- OECD, *Annual Report*. (2009). *The Organization for Economic Co-operation and Development*, OECD, 2, rue André Pascal, 75775 Paris Cedex 16, France.
- OECD, *Annual Report*. (2012). *The Organization for Economic Co-operation and Development*, OECD, 2, rue André Pascal, 75775 Paris Cedex 16, France.
- OECD, *Annual Report*. (2013). *The Organization for Economic Co-operation and Development*, OECD, 2, rue André Pascal, 75775 Paris Cedex 16, France. .
- *Key Elements of Sustainable Consumption and Production Source: UNEP (2010)*.
- <https://cptu.gov.bd/standard-documents/standard-tender-document.html>
- <https://cptu.gov.bd/procurement-policy-and-procedure-documents.html>
- [https://www.researchgate.net/figure/Key-Elements-of-Sustainable-Consumption-and-Production-Source-UNEP-2010\\_fig3\\_320464172](https://www.researchgate.net/figure/Key-Elements-of-Sustainable-Consumption-and-Production-Source-UNEP-2010_fig3_320464172)
- <https://www.uclg.org/en/issues/2030-agenda-sustainable-development>
- [https://dspace.bracu.ac.bd/xmlui/bitstream/handle/10361/12305/17382020\\_BIGD.pdf?sequence=1&isAllowed=y](https://dspace.bracu.ac.bd/xmlui/bitstream/handle/10361/12305/17382020_BIGD.pdf?sequence=1&isAllowed=y)