Sonargaon University (SU)

Internship Report On

The Businesses in developing countries adopting Procurement & e-Procurement Systems: A case study of Bangladesh Forest Department, Bangladesh.

Dissertation submitted in partial fulfillment of the requirements for the Degree of

Masters in Supply Chain Management

Submitted by
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ID No: MSCM 2102023006

Masters in Supply Chain Management

Submitted To
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Professor
Department of Business Administration
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Submitted Date: 12 January, 2023

Sonargaon University (SU

The Businesses in developing countries adopting Procurement & e-Procurement systems: A case study of Bangladesh Forest Department, Bangladesh. (2018-2022)

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ID No: MSCM 2102023006

Masters in Supply Chain Management

Supervisor' Forwarding

Md. Abul Kalam Professor

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Letter of Transmittal

Md.Abul Kalam
Professor
Department of Business Studies
Sonargaon University

Subject: Submission of Dissertation report

Dear Sir,
With humble honor and respect, I am submitting my dissertation report on **"The businesses in developing countries adopting Procurement & e-Procurement systems**" As per partial accomplishment of the requirements for the MBA degree, I have completed dissertation from "Bangladesh Forest Department, Bangladesh" [As per partial accomplishment of the requirements for the MSCM degree, this dissertation has been carried out] under the supervision of you.

This report is an integral part of our academic courses in completion of the MBA program which has given me the opportunity to have an insight into the e-Procurement System in Bangladesh. I hope this report reflects on the contemporary issues on the e-Procurement System that are being Practiced by organizations in our country.

In completing the report I tried my best to blend all my knowledge and imparted every available detail and also attempted to avoid unnecessary amplification of the report.
I humbly request you to accept this report for your kind evaluation.

Sincerely,

_____

Md. Mizanur Rahman
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Student Declaration

Md. Mizanur Rahman. My student ID: MSCM 2102023006 hereby declare that the work presented report of internship titled **"The businesses in developing countries adopting Procurement & e-Procurement systems"** work in Bangladesh Forest Department, at Banpahar, Nandankhaon, Kowtali, Chattogram-4200. under the supervision of Md.Abul Kalam, Professor, Department of Business Studies, Sonargaon University, Banani, Dhaka-1213, Bangladesh.

I also confirm that is my original work and due acknowledgements have been made to materials used in the report.

Md. Mizanur Rahman
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Acknowledgement:

Education involves not only reading books and doing exercise but also acquiring knowledge through doing in practical. I prepared this report for considering these objectives. In this period of time, I enjoyed warm co-operation from every person in the Forest. For the successful accomplishment of this report, first I would like to thank Almighty Allah. And Finally I would like to thank to my honorable supervisor for this report Md.Abul Kalam who has always given support, effort and wise direction to reach at the peak level of effectiveness to complete my report. Additionally, with my warm gratitude from the deepest of my soul I would like to remember all of them who have helped me from every aspect in accomplishing this report as well as my internship program. I also wish to render my grateful thanks to all senior and junior officers of Bangladesh Forest Department, Bangladesh, Bangladesh Forest Department, at Banpahar, Nandankhaon, Kowtali, Chattogram-4200 For the continuous support of my research, for his patience, motivation, enthusiasm, and immense knowledge. His guidance helped me in all the time of research and writing of this thesis. Thanks you very much Sir.

Last but not the least, thanks to all MSCM guys and user department are surveyed, thank you for taking time to complete the survey questionnaires. Your participation made this dissertation a reality.

……

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Executive Summary

The Internship report is prepared as a requirement of MSCM program of Sonargaon University. This report is on **"The businesses in developing countries adopting Procurement & e-Procurement systems"** This report is ina tended to assist the reader in detailed understanding the financial performance of a Forest Department in the Bangladesh. The purpose of this report is to have an idea abohe "Procurement Performance of Forest Department in the Bangladesh.

Procurement means the purchasing or hiring of Goods, or acquisition of Goods through purchasing and hiring, and the execution of Works and performance of Services by any contractual means Public Procurement is the acquisition by "Public Authorities/Entities" of goods, works and services using "public money"

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

Role of Public Procurement 10-20 % of GDP, 45% government spending (World Forest, OECD) Projects of various sizes and in different sectors PP is one of the major economic activities of the public sector. % of Bangladesh's government spending?

Relevance to Good Governance Costs of poor performance: ϖ Systemic corruption = 20-30% of procurement wasted (World Forest) ϖ 80% of waste is inefficiency, not corruption (CONSIP study) ϖ Sustainable development (financing for development, green procurement, SMEs, innovation) ϖ Regional integration ϖ International trade

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Chapter – 1

Introduction to the Report

1.1. Background of the study

Procurement is the method of discovering and agreeing to terms and purchasing goods, services, or other works from an external source, often with the use of a tendering or competitive bidding process.[1] When a government agency buys goods or services through this practice, it is referred to as public procurement.[2]
Procurement as an organizational process is intended to ensure that the buyer receives goods, services, or works at the best possible price when aspects such as quality, quantity, time, and location are compared.[3] Corporations and public bodies often define processes intended to promote fair and open competition for their business while minimizing risks such as exposure to fraud and collusion.
Almost all purchasing decisions include factors such as delivery and handling, marginal benefit, and fluctuations in the prices of goods. Organisations which have adopted a corporate social responsibility perspective are also likely to require their purchasing activity to take wider societal and ethical considerations into account.[4] On the other hand, the introduction of external regulations concerning accounting practices can affect ongoing buyer-supplier relations in unforeseen

1.2. Statement of the problems

Purchasing managers/directors, and procurement managers/directors guide the organization's acquisition procedures and standards. Most organizations use a three-way check as the foundation of their purchasing programs[citation needed]. This involves three departments in the organization completing separate parts of the acquisition process. The three departments do not all report to the same senior manager, to prevent unethical practices and lend credibility to the process. These departments can be purchasing, receiving and accounts payable; or engineering, purchasing and accounts payable; or a plant manager, purchasing and accounts payable. Combinations can vary significantly, but a purchasing department and accounts payable are usually two of the three departments involved.
When the receiving department is not involved, it is typically called a two-way check or two-way purchase order. In this situation, the purchasing department issues the purchase order receipt not required. When an invoice arrives against the order, the accounts payable department will then go directly to the requestor of the purchase order to verify that the goods or services were received. This is typically what is done for goods and services that will bypass the receiving department. A few examples are software delivered electronically, NRE work (non-reoccurring engineering services), consulting hours, etc.
Historically, the purchasing department issued purchase for supplies, services, equipment, and raw materials. Then, in an effort to decrease the administrative costs associated with the repetitive ordering of basic consumable items, "blanket" or "master" agreements were put into place. These types of agreements typically have a longer duration and increased scope to maximize the quantities of scale concept. When additional supplies were required, a simple release would be issued to the supplier to provide the goods or services.

1.3. Scope of the study

Why Is Procurement Important in Business? Procurement is an important step in understanding supply chains, because it helps a company find reliable suppliers that can provide competitively priced goods and services that match the company's needs.

- Information availability.
- Good communication system.
- Have a wide area of gaining knowledge.
- Good working environment.

1.4. Objectives of the study

Procurement Objectives and KPI's

- OBJECTIVE 1: Support Operational Requirements. ...
- OBJECTIVE 2: Manage the Procurement Process and the Supply Base Efficiently and Effectively. ...
- OBJECTIVE 3: Develop strong relationships with other groups within the organization. ...
- OBJECTIVE 4: Support organizational Goals and Objective.

1.5. Research questions of the study

On to the questions:

- When should I use procurement? ...
- What value do I get from a procurement team? ...
- How can a procurement team help if they are not specialists in that particular industry? ...
- How does procurement affect my job in the business? ...
- Can you teach me to do procurement?

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Chapter-2

Profile of the organization

2.1. Organization overview Of Bangladesh Forest Department (BFD)

Bangladesh , pronounced officially the People's Republic of Bangladesh, is a country in South Asia. It is the eighth-most populous country in the world, with a population exceeding 165 million people in an area of 148,460 square kilometres (57,320 sq mi).[7] Bangladesh is among the most densely populated countries in the world, and shares land borders with India to the west, north, and east, and Myanmar to the southeast; to the south it has a coastline along the Bay of Bengal. It is narrowly separated from Bhutan and Nepal by the Siliguri Corridor; and from China by the Indian state of Sikkim in the north. Dhaka, the capital and largest city, is the nation's political, financial and cultural centre. Chittagong, the second-largest city, is the busiest port on the Bay of Bengal. The official language is Bengali, one of the easternmost branches of the Indo-European language family.

Bangladesh forms the sovereign part of the historic and ethnolinguistic region of Bengal, which was divided during the Partition of India in 1947.[13] The country has a Bengali Muslim majority. Ancient Bengal was an important cultural centre in the Indian subcontinent as the home of the states of Vanga, Pundra, Gangaridai, Gauda, Samatata, and Harikela. The Mauryan, Gupta, Pala, Sena, Chandra and Deva dynasties were the last pre-Islamic rulers of Bengal. The Muslim conquest of Bengal began in 1204 when Bakhtiar Khalji overran northern Bengal and invaded Tibet. Becoming part of the Delhi Sultanate, three city-states emerged in the 14th century with much of eastern Bengal being ruled from Sonargaon. Sufi missionary leaders like Sultan Balkhi, Shah Jalal and Shah Makhdum Rupos helped in spreading Muslim rule. The region was unified into an independent, unitary Bengal Sultanate. Under Mughal rule, eastern Bengal continued to prosper as the melting pot of Muslims in the eastern subcontinent and attracted traders from around the world. The Bengali elite were among the richest people in the world due to strong trade networks like the muslin trade which supplied textiles, such as 40% of Dutch imports from Asia.[14] Mughal Bengal became increasingly assertive and independent under the Nawabs of Bengal in the 18th century. In 1757, the betrayal of Mir Jafar resulted in the defeat of Nawab Siraj-ud-Daulah to the British East India Company and eventual British dominance across South Asia. The Bengal Presidency grew into the largest administrative unit in British India. The creation of Eastern Bengal and Assam in 1905 set a precedent for the emergence of Bangladesh. In 1940, the first Prime Minister of Bengal supported the Lahore Resolution with the hope of creating a state in the eastern subcontinent. Prior to the partition

of Bengal, the Prime Minister of Bengal proposed a Bengali sovereign state.
A referendum and the announcement of the Radcliffe Line established the present-day territorial boundary of Bangladesh.

6.1 2.3 Profile of Bangladesh Forest Department

The Ministry of Environment, Forest and Climate Change (Bengali: পরিবেশ, বন ও জলবায়ু পরিবর্তন মন্ত্রণালয়; Paribēś, bana o jalabayou paribarton mantraṇālaẏa) is a ministry of the government of the People's Republic of Bangladesh whose role is ensuring the sustainable environment and optimum forest coverage.[2] Ministry of Environment, Forests and Climate Change is an independent ministry of the Government of the People's Republic of Bangladesh. Its main function is to plan, promote, coordinate and monitor government activities related to the environment and forest. This Ministry was established to look after all environmental matters in Bangladesh, and the Ministry is a permanent member of the Executive Committee of the National Economic Council. The Ministry is a participant in the United Nations Environment Program (UNEP). The main functions of the Ministry include environmental conservation, survey of forest and environmental elements, prevention of environmental degradation and pollution control, afforestation and restoration of degraded areas, and overall protection of the environment. Previously the ministry's name was the Ministry of Environment and Forest. On May 14, 2018, the cabinet changed the name to Ministry of Environment, Forest

2.4. Corporate Information

The forest department was established in 1870 during the British Raj era. Originally established to look after natural forests, the department started social forestation in the 1980s. The department is also responsible for National Botanical Garden of Bangladesh, Forestry Development and Training Centre, Kaptai, and to Bangladesh Forest College.[4][5] The total amount of forest land under the management of the department is 3.617 million acres.[6] In the 1950s and 1960s the department planted Sal Dhaka, Tangail, and Mymensingh of Dhaka division. The department also planted Tendu in Dinajpur. In the 1980s the department planted trees in coastal areas for protection against cyclones and tides. The department planted trees along roads, canals, and railways tracks which totaled 94,000 km.[7]

2.5. Principal activities

Principles of sustainable tropical forest management where wood production is the primary objective

- Background issues concerning sustainable forest management.
- A national policy and legal framework.
- Security of forest tenure and the permanent forest estate.
- Forest management planning.

2.5. Mission

Mission: **Forest expansion, biodiversity conservation, poverty alleviation and wildlife conservation through active participation of people**.

2.5. Vision

Vision: **Conservation of forests, environment, biodiversity and socio-economic development through modern technology and innovation**. Mission: Forest expansion, biodiversity conservation, poverty alleviation and wildlife conservation through active participation of people.

2.5. Objectives of the Forest Department

As an organization, Forest Department has multi-dimensional functions of **forest resource conservation and management, protection and management of biodiversity and watersheds along with economic and ecological development of the country**.

2.6. Core Values of Forest Department

Various types of forest values have been identified (see, for example, Rolston and Caufal 1991) and broadly include amenity values, e.g., lifestyle, scenery, wildlife, and nature; environmental quality values, e.g., air, soil, and water quality; ecological values, e.g., habitat conservation, sustainability, threatened

I. Performance Driven

The purpose of this study was to determine the effect of job satisfaction, organizational support, and motivation on employee performance in the Jember Regional Forestry Branch Office. The total population of this study was 95, which was also used as a sample in the study. The analysis technique used is the Structural Equation Model (SEM) using WarpPLS 5.0. The results of data analysis show that job satisfaction variables significantly influence work motivation, organizational spport has no significant effect on work motivation, job satisfaction has a significant effect on employee performance, organizational support has a significant effect on employee performance, work motivation has a significant effect on employee performance.

2.5. General Works of BFD

The **Principal Chief Conservator of Forests** (Hindi: प्रधान मुख्य वन संरक्षक) is the highest-ranking officer belonging to the Indian Forest Service who is responsible for managing the Forests, Environment and Wild-Life related issues of a state of India.

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(a) Contract Agreement (PG4-8)

THIS AGREEMENT made the 20th day of November 2022 between Divisional Forest Officer, Chattogram South Forest Division, Nandankanan, Chattogram, Bangladesh (hereinafter called "the Purchaser") of the one part and Conveyor & Ropeway Services Pvt. Ltd., having its Registered Office at 75-C, Park Street, 6th Floor, Kolkata-700 016, India (hereinafter called "the Supplier") of the other part:

WHEREAS the Purchaser invited Tenders for Inspection, Inventory, Supplying Spare Part, Repair, Maintenance, Servicing and Other Associated Works for Re-commissioning existing Rope Way System at Sheikh Rasel Aviary & Eco-Park at Rangunia, Chattogram, Bangladesh and has accepted a Tender by the Supplier for the supply of those goods and related services in the sum of BDT 1,50,000000.00 [One Crore Fifty Lakh] only (hereinafter called "the Contract Price").

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

I. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the General Conditions of Contract hereafter referred to.

2. The following documents forming the Contract shall be in the following order of precedence, namely:

   (a) This signed Form of Contract Agreement;
   (b) The Notification of Award;
   (c) The Tender and the appendices to the Tender;
   (d) Particular Conditions of Contract;
   (e) General Conditions of Contract;
   (f) Technical Specifications;
   (g) Drawings;
   (h) Price Schedules and Schedule of Requirements and;
   (i) other document including correspondences listed in the PCC forming part of the Contract

3. In consideration of the payments to be made by the Purchaser to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Purchaser to provide the goods and related services and to remedy any defects therein in conformity in all respects with the provisions of the Contract.

4. The Purchaser hereby covenants to pay the Supplier in consideration of the provision of the goods and related services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of Bangladesh on the day, month and year first written above.

For the Purchaser:	For the Supplier:
Signature	
Print Name	
Title	

In the presence
of Name
Address

(b) Notification of Award

Contract No: Date:

To: Conveyor & Ropeway
Services Pvt. Ltd.
75c, Park Street, 6th Floor,
Kolkata-700 016, India.

This is to notify you that your tender dated 15 October, 2022 (tender no. for the supply of Goods and related Services Inspection, Inventory, Supplying Spare Part, Repair, Maintenance, Servicing and Other Associated Works for Re-commissioning existing Rope Way System at Sheikh Rasel Aviary & Eco-Park at Rangunia, Chattogram, Bangladesh, for the Contract Price of BDT 1,50,000000.00 [One Crore Fifty Lakh Only]. as corrected and modified in accordance with the Instructions to Tenderers, has been approved by Approving Authority /Project Director, Establishment of Sheikh Russell Aviary and Ecopark, Rangunia, Chattogram(2nd phase)(1st Revised)Project.

You are thus requested to take following actions:

i. accept in writing the Notification of Contract Award within seven (7) working days of its issuance pursuant to ITT Sub-Clause 62.3

ii. furnish a Performance Security in the specified format and in the amount of BDT 1500000.00 [Fifteen Lakh Only], *within* seven (28) days from issue of this Notification of Contract Award but not later than 30 October, 2022 in accordance with ITT Clause 64.2

iii. sign the Contract within twenty eight (28) days of issuance of this Notification of Award but not later than 30 October, 2022 in accordance with ITT Clause 67.2

You may proceed with the execution of the supply of Goods and related Services only upon completion of the above tasks. You may also please note that this Notification of Contract Award shall constitute the formation of this Contract, which shall become binding upon you. We attach the draft Contract and all other documents for your perusal and signature.

(Md. Shofiqul Islam)
Divisional Forest Officer
Chattogram South Forest
Division, Chattogram.

Tel: email:

Proposal For Inspection, Inventory, Supplying Spare Part, Repair, Maintenance, Servicing And Other Associated Works For Re-Commissioning Of Existing Rope Way Cable Car System In Sheikh Rasel Aviary & Eco-Park, At Rangunia, Chattogram

Purchaser: Divisional Forest Officer, Chattogram South Forest Division, Chattogram

Contract Ref. No.:

Supplier:

(c) Schedule — I

SITE INFORMATION

1.1 Location

Rangunia is about 35 Km from Chattogram City. An Eco Park and Aviary for exotic aquatic birds is being developed at Rangunia by Department of Forest, Govt. of Bangladesh. Inspection, Inventory, Supplying Spare Part, Repair, Maintenance, Servicing and Other Associated Works for Re-commissioning existing Rope Way System at Sheikh Rasel Aviary & Eco-Park at Rangunia, Chattogram is required for its sustainability and smooth operation ,which will attract more tourist.

1.2 Geographical and Meteorological Information

Coordinate	22° 29' 16.61" N 92° 07' 29.05" E
Climate	Tropical Ambient Temperature 40° C Max. / 15° C Min.
Topography	Undulating terrain with a few small and medium sized hills
Wind Speed	260 Km. / hr, Exposure C (BNBC)
Earthquake Zone	Zone 2 as per Bangladesh Code PGA 0.15
Rainfall	95— 100 mm / hour

Schedule — 2

SAFETY PROVISION

4.1 General safety provisions shall be in accordance with the stipulation laid in Indian/International Codes.

4.2 Operational safety shall be ensured by providing protection against over speeding of cabins and against reversal of rotation. Operational safety shall also be ensured against availability of service and emergency brake suitably interlocked. In case of Power failure, the emergency brake shall automatically be active and stop the Drive.

4.3 Operation safety shall further be ensured by providing a Grip Testing Device at the exit point of each terminal station which will ensure proper locking of carriage grips with the Rope. In the event of improper gripping, Ropeway drive shall be automatically tripped.

4.4 Line safety shall be ensured by providing suitable rope gauge with a view to having adequate clearance between Cabins while crossing each other during worst wind condition. Line safety shall further be ensured by providing a "Rope Catcher" which will arrest the rope in the event of any accidental occurrence of rope coming out of the Line Rollers and at the same time trip the drive.

4.5 Electrical protection shall be provided by way of Thermal Overload Relay, Under Voltage Relay, Single Phasing Preventer, HRC Fuse, Earthing / Grounding of equipment’s etc.

4.6 In the event of electrical power failure, standby diesel engine shall be started to drive the Ropeway and bring the cabins to the respective stations.

4.7 In the event of a breakdown of the Ropeway with passenger on line, Vertical rescue operation shall be carried out by rescue chair by rescuers. In this the rescuers reach the cabin from the nearest tower with all the equipment’s and then the passengers are lowered down to the ground level with the help of rescue chairs being operated manually.

4.8 Close Circuit Television will be provided at appropriate locations at the Terminals to facilitate the operator for maintaining safety and soundness of the system.

Schedule — 3

SCOPE OF WORK & RESPONSIBILITIES

5.1 SCOPE OF WORK

SCOPE OF CRSPL (SUPPLIER)

- Plant Inspection
- Checking of Alignment
- Servicing of line equipment
- Servicing of Tower Mechanical Items
- Magnetic Testing of Rope
- Non destructive Test (NDT) of Critical items
- Servicing of Cabin, Hanger and Grips
- Servicing of Station Mechanical items.
- Servicing of all Electrical Units
- Trial Operation and re-commissioning
- Re-Checking of Alignment (after 03 months, 06 months and 12 months of re-commissioning)

Schedule — 4

GENERAL CONDITIONS OF SALE

01. Definitions

a) The term "Purchaser" / "Customer" refers to DFO, Chattogram South Forest Division.

b) The term "Supplier"/ "Contractor" refers to Conveyor & Ropeway Services Pvt. Ltd.(CRSPL)

C) The term "Engineer" refers to the person responsible and appointed in writing by the Purchaser

d) The term "Sub-Contractor" refers to a person named in the contract for any part of the work or any person to whom any part of the contract has been sub-let with the consent, in writing, of the Purchaser.

e) The term "Contract" refers to and includes acceptance of Proposal, the conditions of contract, specifications, schedules, drawings, form of tender, covering letters and schedule of prices and rates as agreed between the Purchaser and the Contractor, and those general and special conditions that may be added, and shall also include any agreement signed by and between the parties in relation to the offer submitted.

f) The term "Repair, maintenance, servicing and other associated works" refers to the whole of the plant required for transportation of passengers covered under this offer.

g) The term "Setting to Work" refers to inspection, inventory, supplying spare part, repair, maintenance, servicing and other associated works for existing rope way cable car system to the re-commissioning of the installation.

02. Basis of Pricing

2.1 The Offer Price shall remain FIRM till validity period stated in Clause 20.

The proposal is based on the present cost of materials, transport and labour and in the event of a contract not resulting from this offer within the stated validity period, alterations may become necessary. All offers are subject to Governmental orders, regulations and directives in force from time to time. Any contract resulting from this offer shall be upon the basis of the Purchaser accepting exclusively the following express obligations and conditions:-

a) To increase the contract price above the basis now existing in accordance with the following provision :-

Unless otherwise specified and agreed, variations in the contract price shall be adjusted in accordance with the applicable Mechanical Engineering Materials Price Index published in the Board of Trade Journal and for the purpose, date of this offer shall be considered as the "base" date. For items procured outside India, variation will be applicable on documents from the Suppliers.

b) That if owing to restrictions under any Regulations of Competent Authority or non-availability of material in time, the Contractor is unable to supply any of the materials specified, they shall be at liberty to substitute other materials

which, to their opinion will be capable of the same duties, in order to complete the contract.

2.2 Offer is conditional upon whole of the work as described in this Proposal is awarded to CRSPL.

2.3 Prices offered are C & F Chattogram (If any)

3. Country of Origin

All goods and services to be supplied under this proposal shall have their origin from various countries, but will be procured / coordinated, mostly from India.

4. Patent Rights

The supplier shall indemnify the Purchaser against all third-party claims of infringement of patent, trade mark, or industrial design rights arising from use of the goods or any part thereof.

5. Inspection & Test

a) The Purchaser or its representative shall have the right to inspect and / or to test the goods to confirm their conformity to the design specification at no extra cost to the Purchaser. It may be conducted at the premises of the Supplier or its subcontractor(s). All reasonable facilities and assistance, including access to drawing and production data, shall be furnished to the inspector at no charge to the Purchaser. All cost and expenses for deputation of Purchaser's representative including but not limited to passage, board & lodging, incidentals, fees etc. shall be borne by the Purchaser.

However, since the delivery period offered at the request of the Purchaser is very short, Inspection shall be waived and the Seller shall be fully responsible for their quality.

06. **Packing**

All contract goods (except Structures) shall be packed strongly and properly to protect them from moisture, rain, rust, corrosion, shock etc. according to their different shape and special features as to withstand numerous handling, loading and unloading as well as long distance sea and inland transportation.

07. **Marking for Shipment**

The Supplier shall mark the following on each package with indelible paint in conspicuous English printed works: (if any)

a) Consignee

b) Contract number

c) Shipping mark

d) Port of destination

e) Name of goods and item no., case no.

f) Gross / net weight (KG)

g) Measurement (length X width X height in cm)

08. **Insurance**

The Purchaser shall provide "Cargo Insurance" for all goods in a freely convertible currency naming the Purchaser as beneficiary. (if any)

09. **Terms of Payment**

The method and condition of payment to be made to the supplier under this contract shall be as under:-

a) 100% (Hundred per cent) of the value of goods (spare parts) payable against presentation of Shipping Documents (If any)

b) 100% (Hundred per cent) of the value of Engineering Services payable on execution.

c) On delivery and acceptance any item any percent payment of the contract value.

d) Cost of Supply items are FOB Land / Sea Port nearest to Kolkata, India. Freight, Insurance, Custom duty, local transport, local taxes etc. to be borne by supplier/contractor/local agent(if any)

e) Cost is inclusive of Sea-worthy packing and forwarding charges. to be borne by supplier/contractor/local agent(if any) , which will later on pad by purchase to supplier/local agent in BDT after acceptance of invoice from supplier.

f) Payment for supply items to be made through 100% irrevocable L/C through s supplier/contractor/local agent(if any)

g) Payment for Services to be released through Bank within 7 (seven) days of completion of Services.

All payment shall be effected the particulars of the Bank Account nominated are as following and/or All payment shall be effected out of a confirmed, irrevocable and divisible letter of Credit, with part shipment allowed established with any of the following Bank carrying out business in Bangladesh.

a) Agrani Bank

b) Janata Bank

c) Uttara Bank

d) Rupali Bank

e) Soneli Bank

A Schedule of Prices indicating value of Individual Supply/Work/Services shall be provided on acceptance of Proposal which shall form part of the Contract. Letter of Credit should allow part shipment/ delivery for pro rata payment as per above mentioned Billing Schedule.

Title of the Account : [insert title to whom the Contract awarded]

Name of the Bank : [insert name with code, if any]

Name of the Branch : [insert branch name with code ,if any]

Account Number : [insert number]

Address : [insert location with district]

Tel :

Fax :

e-mail address :

[information furnished by the Contractor shall be substantiated by the concerned Bank and authenticated by the Procuring Entity]

Performance Security

The Supplier shall submit a Contract Performance Security in the Form of irrevocable Bank Guarantee equal to 10 % (ten per cent) of the Contract Value. The Guarantee shall remain valid for 28 (twenty eight) days from the date of Commissioning.

11. Completion

Normal completion period for a Plant of this nature is 12 (twelve) months. However, the work shall be completed in **10 (ten)** months from the date of signing of the Contract for the ordered value, whichever is later also on the following expressive understanding.

Liquidated damage for Late Delivery, if imposed, shall be applied only after 11 (eleven) months, if the job is delayed for reasons exclusive attributable to the Contractor.

12. **Warranty**

a) The Supplier shall warrant that the goods supplied shall be new, unused, of the most recent or current models and shall have no defect, arising from design, materials, or workmanship (except when the design and / or material is required by the Purchaser's specification) or from any act or omission of the Supplier, that may develop under normal use of the supplied goods in the conditions prevailing in the country of final destination.

b) This warranty shall remain valid for 12 (twelve) months from the date of re-commissioning or 18 (eighteen) months from the date of arrival of last shipment of the goods at the port of destination, whichever occurs earlier.

c) Normal wear & tear is excluded from the purview of the Warranty.

d) Supplier's liability against the Warranty shall be repair of any defective Plant or parts to perform satisfactorily or to replace them free of charge, if they fail to perform even after repair. Replacement parts shall become the Supplier's property.

13. **Force Majeure**

In all cases of Force Majeure including e.g. war declared or undeclared, Act of God, Act of Public Enemy, Government orders, rules and regulations, civil commotion, strike, lock-out, fire, earthquake, typhoons as well as any circumstances which could either not be predictede by the parties to the Contract or which could be predicted, but not avoided.

In the event of any delay or stoppages due to Force Majeure conditions, delivery date fixed should be suitably extended considering the duration of the FM conditions as well as time lag for re-starting period upon mutual discussions and agreement.

For prolonged period of stoppage or suspension for FM conditions or otherwise as started above, if there is any increase in the prices of raw materials, components, electrical, Mechanical steel etc., revised increased prices shall be agreed upon mutual discussions and delivery schedule be re-fixed without penalty.

14. **Governing Language**

The contract shall be written in English language. All correspondences and other documents pertaining to the contract which are exchanged by the parties shall be written in the same language.

15. **Applicable Law**

The contract shall **be** interpreted in accordance with the current laws applicable in India & Bangladesh.

16. **Taxes & Duties.**

Procurement, Supply, and Installation of All defective/missing items/ spare parts are provided by the Suppliers/Contractor/Sub-Contractor cost of all expenses (Fright, Insurance, Customs, Duties, Local Transport, Local Tax, levies, etc.) should be born by Suppliers/Contractor/Sub- Contractor.

Suppliers/Contractor/Sub-Contractor will be submitted the invoice for all expenses incurred in relation to supply of spare parts and other related services. Purchaser will provide the bill through the Bank Chanel to the supplier in BDT. In case of exchange rate of BDT to INR/USD, Cost is based on the exchange rate prevailing on date and shall be presently adjusted for any downfall.

17. Accommodation at Plant site for exported staff

To be made available free of charge by the Purchaser

18. **Inland Transport in Bangladesh**

Supplier should supply the spare parts at plant site.

19. **Operation & Maintenance**

Liability of the Contractor in respect of O & M of the Plant shall be limited to deployment of required technical crew to over-see proper operation and maintenance as also to provide Training to the Purchaser's personnel. The Purchaser shall arrange for or provide with all required operating personnel, power, consumables, tools & tackles, Spares, Commercial & Security staff, Ticketing, Administrative and Managerial activities.

Number of expatriated personnel shall be at the sole discretion of the Contractor without sacrificing their contractual responsibility. Also, deployment shall be for one shift of 8 hours duration.

20. **Validity**

This offer shall remain valid for 120 (One hundred twenty) days from the date of offer.

21. **Other Clauses**

Clauses stipulated in the Tender Document, unless superseded above, shall be applicable.

(d) Particular Conditions of Contract (PCC)

GCC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract
GCC 1.1(j)	The Purchaser is: Divisional Forest Officer/Project Director, Establishment of Sheik Russell Aviary and Eco-Park at Rangunia, Chattogram (2nd Phase), Chattogram South Forest Division, Nandankanan, Chattogram, Bangladesh
GCC 1.1(o)	The Point of Delivery of Plant: Sheik Russell Aviary and Eco-Park at Rangunia, Chattogram.
GCC 5.1(i)	The following documents shall also be part of the Contract: 1. Method Statement for Inspection and Servicing, Implementation Schedule, Technical Specifications submitted by Tenderer 2. Drawing submitted by Tenderer
GCC 11.1	For notices, the Purchaser's contact details shall be: Divisional Forest Officer / Project Director, Establishment of Sheik Russell Aviary and Eco-Park at Rangunia, Chattogram (2nd Phase), Chattogram South Forest Division, Nandankanan, Chattogram, Bangladesh Sheikh Rase! Aviary and Eco-Park Project Phone:88-031-637328, E-mail:dfoctgs@gmail.com For notices, the Supplier's contact details shall be: Attention: K.Bose Conveyor & Ropeway Services Pvt. Ltd., Address: 75-C, Park Street, 6th Floor Kolkata-700 016, India Telephone: 00 91 33 22176779 / 22295990 Facsimile number: 00 91 33 22174280 Electronic mail address: tech_crspl@yahoo.in
GCC 18.1	The scope of Supply shall be defined in: As stated in Annexure - I: Schedule of Requirement and Technical Specifications

GCC 22.2	The packing, marking and documentation within and outside the packages shall be: The outer packing may be clearly marked on at least four slides as follows: Name and address of Purchaser Name of the Supplier Contract Description Final Destination/Delivery point: Sheikh Russell Aviary & Eco-Park At Rangunia, Chattogram, Bangladesh Gross weight Package number of total number of packages Brief description of the content Any special lifting instructions Any special handling instructions Clear identification of Lower and Upper Base Station Mark on the respective Plant and machinery

GCC 23.2	Details of shipping and documents to be furnished by the Supplier/Contractor/Sub-Contractor shall be: Upon shipment, the Supplier shall notify the Purchaser and the Insurance Company by telex or fax or e-mail the full details of the shipment, including Contract number, description of Goods, quantity, the vessel, the bill of lading number and date, port of loading, date of shipment, port of discharge, etc. The Supplier shall send the following documents to the Purchaser, with a copy to the Insurance Company: (a) Original and 5 copies of the Supplier's invoice showing the description of the Goods, quantity, unit price, and total amount; (d) Original and 2 Copies of Certificate of Origin from Chambers of Commerce of respective Countries (c) Full set of Clean Shipped on-board Marine/Ocean Lading (Bill of Lading) (d) One set of Non-Negotiable Shipping Documents comprising above items. (e) Country of Origin of Goods must be mentioned on outside of all packages and also in invoices (f) Original and 5 copies of the packing list identifying contents of each package; (g) Manufacturer's or Supplier's warranty certificate; (h) Inspection Certificate, issued by the nominated inspection agency, and the Supplier's factory inspection report; and (I) CE Certification of the products of European origin, if available. The Purchaser shall receive the above documents at least one week before arrival of the Goods at the port or place of arrival and, if not received, the Supplier will be responsible for any consequent expenses. (If any)
GCC 25.1	The Contract price is: BDT 1,50,000000.00 [One Crore Fifty Lakh Only].
GCC 26.2	Responsibility of the Purchaser and Supplier is: The Supplier shall deliver the equipment and spare part, repair, maintenance, servicing and other associated works for existing rope way cable car system in Sheikh Russell Aviary & Eco-Park at Rangunia, Chattogram, Bangladesh.

GCC 27.1	The method and conditions of payment to be made to the Supplier under this Contract shall be paid by purchaser through the Account Pay Cheque in BDT from Purchaser's country in favor of the suppliers to his nominated bank account in his country, which will be converted in INR/USD through bank channel by convert able taka account instrument of the concern bank(if applicable).The particulars of the Bank Account nominated are as following Title of the Account : [insert title to whom the Contract awarded] Name of the Bank : [insert name with code, if any] Name of the Branch : [insert branch name with code ,if any] Account Number : [insert number] Address : [insert location with district] Tel : Fax : e-mail address : [information furnished by the Contractor shall be substantiated by the concerned Bank and
GCC 27.5	The payment-delay period after which the Purchaser shall pay interest to the supplier shall b 28 (twenty-eight) days after submission of an invoice or request for payment by the Supplier and after the Purchaser has accepted it. Not Applicable.
GCC 28.2	The insurance coverage shall be: The Purchaser shall obtain the insurance coverage for al imported Items and Supplier shall obtain the Insurance for storage, repair, maintenance servicing and other associated works, trial operation, re-commissioning etc., till Take-over a specified in 'Additional Terms and Conditions'.
GCC 32.1	The inspections and tests shall be: In accordance with internationally accepted Good Industrial Practice applicable for Passenger Ropeway System.
GCC 33.3	The period of validity of the Warranty shall be: 365 (three hundred sixty-five) days from th date of commissioning. For purpose of the Warranty, the place(s) of final destination(s) shal be: Sheikh Russell Aviary and Eco-Park, Rangunia, Chattogram
GCC 33.6	The Supplier shall correct any defects covered by the Warranty within 28 days of being notified by the Purchaser of the occurrence of such defects.
GCC 35.1	The applicable rate for liquidated damages for delay shall be: 0.5 percent of the Contract Pric of the delayed Goods or unperformed Related services for each week of delay until actua delivery or performance. The maximum amount of liquidated damages shall be: Ten (10%) percent of the Contract Price.

GCC 47.2(b)	The name of the Adjudicator: Shall be jointly appointed by the parties, if required In cas disagreement between the parties, the appointing authority of the Adjudicator is: President The Institution of Engineers, Bangladesh
GCC 47.3(b)	The rules of procedure for arbitration proceedings shall be as follows:
	If the Adjudicator chooses the UNCITRAL Arbitration Rules, the following sample claus should be inserted:
	GCC 47.3 (b)—Any dispute, controversy or claim arising out of or relating to this Contract, or breach, termination or invalidity thereof, shall be settled by arbitration in accordance wit the UNCITRAL Arbitration Rules as at present in force.
	If the Adjudicator chooses the Rules of ICC, the following sample clause should be inserted: GCC 47.3 (b)—All disputes arising in connection with the present Contract shall be finally settled under the Rules of Conciliation and Arbitration of the International Chamber of Commerce by one or more arbitrators appointed in accordance with said Rules.
	If the Adjudicator chooses the Rules of Arbitration Institute of Stockholm Chamber of Commerce, the following sample clause should be inserted: GCC 47.3 (b)—Any dispute, controversy or claim arising out of or in connection with this Contract, or the breach termination or invalidity thereof, shall be settled by arbitration in accordance with the Rules of the Arbitration Institute of the Stockholm Chamber of Commerce.
	If the Adjudicator chooses the Rules of the London Court of International Arbitration, the following clause should be inserted: GCC 47.3 (b)—Any dispute arising out of or in connection with this Contract, including any question regarding its existence, validity or termination shall be referred to and finally resolved by arbitration under the Rules of the London Court of International Arbitration, which rules are deemed to be incorporated by reference to this clause.

Additional Terms And Conditions For Inspection, Inventory, Supplying Spare Part, Repair, Maintenance, Servicing And Other Associated Works For Existing Rope Way Cable Car System

1. Definitions:

1.1 Project Manager: Assistant Conservator of Forests / Range Officer, Rangunia Range appointed by the Procuring Entity and notified to the Contractor who is responsible for supervising the execution and completion of the Works and Physical services and administering the Contract.

1.2 Site means the places where the Permanent Works (repair, maintenance, servicing and other associated works, trial operation, re-commissioning) are to be executed including storage and working areas.

2. Insurance

2.1 The Supplier/Contractor shall provide, in the joint names of the Procuring Entity and the Supplier/Contractor, insurance cover from the start date of associated works with repair, maintenance, servicing and other associated works, trial operation, re-commissioning till Take-over of the Plant, for the following events which are due to the Contractor's risks:

a) loss of or damage to the Works, Plant, and Materials (minimum cover 30% of the related contract Price);
b) loss of or damage to Equipment (cover full replacement cost);
c) loss of or damage to property (except the Works, Plant, Materials and Equipment) in connection with the Contract (cover full replacement cost); and
d) Personal injury or death (for third party: Tk. 10 (ten) lac, for contractor's employees and purchaser's person: as per requirement applicable in Bangladesh).

2.2 The Supplier/Contractor shall deliver policies and certificates of insurance to the Project Manager, for the Project Manager's approval, before the commencing associated works with re-commissioning. All such insurances shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.

2.4 Alterations to the terms of insurance shall not be made without the approval of the Project Manager.

2.5 Both parties shall comply with conditions of the insurance policies.

2.6 Insurance shall be obtained from Shadharan Bima Corporation, Bangladesh

3. Management and Progress Meeting

3.1 Either the Project Manager or the Contractor may require the other to attend a management and progress meeting. The business of such meeting shall be to review the progress and plans for remaining work and to deal with matters raised in accordance with the early warning procedure.

3.2 The Project Manager shall record the business of the meetings and provide copies of the record to those attending the meeting and to the Procuring Entity. The responsibility of the parties for actions to be taken shall be decided by the Project Manager either at the management and progress meeting or after the meeting, and stated in writing to all concerned.

4. Commencement re-commissioning of Inspection, Repair Maintenance Servicing

4.1 The Supplier/Contractor/Sub-Contractor shall this spare parts to the site give the possession of the site, as required for the commencement of the repair, maintenance, servicing and other associated works, re-commissioning of the exiting Ropeway Cable Car.

4.2 The Supplier/Contractor shall commence the repair, maintenance, servicing and other associated works as soon as is reasonably practicable after taking the possession of the site from the Procuring Entity.

5. Completion of Works

5.1 The Supplier/Contractor shall carry out the Works in accordance with the Programme of Works submitted by the Supplier/Contractor and as updated with the approval of the Project Manager to complete them in all respects by the Intended Completion Date.

5.2 Except in case of Force Majeure, a delay by the Contractor in the performance of its Completion obligations shall render the Contractor liable to the imposition of Liquidated Damages unless an extension of Intended Completion Date is agreed upon.

6. Programme of Works

6.1 The Supplier/Contractor shall submit to the Project Manager for approval a Programme of Works showing the general methods, arrangements, order, and timing for all the activities in Servicing, Repair Maintenance re-commissioning of the cable car system with associated works. The programme may be in the form of an Implementation Schedule prepared in any software or other form acceptable to the Project Manager.

7. Execution of Works

7.1 The Supplier/Contractor shall re-commission for safely operation and carry out the Goods and Physical services in accordance with the approved Specifications and Drawings. (Completion work time within 03 months). After re-commissioning Supplier will Re-Checking of Alignment (after 03 months, 06 months and 12 months of re-commissioning)

7.2 Before commencing and each stage of Repair Maintenance re-commissioning associated works, the Supplier/Contractor shall furnish a statement of procedure work provisions, in sufficient detail to demonstrate the adequacy of the Supplier/Contractor's capacity and arrangement to meet the requirements and the completion time to the Project Manager for approval. However, Project Managers Approval shall not relieve the Supplier/Contractor of his responsibility and contractual obligations

7.3 All works under the Contract shall at all times be open to examination, inspection, measurements, testing and supervision of the Project Manager, and the Contractor shall ensure presence of its representatives at such actions provided proper advance notice is given by the Project Manager.

7.4 No part of the Works shall be covered up or put out of sight without the approval of the Project Manager. The Supplier/Contractor shall give notice in writing to the Project Manager whenever any such part of the Works is ready for examination and the Project Manager shall attend to such examination without unreasonable delay.

7.5 The Project Manager shall check the maintenance and repair works executed by the Supplier/Contractor and notify the Supplier/Contractor of any Defects found. Such checking shall not relieve the Contractor from his or her obligations. The Project Manager may also instruct the Contractor to search for a Defect and to uncover and test any work that the Project Manager considers may have a Defect.

7.5 If the Project Manager instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples If there is no Defect, the test shall be a Compensation Event.

7.6 If, as a result of an examination, inspection, measurement or testing, of maintenance and repair works it is found to be defective or otherwise not in accordance with the Contract, the Project Manager may reject the Works by giving notice to the Contractor, with reasons. The Contractor shall then promptly make good the defect and ensure that the rejected Works subsequently complies with the Contract.

8. Approval of the Supplier/Contractor's Temporary Works

8.1 The Supplier/Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Project Manager, who is to approve them, if they comply with the Specifications and Drawings.

8.2 The Contractor shall be responsible for design of Temporary Works.

8.3 The Project Manager's approval shall not alter the Contractor's responsibility for design of the Temporary Works.

8.4 The Contractor shall obtain approval of third parties to the design of the Temporary Works, where required.

9. Supplier/Contractor's Personnel at Site

9.1 Before commencing maintenance and repair works the Supplier/Contractor shall provide a list of key technical personnel including Site Manager required to perform the installation and erection work to the Project Manager for Approval.

9.2 The Contractor shall employ the key personnel to carry out the functions named in the list or other personnel approved by the Project Manager.

9.3 The Project Manager will approve any proposed replacement of key personnel only if their relevant qualifications and abilities are equal to or higher than those of the personnel named in the Schedule.

9.4 If the Project Manager asks the Supplier/Contractor to remove a particular person who is a member of his or her staff or work force from the Site, he or she shall state the reasons, and the Supplier/Contractor shall ensure that the person leaves the Site within three (3) days and has no further connection with the work in the Contract.

10. Safety, Security and Protection of the Environment

10.1 The Contractor shall throughout the execution and completion of the Works and the remedying of any defects therein:

(a) take all reasonable steps to safeguard the health and safety of all workers working on the Site and other persons entitled to be on it, and to keep the Site in an orderly state;

(b) provide and maintain at the Contractor's own cost first-aid boxes, safety boots and helmets for personnel at site, all lights, guards, fencing, warning signs and watching for the protection of the Works or for the safety on-site; and

(c) take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of the Contractors methods of operation.

(d) The Supplier/Contractor shall not, while implementing the Works, cause any permanent damage to public road, plantation or lake, inhabitants of aviary, or a high tension power line or any other thing of a public utility service or obstruct or interfere with, otherwise than temporarily as may be necessary, the traffic on any public road, plantation or waterway.

11. Accidents

11.1 The Supplier/Contractor or any person authorized by him in this behalf shall take following steps, whenever any accidents occur during installation, erection, associated civil works, operation, management of the ropeway system which involves loss of life or serious injury to the user of the Ropeway:

inform and report the matter to the officer-in-charge of police station having jurisdiction over the Site;

Inform in writing to the Project Manager;

take necessary steps for first aid and seek necessary aid from nearest hospital; and Necessary steps for making claim under insurance cover

12. Discoveries

12.1 Anything of historical or other interest or of significant value unexpectedly discovered on the Site shall be the property of the Procuring Entity.The Supplier/Contractor shall notify the Project Manager of such discoveries and carry out the Project Manager's instructions for dealing with them.

13. Other Contractors

13.1The Supplier/Contractor shall cooperate and share the Site with other Contractors, public authorities, utilities, the Project Manager and the Procuring Entity between the dates given in the Schedule of other Contractors. The Contractor shall also provide facilities and services for them as described in the Schedule. The Procuring Entity may modify the Schedule of other Contractors, and shall notify the Contractor of any such modification.

14. Project Manager's Decision

14.1 Project Manager will decide Contractual matters between the Procuring Entity and the Supplier/Contractor in its role as representative of the Procuring Entity.

15. Delegation

15.1 The Project Manager may delegate any of his duties and responsibilities to his representative except to the Adjudicator, after notifying the Supplier/Contractor, and may cancel any delegation, without retroactivity, after notifying the Contractor.

15.2 Any communications to the Supplier/Contractor in accordance with such delegation shall have the same effect as if it was given by the Project Manager.

16. Working Hours

16.1 The Supplier/Contractor shall the work services on the site on the weekly holidays, and other days within the normal working hours to perform their task as soon as possible to re-commission the work.

17. Welfare of Laboure's

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

17.2 The Supplier/Contractor, in particular, shall provide proper accommodation to his or her laborer's and arrange proper water supply, conservancy and sanitation arrangements at the site for all necessary hygienic requirements and for the prevention of epidemics in accordance with relevant regulations, rules and orders of the government.

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

18. Child Labour

18.1The Contractor shall not employ any child to perform any work that is economically exploitative, or is likely to be hazardous to, or to interfere with, the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral, or social development in compliance with the applicable labor laws and other relevant treaties ratified by the government

19. Early Warning

19.1 If at any time during erection and installation works, the Supplier/Contractor or its Subcontractors should encounter events, circumstances, conditions that may adversely affect the quality of the work, delay the execution of the Works, the Contractor shall promptly notify the Project Manager in writing of the delay, its likely duration, and its cause. As soon as practicable after receipt of the Contractor's notice, the Project Manager shall evaluate the situation, and the Contractor shall cooperate with the Project Manager in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced.

20. Liquidated Damage

20.1 The applicable rate for liquidated damages for delay shall be: *0.5 percent of the* Contract Price of the delayed Goods or unperformed Related services for each week of delay until actual delivery or performance

20.2 The maximum amount of Liquidated Damages for the uncompleted Works or any part thereof is 10 (ten) percent of the final Contract price of the whole of the Works.

20.3 Payment of liquidated damages shall not affect the Contractor's liabilities.

21. Force Majeure

211 Force Majeure may include, but is not limited to, (a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies ; (b) rebellion, terrorism, sabotage by persons other than the Contractor's personnel, revolution, insurrection, military or usurped power, or civil war; (c) riot, commotion, disorder, strike or lockout by persons other than the Contractor's personnel; (d) munitions of war, explosive materials, ionizing radiation or contamination by radio-activity, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radioactivity; and (e) natural catastrophes such as fires, floods, epidemics, quarantine restrictions, freight embargoes, cyclone, hurricane, typhoon, tsunami, storm surge, earthquake, hill slides, landslides, and volcanic activities.

22. Correction of Defects

22.1 The Project Manager shall give notice to the Contractor, with a copy to the Procuring Entity and others concerned, of any Defects before the end of the Defects Liability Period, which begins at Completion Date. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.

23. Cost of Repairs to Loss or Damages

23.1 Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Liability Period shall be remedied by the Contractor at the Contractor's own cost, if the loss or damage arises from the Contractor's acts or omissions.

24. Completion

24.1The Contractor shall apply by notice to the Project Manager for issuing a Completion Certificate of the Works, and the Project Manager shall do so upon deciding that the work is completed.

24.2Any temporary structure or facilities erected or build by the supplier are to be dismantle and removed from the site at the cost born by the supplier at completion.

25. Taking-over

25.1

On receipt of a Completion report from the Supplier, the Project Manager shall issue a Completion Certificate or submit his detail observation within 10 (ten) days of receipt of Completion Report.

The Procuring Authority, represented by a competent committee, shall Take Over the Site and Ropeway System within 5 (five) days of Project Manager's issuing the said Certificate.

In the unlikely event of the supplier receiving no response from the Project Entity within Fifteen-day period from Supplier's submitting the Completion Report the project will be deemed to have been Taken-Over by the Procuring Entity.

26. Operating and Maintenance Manuals, As-built Drawings, list of consumables and spares

26.1 The Supplier/Contractor shall handover the operating and maintenance manuals, as built drawings, list of consumable and spares for at least two years before issuing a certificate of Completion.

27. Defects Liability Period

27.1The defects liability period is 12 (twelve) months from the date of issuing a certificate of completion.

(e) General Conditions of Contract

1. Definitions

1.1 The following words and expressions shall have the meaning hereby assigned to them. Boldface type is used to identify the defined term:

(a) **Completion Schedule** means the fulfilment of the Related Services by the Supplier in accordance with the terms and conditions set forth in the Contract;

(b) **Contract Agreement** means the Agreement entered into between the Purchaser and the Supplier, together with the Contract Documents referred to therein, including all attachments, appendices, and all documents incorporated by reference therein;

(c) **Contract Documents** means the documents listed in the Contract Agreement, including any amendments thereto;

(d) **Contract Price** means the price stated in the Notification of Award and thereafter as adjusted in accordance with the provisions of the Contract; ;

(e) **Day** means calendar days unless otherwise specified as working days;

(f) **Delivery** means the transfer of ownership of the Goods from the Supplier to the Purchaser in accordance with the terms and conditions set forth in the Contract;

(g) **GCC** mean the General Conditions of Contract;

(h) **Goods** means raw materials, products and equipment and objects in solid, liquid or gaseous form, electricity, and related Services if the value of such Services does not exceed that of the Goods themselves ;

(i) **Government** means the Government of the People's Republic of Bangladesh;

(j) **Procuring Entity/Purchaser** means a Entity having administrative and financial powers to undertake Procurement of Goods, Works or Services using public funds, as specified in the PCC;

(k) **Related Services** means Services linked to the supply of Goods contracts.;

(l) **PCC** means the Particular Conditions of Contract;

(m) **Subcontractor** means any natural person, private or government entity, or a combination of the above, to whom any part of the Goods to be supplied or execution of any part of the Related Services is subcontracted by the Supplier;

(n) **Supplier** means a Person under contract with a Purchaser for the supply of Goods and related Services under the Act;

(o) **Site** means the point(s) of delivery named in the PCC

(p) **Writing** means communication written by hand or machine duly signed and includes properly authenticated messages

by facsimile or electronic mail.

(q) **Verified Report** means the report submitted by the Purchaser to the Head of the Purchaser setting forth its findings as to the existence of grounds or causes for termination and explicitly stating its recommendation for the issuance of a Notice to Terminate.

2. Contract Documents

2.1 Subject to the order of precedence set forth in the GCC Sub-Clause 5.1, all documents forming the Contract (and all parts thereof) are intended to be correlative, complementary, and mutually explanatory. The Contract Agreement shall be read as a whole.

3. Corrupt, Fraudulent, Collusive or Coercive Practices

6.1 The Government requires that Purchaser, as well as Suppliers, shall observe the highest standard of ethics during the implementation of procurement proceedings and the execution of contracts under public funds.

6.2 The Government requires that Procuring Entities, as well as Suppliers shall, during the execution of Contracts under public funds, ensure-

(a) strict compliance with the provisions of Section 64 of the Public Procurement Act 2006 (Act 24 of 2006);

(b) abiding by the code of ethics as mentioned in the Rule127 of the Public Procurement Rules, 2008;

(c) that neither it nor any other member of its staff or any other agents or intermediaries working on its behalf engages in any practice as detailed in GCC Sub -Clause 3.3

6.3 For the purpose of GCC Sub-clause 3.2 the terms –

(a) **corrupt practice** means offering, giving or promising to give, receiving, or soliciting, either directly or indirectly, to any officer or employee of a Purchaser or other public or private authority or individual, a gratuity in any form; employment or any other thing or service of value as an inducement with respect to an act or decision or method followed by a Purchaser in connection with a Procurement proceeding or contract execution;

(b) **fraudulent practice** means the misrepresentation or omission of facts in order to influence a decision to be taken in a Procurement proceeding or Contract execution;

(c) **collusive practice** means a scheme or arrangement between two (2) or more Persons, with or without the knowledge of the Purchaser, that is designed to arbitrarily reduce the number of Tenders submitted or fix Tender prices at artificial, noncompetitive levels, thereby denying a Purchaser the benefits of competitive price arising from genuine and open competition; or

(d) **coercive practice** means harming or threatening to harm, directly or indirectly, Persons or their property to influence a decision to be taken in a Procurement proceeding or the execution of a Contract, and this will include creating obstructions in the normal submission

process used for Tenders.

6.4 Should any corrupt, fraudulent, collusive or coercive practice of any kind come to the knowledge of the Purchaser, it will, in the first place, allow the Supplier to provide an explanation and shall, take actions only when a satisfactory explanation is not received. Such exclusion and the reasons thereof, shall be recorded in the record of the procurement proceedings and promptly communicated to the Supplier concerned. Any communications between the Supplier and the Purchaser related to matters of alleged fraud or corruption shall be in writing.

6.5 If corrupt, fraudulent, collusive or coercive practices of any kind determined by the Purchaser against the Supplier alleged to have carried out such practices, the Purchaser shall proceed under GCC Clause 42.4

6.6 The Supplier shall permit the Purchaser to inspect the Supplier's accounts and records and other documents relating to the submission of the Tender and Contract performance.

4. Interpretation

4.1 In interpreting the GCC, singular also means plural, male also means female or neuter, and the other way around. Headings in the GCC shall not be deemed part thereof or be taken into consideration in the interpretation or construction thereof or of the Contract. Words have their normal meaning under the English language unless specifically defined.

4.2 **Entire Agreement**

(a) The Contract constitutes the entire agreement between the Purchaser and the Supplier and supersedes all communications, negotiations and agreements (whether written or oral) of parties with respect thereto made prior to the date of Contract Agreement; except those stated under GCC Sub Clause 5.1(i) .

4.3 **Amendment**

(a) No amendment or other variation of the Contract shall be valid unless it is in writing, is dated, expressly refers to the Contract, and is signed by a duly authorised representative of each party thereto.

4.4 **Non-waiver**

(a) Subject to GCC Sub-Clause 4.4(b), no relaxation, forbearance, delay, or indulgence by either party in enforcing any of the terms and conditions of the Contract or the granting of time by either party to the other shall prejudice, affect, or restrict the rights of that party under the Contract, neither shall any waiver by either party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract.

(b) Any waiver of a party's rights, powers, or remedies under the Contract must be in writing, dated, and signed by an authorised representative of the party granting such waiver, and must specify the right and the extent to which it is being waived.

4.5 **Severability**

(a) If any provision or condition of the Contract is prohibited or rendered

invalid or unenforceable, such prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.

5. Documents Forming the Contract in order of precedence

5.1 The following documents forming the Contract shall be in the following order of precedence, namely :

(a) the signed Contract Agreement;

(b) the Notification of Award;

(c) The Tender and the appendices to the Tender;

(d) Particular Conditions of Contract;

(e) General Conditions of Contract;

(f) Technical Specifications;

(g) Drawings;

(h) Priced Schedule and schedule of requirements and ;

(i) Other Documents including correspondences listed in the PCC forming part of the Contract.

6. Eligibility

6.1 The Supplier and its Subcontractors shall have the nationality of an eligible country. A Supplier or Subcontractor shall be deemed to have the nationality of a country if it is a citizen or constituted, incorporated, or registered, and operates in conformity with the provisions of the laws of that country.

6.2 All Goods and Related Services to be supplied under the Contract shall have their origin in Eligible Countries.

6.3 For the purpose of the GCC Clause 6.2, origin means the country where the goods have been grown, mined, cultivated, produced, manufactured, or processed; or through manufacture, processing, or assembly, another commercially recognized article results that differs substantially in its basic characteristics from its components.

7. Governing Language

7.1 The Contract shall be written in English language. Correspondence and documents relating to the Contract exchanged by the Supplier and the Purchaser shall be written in English .Supporting documents and printed literature that are part of the Contract may be in another language provided they are accompanied by an accurate translation of the relevant passages in English language, in which case, for purposes of interpretation of the Contract, this translation shall govern.

7.2 The Supplier shall bear all costs of translation to the governing language and all risks of the accuracy of such translation.

8. Governing Law

8.1 The Contract shall be governed by and interpreted in accordance with the laws of the People's Republic of Bangladesh.

9. No fees/Gratuities

9.1 No fees, gratuities, rebates, gifts, commissions or other payments, other than those shown in the Tender or the contract, shall be given or received in connection with the procurement process or in the contract execution.

10. Use of Contract Documents & Information

10.1 The Supplier shall not, except for purposes of performing the obligations in this Contract, without the Purchaser's prior written consent, disclose this Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the Purchaser. Any such disclosure shall be made in confidence and shall extend only as far as may be necessary for purposes of such performance.

10.2 Any document, other than this Contract itself, enumerated in GCC Clause 10.1 shall remain the property of the Purchaser and shall be returned (all copies) to the Purchaser on completion of the Supplier's performance under this Contract if so required by the Purchaser.

11. Communications & Notices

11.1 Communications between Parties (notice, request or consent required or permitted to be given or made by one party to the other) pursuant to the Contract shall be in writing to the addresses specified in the PCC.

11.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.

11.3 A Party may change its address for notice hereunder by giving the other Party notice of such change to the address.

12. Trademark, Patent and Intellectual Property Rights

12.1 The Purchaser should not be liable for any infringement of intellectual property rights arising from use of the goods procured. In case there are third-party claims of such infringement of patent, trademark, or industrial design rights, the supplier must indemnify and hold the Purchaser free and harmless against such claims and shall not be in contravention of The **Trademark Act, 2009 and The Patents and Designs Act, 1911.**

13. Copyright

13.1 The copyright in all drawings, documents, and other materials containing data and information furnished to the Purchaser by the Supplier herein shall remain vested in the Supplier, or, if they are furnished to the Purchaser directly or through the Supplier by any third party, including suppliers of materials, the copyright in such materials shall remain vested in such third party.

14. Assignment

14.1 The Supplier shall not assign his rights or obligations under the Contract, in whole or in part, except with the Purchaser's prior written consent.

15. Sub contracting

15.1 Any subcontracting arrangements made during contract implementation and not disclosed at the time of the Tendering shall not be allowed.

15.2 Subcontracting of any portion of the Goods shall not relieve the Tenderer from any liability or obligations that may arise from its performance.

15.3 Supplier shall retain full responsibility for the contract and can not pass any contractual obligations to the subcontractor and under no circumstances assignment of the contract to the subcontractor be allowed.

15.4 Subcontractors shall comply with the provisions of GCC Clause 3 and 6.

16. Supplier's Responsibilities

16.1 The Supplier shall supply all the Goods and Related Services specified in the Scope of Supply as stated under GCC Clause 18 and the Delivery and Completion schedule, as stated under GCC Clauses 23 and 24 in conformity with the provisions of the Contract Agreement.

17. Purchaser's Responsibilities

17.1 Whenever the performance of the obligations in this Contract requires that the Supplier obtain permits, approvals and other license from local public authorities, the Purchaser may, if so needed by the Supplier, make its best effort to assist the Supplier in complying with such requirements in a timely and expeditious manner. However, the supplier shall bear the costs of such permits and/or licenses. On the other hand, the Purchaser shall pay all costs involved in the performance of its responsibilities, in accordance with the contract.

17.2 The Purchaser shall pay the Supplier, in consideration of the provision of Goods and Related Services, the Contract Price under the provisions of the Contract at the times and manner prescribed in the Contract Agreement.

18. Scope of Supply

18.1 Subject to the PCC, the Goods and Related Services to be supplied shall be as specified in Section 6: Schedule of Requirements.

18.2 Unless otherwise stipulated in the Contract, the Scope of Supply shall include all such items not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for attaining Delivery and Completion of the Goods and Related Services as if such items were expressly mentioned in the Contract.

19. Amendment to Order

19.1 The Purchaser may make an amendment to Order for necessary adjustment within the general scope of the contract in any one or more of the following aspects in order to fully meet the requirement of the Contract:

(a) Drawing, design or specifications of the goods, provided that:

i. The goods to be furnished are to be specifically manufactured for the government in accordance therewith;

ii. The change is an improvement of the goods and advantageous to the Government;

iii. It is done at no extra cost; and

iv. It is not prejudicial to the losing Tenderers in the sense that such change/s could not have been foreseen during the conduct of the tendering and would have significantly affected the other tenderer's tender;

(b) The place of delivery;

(c) The place of performance of the services;

(d) Additional items needed and necessary for the protection of the goods procured, which were not included in the original contract.

19.2 Such amendment may or may not result to an increase or a decrease of the contract price, and/or an extension or reduction of the delivery period. However, the amendment should not have the result of changing the subject matter of the contract or the specifications of the goods or services, in any material aspect and to such an extent that, if introduced during the Tendering stage, may have had a significant effect on other Tenderer's tender, because this situation would actually require another tendering activity.

20. Instances When Amendment to Order May be Issued

20.1 The Purchaser may issue amendments order at any time during contract implementation, through a notice as stated under GCC Clause 11, provided that such adjustment is required to fully meet the requirements of the contract. Any of the following circumstances may serve as basis for such amendment/s:

(a) Emergency cases, fortuitous events or unforeseen contingencies arising during contract implementation, and such contingencies have an impact on the procurement at hand, such as:

i. Changes in the conditions affecting the contract, e.g., a change in the place of delivery;

ii. Time is of the essence in the implementation of the contract, and any changes require immediate implementation; and

iii. Additional requirements have been identified as necessary for the protection of the goods procured, such as changes in the packaging of the goods, or

additional items have become necessary to ensure that the goods are sufficiently protected from the elements;

(b) When the contract does not reflect the real intention of the parties due to mistake or accident, and the amendment is necessary to reflect the party's intention; and

(c) Other analogous circumstances that could affect the conditions of the procurement at hand

21. Adjustments in Contract Price and/or Delivery Schedule in Amendment to Order

21.1 If an amendment to order increases or decreases the cost of ,or the time required for executing any part of the delivery under the original contract, an equitable adjustment in contract price and/or delivery schedule should be mutually agreed upon between parties concerned, and the contract should be modified as stated under GCC Clause 46

21.2 If the amendment to order consists of additional items, the price adjustment shall be based on the unit price in the original contract for items of goods similar to those in the original contract. If the contract does not contain any rate applicable to the additional items, then suitable prices shall be mutually agreed upon between the parties, based on prevailing market prices.

21.3 It is required, however, that any increase in contract price must not exceed ten percent (10%) of the original contract price.

22. Packing and Documents

22.1 The Supplier shall provide such packing of the goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract and in accordance with existing industry standards. The packing shall be sufficient to withstand, without limitation, rough handling and exposure to extreme temperatures, salt and precipitation, and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.

22.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract as stated under GCC Clause 22.1, including additional requirements, if any, specified in the PCC, and in any subsequent instructions ordered by the Purchaser.

22.3 The outer packaging must contain a "Packing List" which must reflect the actual contents of the package.

23. Delivery and Documents

23.1 Subject to GCC Sub-Clause 19, the Delivery of the Goods and completion of the Related Services shall be in accordance with the Delivery and Completion Schedule specified in the Section 6: Schedule of Requirements.

23.2 The details of shipping and other documents to be furnished by the Supplier shall be specified in the PCC, and shall be received by the Purchaser at least one week before arrival of the Goods and, if not received the Supplier shall be responsible for consequent expenses.

24. Acceptance

24.1 Acceptance by the Purchaser shall be completed not later than fourteen (14) days from receipt of the goods at final destination in the form of an **Acceptance Certificate**, unless any defects in the supply, any damage during transportation or any failure to meet the required performance criteria of the supply are identified and reported to the Supplier as stated under GCC Clause 31 and GCC Clause 32. In such cases the Acceptance Certificate will be issued only for those parts of the contract supplies which are accepted. The Acceptance Certificate for the remaining supplies will only be issued after the Supplier has remedied the defects and/or any non-conformity under GCC Clause 31 and GCC Clause 32.

24.2 The appropriate Technical Inspection and Acceptance Committee of the Purchaser must commence the inspection and acceptance process within two (2) days from delivery of the goods, and shall complete the same as soon as practicable.

25. Contract Price

25.1 The Contract Price shall be specified in the PCC.

25.2 During evaluation, tender has excluded and not taken into account:

(a) In the case of Goods manufactured in Bangladesh, VAT payable on account of Supplier, which will be payable on the goods if a contract is awarded to the Tenderer;

(b) in the case of Goods manufactured outside the Bangladesh, already imported or to be imported, customs duties, import VAT and other import taxes levied on the imported Good, VAT, which will be payable on the Goods if the contract is awarded to the Tenderer.

25.3 The Contract price will include all the costs paid or payable as stated under GCC Clause 25.2.

25.4 Prices charged by the Supplier for the Goods delivered and the Related Services performed under the Contract shall not vary from the price as stated under GCC Sub-Clause 25.1, with the exception of any change in price resulting from a Change Order issued under GCC Clause 19.

26. Transportation

24.1 The Supplier is required under the Contract to transport the Goods to a specified place of destination as specified in Section 6: Schedule of Requirements, defined as the Site, transport to such place of destination, including insurance, other incidental costs, and temporary storage, if any. These costs shall be included in the Contract Price.

24.2 If not in accordance GCC Clause 26.1, responsibility for transportation of the Goods shall be as specified in the ***INCOTERM*** indicated in the Price Schedule or any other trade terms specify the responsibilities of the Purchaser and Supplier as specified in PCC.

27. Terms of Payment

25.1 The Contract Price, including any Advance Payments, if applicable, shall be paid in the manner as specified in the PCC.

25.2 The Supplier's request for payment shall be made to the Purchaser in writing, accompanied by an invoice describing, as appropriate, the Goods delivered and Related Services performed, and accompanied by the documents as stated under GCC Clause 23 and 24 and upon fulfilment of any other obligations stipulated in the Contract.

25.3 Payments shall be made promptly by the Purchaser, but in no case later than the days indicated in the PCC after submission of an invoice or request for payment by the Supplier, and after the Purchaser has accepted it.

25.4 The currencies in which payments shall be made to the Supplier under this Contract shall be those in which the tender price is expressed.

25.5 In the event that the Purchaser fails to pay the Supplier any payment by its respective due date or within the period set forth in the PCC, the Purchaser shall pay to the Supplier interest on the amount of such delayed payment at the rate shown in the PCC, for the period of delay until payment has been made in full, whether before or after judgment or arbitrage award.

28. Insurance

26.1 The Goods supplied under this Contract shall be fully insured by the Supplier in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage, and delivery. The Goods remain at the risk and title of the Supplier until their final acceptance by the Purchaser.

26.2 If not in accordance GCC Clause 28.1, the insurance coverage shall be as specified in the ***INCOTERM*** indicated in the Price Schedule or any other insurance provisions as specified in PCC.

29. Taxes and Duties

27.1 For Goods Manufactured within Bangladesh, the Supplier shall be entirely responsible for all taxes, duties, VAT, license fees, and other such levies imposed or incurred until delivery of the contracted goods to the Purchaser.

27.2 For Goods manufactured outside Bangladesh, the Supplier shall be entirely responsible for all taxes, duties and other such levies imposed outside Bangladesh.

27.3 If any tax exemptions, reductions, allowances or privileges may be available to the Supplier in Bangladesh, the Purchaser shall use its best efforts to enable the Supplier to benefit from any such tax savings to the maximum allowable extent.

30. Performance Security

28.1 The proceeds of the Performance Security shall be (10) Ten of the contract price payable to the Purchaser as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.

28.2 The Performance Security shall be discharged by the Purchaser and returned to the Supplier not later than Thirty (30) days following the date of Completion of the Supplier's performance obligations under the Contract and the issuance of certification to that effect by the Purchaser, including any warranty obligations as stated under GCC Clause 33, provided that there are no claims field against the supplier.

31. Specifications and Standards

29.1 The Goods and Related Services supplied under this Contract shall conform to the technical specifications and standards mentioned in Section 7, Technical Specification and in Section 8, Drawings, if any.

29.2 If there is no applicable standard, the goods must conform to the authoritative standards appropriate to the good's country of origin. Such standards must be the latest issued by the concerned institution.

29.3 Subject to the GCC Clause 19, the Supplier shall be entitled to disclaim responsibility for any design, data, drawing, specification or other document, or any modification thereof provided or designed by or on behalf of the Purchaser, by giving a notice of such disclaimer to the Purchaser.

29.4 Wherever references are made in the Contract to codes and standards in accordance with which it shall be executed, the edition or the revised version of such codes and standards shall be those specified in the Technical Specification. During Contract execution, any changes in any such codes and standards shall be applied only after approval by the Purchaser and shall be treated under GCC Clause 19.

32. Inspections and Tests

30.1 The Purchaser shall have the right to test the Goods to confirm their conformity to the Contract specifications. The PCC and Technical specifications shall specify what tests the Purchaser requires and where they are to be conducted. The supplier shall at its own expense and at no cost to the Purchaser, carry out all such tests of the Goods and related services as are specified in the Contract.

30.2 The Supplier shall provide the Purchaser with a report of the results of any such test.

30.3 The Purchaser may engage external agents for the purpose of conducting inspection or pre-shipment inspection of Goods, provided that the Purchaser shall bear all of its costs and expenses.

30.4 The Purchaser or its designated representative as specified shall be entitled to attend the tests and/or inspections under GCC Clause 32.1, provided that the Purchaser shall bear all of its own costs and expenses incurred in connection with such attendance.

30.5 Whenever the Supplier is ready to carry out any such test and inspection, it shall give a reasonable advance notice, including the place and time, to the Purchaser. The Supplier shall obtain from any relevant third party or manufacturer any necessary permission or consent to enable the Purchaser or its designated representative to attend the test and/or inspection.

30.6 The Purchaser may require the Supplier to carry out any test and/or inspection not required by the Contract, but deemed necessary to verify that the characteristics and performance of the Goods comply with the technical specifications, codes and standards under the Contract, provided that the Supplier's reasonable costs and expenses incurred in the carrying out of such test and/or inspection shall be added to the Contract Price. Further, if such test and/or inspection impede the progress of manufacturing and/or the Supplier's performance of its other obligations under the Contract, due allowance will be made in respect of the Delivery Dates and Completion Dates and the other obligations so affected.

30.7 The Purchaser may reject any Goods or any part thereof that fail to pass any

test and/or inspection or do not conform to the specifications. The Supplier shall either rectify or replace such rejected Goods or parts thereof or make alterations necessary to meet the specifications at no cost to the Purchaser, and shall repeat the test and/or inspection, at no cost to the Purchaser, upon giving a notice under GCC Sub-Clause 32.5.

30.8 The Supplier agrees that neither the execution of a test and/or inspection of the Goods or any part thereof, nor the attendance by the Purchaser or its representative, nor the issue of any report as stated under GCC Sub-Clause 32.2, shall relieve the Supplier from any warranties or other obligations under the Contract.

33. Warranty

33.1 The Supplier warrants that all the Goods supplied under the Contract are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, except when the design and/or material required by the Purchaser provides otherwise under GCC Clause 19.

33.2 The Supplier further warrants that the all Goods supplied under this Contract shall have no defect, arising from design, materials, or workmanship or from any act or omission of the Supplier that may develop under normal use of the supplied Goods in the conditions prevailing in Bangladesh.

33.3 In order to assure that manufacturing defects shall be corrected by the Supplier, manufacturer, or distributor, as the case may be, a warranty shall be required from the Supplier for a minimum period of three (3) months in the case of supplies, and one (1) year in the case of equipment, or other such period as may be specified in the PCC, after the Goods, or any portion thereof as the case may be, have been delivered to and accepted in the form of an **Acceptance Certificate** as indicated in the GCC Clause 24.1 at the final destination indicated in the PCC

33.4 The warranty periods may vary among the various items and lots. The warranty for Goods delivered ahead will lapse earlier than the succeeding deliveries.

33.5 The Purchaser shall promptly notify the Supplier in writing of any claims arising under this warranty.

33.6 Upon receipt of such notice, the Supplier shall, within the period specified in the PCC, expeditiously repair or replace the defective Goods or parts thereof, at no cost to the Purchaser.

33.7 If the Supplier, having been notified, fails to remedy the defect(s) within the period as stated under GCC Sub Clause 33.6, the Purchaser may proceed to call upon the Performance security without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract and under the applicable law.

33.8 Performance Security under GCC Clause no 30 shall only be released after the lapse of the warranty period, provided that the goods supplied are free from patent and latent defects and all the conditions imposed under the contract have been fully met.

(a) A patent defect, which is one that is apparent to the buyer on normal observation. It is an apparent or obvious defect.

i. For example, a ball pen that does not write is patently defective.

(b) A latent defect, which is one that is not apparent to the buyer by reasonable observation. A latent defect is "hidden" or one that is not immediately determinable.

i. For example, a ball pen that writes .75 kilometres instead of the expected 1.5 kilometres, has a latent defect.

34. Delays in Delivery and Extensions of Time

32.1 The Supplier must deliver the Goods or perform the services procured within the period prescribed by the Purchaser, as specified in the Contract.

32.2 If at any time during performance of the Contract, the Supplier or its subcontractors should encounter conditions impeding timely delivery of the Goods or completion of Related Services as stated under GCC Clause 23, the Supplier shall promptly notify the Purchaser in writing. It must state therein the cause/s and duration of the expected delay. The Purchaser shall decide whether and by how much to extend the time. In all cases, the request for extension should be submitted before the lapse of the original delivery date.

32.3 Within twenty-one (21) days of receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may grant time extensions, if based on justifiable grounds, without liquidated damages.

32.4 The Procuring may extend up to twenty percent (20%) of the original contract time, above 20% of the original contract time approval of Head of Purchaser (HOPE) shall be required, in which case the extension shall be ratified by the Parties by amendment of the Contract as stated under GCC Clause 46.

32.5 Except in the case of Force Majeure, as provided under GCC Clause 38, a delay by the Supplier in the performance of its Delivery and Completion obligations shall render the Supplier liable to the imposition of liquidated damages as stated under GCC Clause 35, unless an extension of time is agreed upon, under GCC Sub-Clause 34.3.

35. Liquidated Damages

35.1 Subject to GCC Clause 34 and 38, if the , if the Supplier fails to deliver any or all of the Goods by the Date(s) of delivery and/or perform the Related Services within the period specified in the Contract as stated under GCC Clause 23, the Purchaser shall, without prejudice to all its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in the PCC of the Contract price of the delayed Goods or unperformed / Related Services for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the percentage specified in those PCC. Once the maximum is reached, the Purchaser may terminate the Contract as stated under GCC Clause 42.

36. Limitation of Liability

36.1 Except in cases of criminal negligence or wilful misconduct, and in the case of infringement of patent and intellectual property rights, if applicable, the Supplier shall not be liable to the Purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, the aggregate liability of the Supplier to the Purchaser shall not exceed the

total Contract Price, provided that this limitation shall not apply, to the cost of repairing or replacing defective equipment or, to any obligation of the Supplier to pay liquidated damages to the Purchaser.

37. Change in Laws and Regulations

37.1 Unless otherwise specified in the Contract, if after the Contract, any law, regulation, ordinance, order or bylaw having the force of law is enacted, promulgated, abrogated, or changed in Bangladesh (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the Delivery Date and/or the Contract Price, then such Delivery Date and/or Contract Price shall be correspondingly increased or decreased, to the extent that the Supplier has thereby been affected in the performance of any of its obligations under the Contract.

38. Definition of Force Majeure

38.1 In this Clause, "Force Majeure" means an exceptional event or circumstance:

(a) which is beyond a Party's control;

(b) which such Party could not reasonably have provided against before entering into the Contract;

(c) which, having arisen, such Party could not reasonably have avoided or overcome; and

(d) which is not substantially attributable to the other Party.

38.2 Force Majeure may include, but is not limited to, exceptional events or circumstances of the kind listed below, so long as conditions (a) to (d) above are satisfied:

(i) war, hostilities (whether war be declared or not), invasion, act of foreign enemies;

(ii) rebellion, terrorism, sabotage by persons other than the Contractor's Personnel, revolution, insurrection, military or usurped power, or civil war;

(iii) riot, commotion, disorder, strike or lockout by persons other than the Contractor's Personnel;

(iv) munitions of war, explosive materials, ionising radiation or contamination by radio-activity, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-activity, and

(v) natural catastrophes such as cyclone, hurricane, typhoon, tsunami, storm surge, floods, earthquake , landslides, fires, epidemics, quarantine restrictions, or volcanic activity;

(vi) freight embargoes;

(vii) acts of the Government in its sovereign capacity.

39. Notice of Force Majeure

39.1 If a Party is or will be prevented from performing its substantial obligations under the Contract by Force Majeure, then it shall give notice to the other Party of the event or circumstances constituting the Force Majeure and shall specify the obligations, the performance of which is or will be prevented. The notice shall be given within 14 days after the Party became aware, or should have become aware, of the relevant event or circumstance constituting Force Majeure.

39.2 The Party shall, having given notice, be excused performance of its obligations for so long as such Force Majeure prevents it from performing them.

39.3 Notwithstanding any other provision of this Clause, Force Majeure shall not apply to obligations of either Party to make payments to the other Party under

the Contract.

40. Duty to Minimise Delay

38.1 Each Party shall at all times use all reasonable endeavours to minimise any delay in the performance of the Contract as a result of Force Majeure.

38.2 A Party shall give notice to the other Party when it ceases to be affected by the Force Majeure.

41. Consequences of Force Majeure

41.1 The Supplier shall not be liable for forfeiture of its Performance Security, liquidated damages, or termination for default if and to the extent that it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

41.2 The Purchaser may suspend the delivery or contract implementation, wholly or partly, by written order for a certain period of time, as it deems necessary due to force majeure as defined in the contract.

41.3 Delivery made either upon the lifting or the expiration of the suspension order. However, if the Purchaser terminates the contract as stated under GCC clause 42, resumption of delivery cannot be done.

41.4 Head of Purchaser determines the existence of a force majeure that will be basis of the issuance of suspension of order.

41.5 Adjustments in the delivery or contract schedule and/or contract price, Including any need to modify contract under GCC Clause 46.

42. Termination for Default

42.1 The Purchaser shall terminate this Contract for default when any of the following conditions attends its implementation:

(a) Outside of force majeure, the Supplier fails to deliver or perform any or all of the GOODS within the period(s) specified in the contract, or within any extension thereof granted by the Purchaser pursuant to a request made by the Supplier prior to the delay;

(b) As a result of force majeure, the Supplier is unable to deliver or perform any or all of the GOODS, amounting to at least ten percent (10%) of the contract price, for a period of not less than sixty (60) calendar days after receipt of the notice from the Purchaser stating that the circumstance of force majeure is deemed to have ceased; or

(c) The Supplier fails to perform any other obligation under the Contract;

(d) If the Supplier, in the judgment of the Purchaser has engaged in corrupt, fraudulent, collusive or coercive practices, as stated under GCC Clause 3, in competing for or in executing the Contract;

(e) When deductible amount due to liquidated damage reaches its maximum as stated under GCC Clause 35.

42.2 Termination of a contract for default is without prejudice to other remedies available to the Purchaser for breach of contract, such as payment of liquidated and other damages, if there are grounds for the latter.

42.3 In the event the Purchaser terminates the Contract in whole or in part, as stated under GCC Clause 42.1, the Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods or Related Services similar to those undelivered or not performed, and the Supplier shall be liable to the Purchaser for any additional costs for such similar Goods or Related Services.

However, the Supplier shall continue performance of the Contract to the extent not terminated.

42.4 In the event as stated under GCC Clause 42.1(d),the Purchaser shall,

(a) terminate the Supplier's employment under the Contract and cancel the contract, after giving 14 days' notice to the Supplier and the provisions of Clause 42 shall apply as if such expulsion had been made under Sub-Clause 42.1

(b) declare, at its discretion, the concerned Person to be ineligible to participate in further Procurement proceedings, either indefinitely or for a specific period of time.

43. Termination for insolvency

43.1 The Purchaser shall terminate this Contract if the Supplier is declared bankrupt or insolvent as determined with finality by a court of competent jurisdiction. In this event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the Purchaser and/or the Supplier.

44. Termination for Convenience

44.1 The Purchaser, by written notice sent to the supplier, may terminate this Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that the termination is for the Purchaser's convenience, the extent to which performance of the supplier under the contract is terminated, and the date upon which such termination becomes effective.

44.2 Any of the following circumstances may constitute sufficient grounds to terminate a contract for conveniences :

(a) If Physical and economic conditions have significantly changed so as to render the contract no longer economically, financially or technically feasible, as determined by the Head of Purchaser;

(b) The Head of Purchaser has determined the existences of conditions that make contract implementation impractical and/or unnecessary, such as, but not limited to , fortuitous event/s, change in laws and government policies;

(c) Funding for the contract has been withheld or reduced;

(d) Any circumstances analogous to the foregoing.

44.3 The GOODS that have been delivered and/or performed or are ready for delivery or performance within thirty (30) calendar days after the Supplier's receipt of Notice to Terminate shall be accepted by the Purchaser at the contract terms and prices. For GOODS not yet performed and/or ready for delivery, the Purchaser may elect:

(a) to have any portion delivered and/or performed and paid at the contract terms and prices; and/or

(b) to cancel the remainder and pay to the Supplier an agreed amount for partially completed and/or performed goods and for materials and parts previously procured by the Supplier.

45. Procedures for Termination of Contracts

45.1 The following provisions shall govern the procedures for termination of this Contract as stated under GCC Clauses 42,43 and 44:

(a) Upon receipt of a written report of acts or causes which may constitute ground(s) for termination as aforementioned, or upon its own initiative, the Purchaser shall, within a period of seven (7) calendar days, verify the existence of such ground(s) and cause the execution of a Verified Report, with all relevant evidence attached;

(b) Upon recommendation by the Purchaser, the Head of the Purchaser shall terminate this Contract only by a written notice to the Supplier conveying the termination of this Contract. The notice shall state:

i. that this Contract is being terminated for any of the ground(s) afore-mentioned, and a statement of the acts that constitute the ground(s) constituting the same;

ii. the extent of termination, whether in whole or in part;

iii. an instruction to the Supplier to show cause as to why this Contract should not be terminated; and

iv. special instructions of the Purchaser, if any.

(c) The Notice to Terminate shall be accompanied by a copy of the Verified Report;

(d) Within a period of seven (7) calendar days from receipt of the Notice of Termination, the Supplier shall submit to the Head of the Purchaser a verified position paper stating why this Contract should not be terminated. If the Supplier fails to show cause after the lapse of the seven (7) day period, either by inaction or by default, the Head of the Purchaser shall issue an order terminating this Contract;

(e) The Purchaser may, at any time before receipt of the Supplier's verified position paper, withdraw the Notice to Terminate if it is determined that certain items or works subject of the notice had been completed, delivered, or performed before the Supplier's receipt of the notice;

(f) Within a non-extendible period of ten (10) calendar days from receipt of the verified position paper, the Head of the Purchaser shall decide whether or not to terminate this Contract. It shall serve a written notice to the Supplier of its decision and, unless otherwise provided, this Contract is deemed terminated from receipt of the Supplier of the notice of decision. The termination shall only be based on the ground(s) stated in the Notice to Terminate; and

(g) The Head of the Purchaser may create a Contract Termination Review Committee (CTRC) to assist him in the discharge of this function. All decisions recommended by the CTRC shall be subject to the approval of the Head of the Purchaser.

46. Contract Amendment

41.1 Subject to applicable laws, no variation in or modification of the terms of this Contract shall be made except by written amendment signed by the

parties.

41.2 The Purchaser, in accordance with their Delegation of Financial Powers, as required, may amend the Contract to reflect the changes introduced to the Original terms and Conditions of the Contract.

47. Settlement of Disputes

42.1 **Amicable Settlement:**

(a) The Purchaser and the Supplier shall use their best efforts to settle amicably all disputes arising out of or in connection with this Contract or its interpretation.

(f) Technical Specifications

SPECIAL INSTRUCTION: The Supplier shall ensure that equipment and plant for the ropeway system are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, safety provisions, interior and exterior finishing and complies Bangladesh Building Code or any Internationally recognized Ropeway Standard.

(g) Drawings;

(h) Priced Schedule and schedule of requirements

(h) Other Documents including correspondences listed in the PCC forming part of the Contract.

In research results, there are in total 50 respondents in the SCM of BCL participating in this questionnaire. Figure shows the gender and age proportion of the sample. 45 respondents are male and 5 are female. The ratio of the respondents in the age group under 20 years old is 10%, 26% in age group 21-30, 50 % is in age group 31-40 and 14 % is in age group over 41.

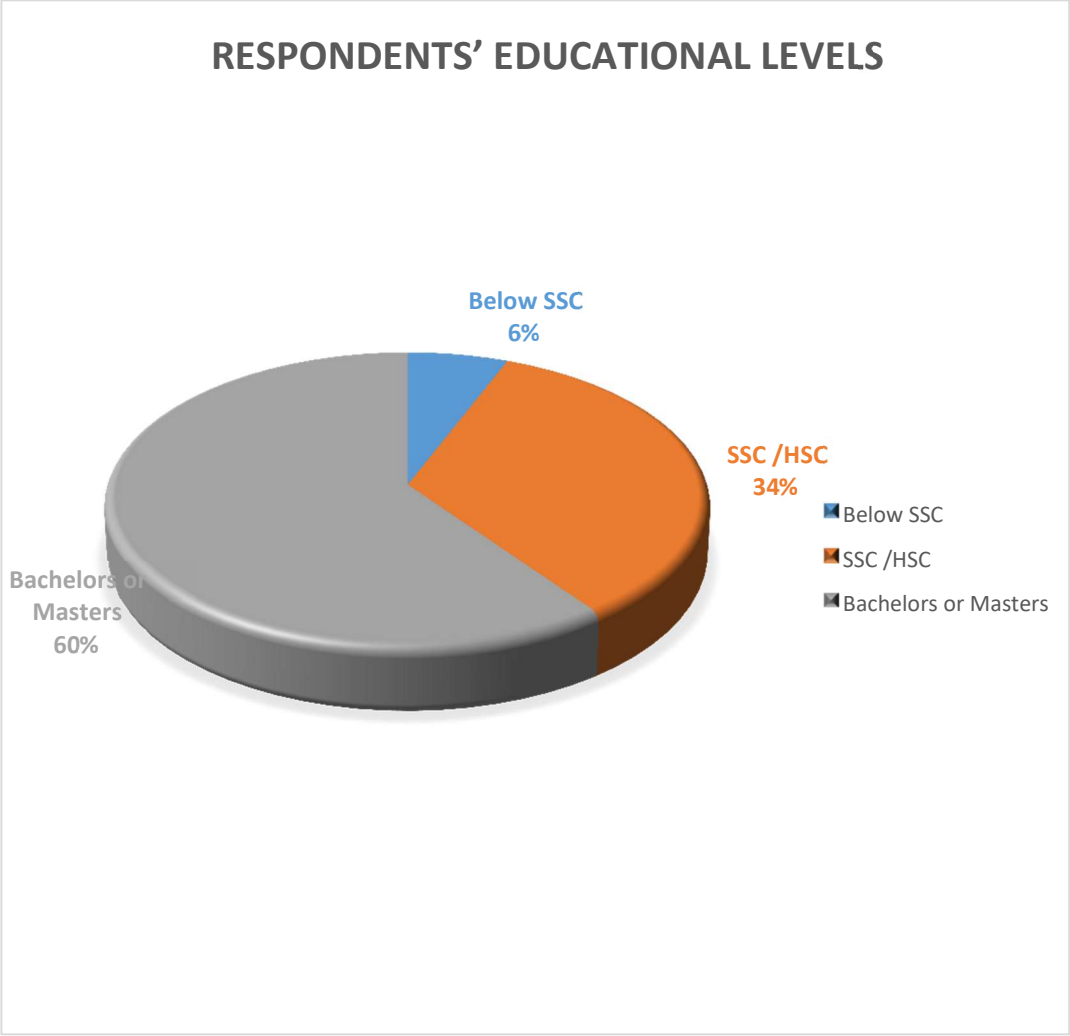
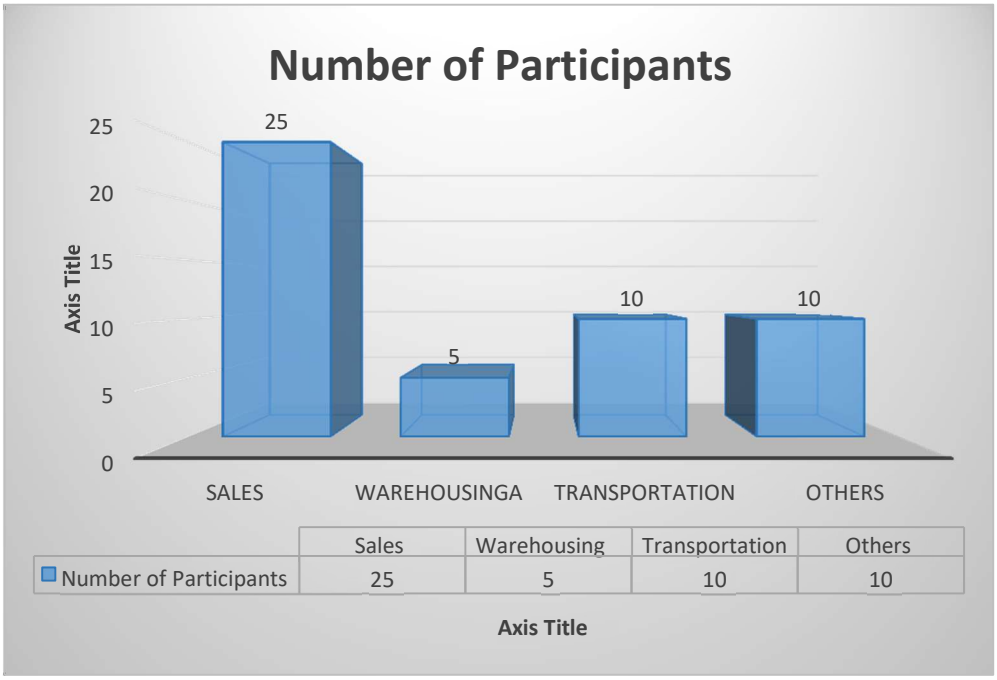


Figure 14-3: Respondents' educational levels, n=50.

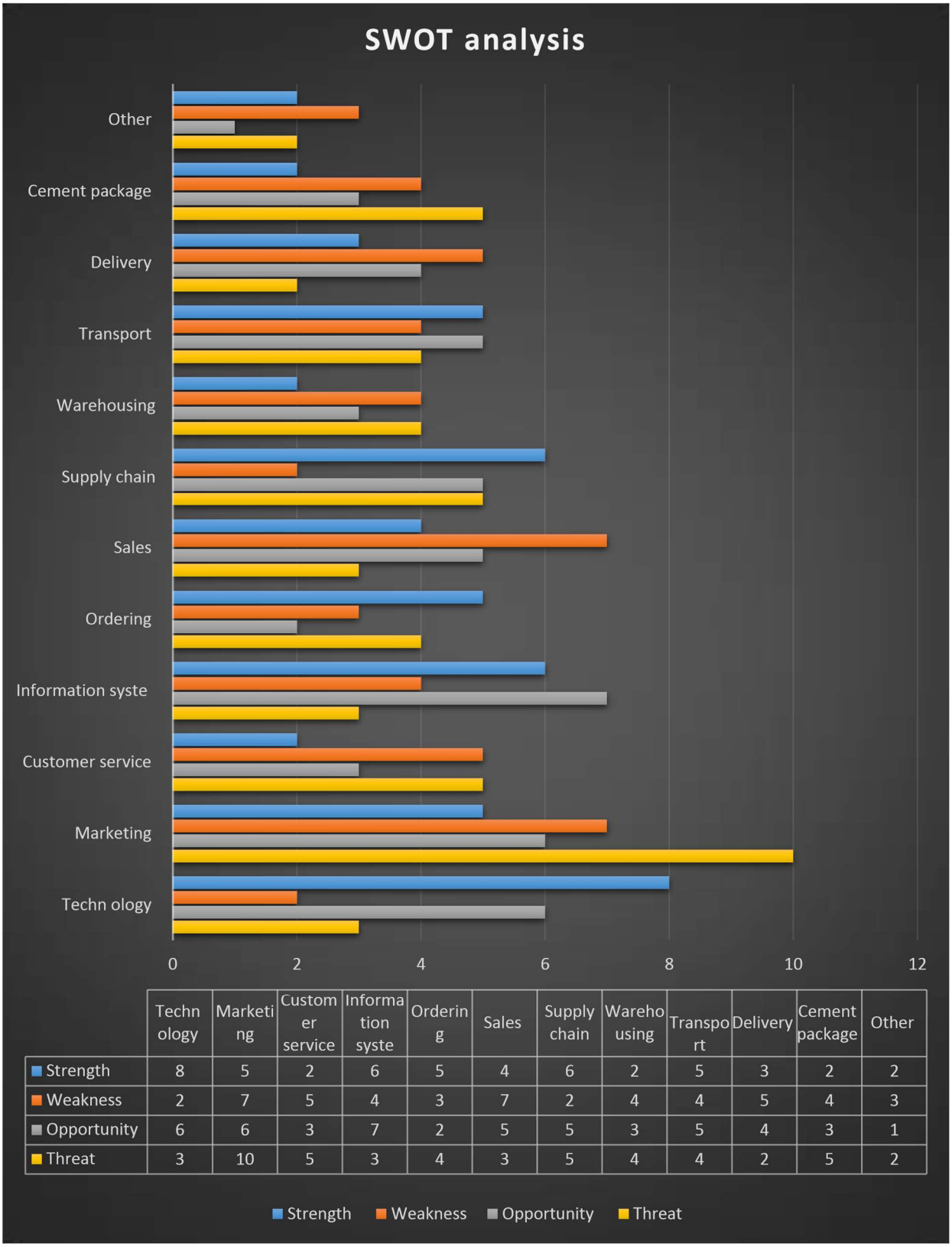
From the Figure 14-3, we can see that 30 employees (60 %) of the respondents are Bachelors or Masters Level and 17 people (34 %) SSC/HSC level. Other 3 people (6 %) are in below SSC level.

They are working in different fields of SCM .



.Figure 14-4: Respondents' responsibility field in BCL, n=284.

The diagram in .Figure 14-4 shows different fields during logistics process in BCL. The 50 respondents belong to and are responsible for sales, warehousing, Transportation and other work. Overall, 50 % of the respondents are engaged in sales department. Their tasks are to contacting potential and target customers, selling cement, seeking challenges with price competition. 10% people are working in warehousing and 20 % are working in transporting cement. The respondents in other fields are 20 %.



	Techn ology	Marketi ng	Custom er service	Informa tion syste	Orderin g	Sales	Supply chain	Wareho using	Transpo rt	Delivery	Cement package	Other
Strength	8	5	2	6	5	4	6	2	5	3	2	2
Weakness	2	7	5	4	3	7	2	4	4	5	4	3
Opportunity	6	6	3	7	2	5	5	3	5	4	3	1
Threat	3	10	5	3	4	3	5	4	4	2	5	2

Figure 14-5: SWOT analysis in BCL during the logistics process, n=50

From several aspects, the respondents show their point of views towards the strengths, weaknesses, opportunities and threats during the logistics process. Firstly, as we can see

16 % of the respondents give their opinions of technology as the strength, 12 % consider supply chain is a great strength and only 4 % think of the cement package. When mentioning the company's weakness, most respondents prefer to choose delivery, marketing& Sales in need of improving. 14 % people are willing to pay more attention to information system and meanwhile, supply chain (10 %), delivery (8%) and other aspects are considered by the proportion 2 %. Risks and threats usually lead to failure and loss. 16 % selected marketing as a threat for the company and 10 % are concentrating on customer service. The following figures will present the detailed information of the respondents' opinions on the SWOT analysis results.

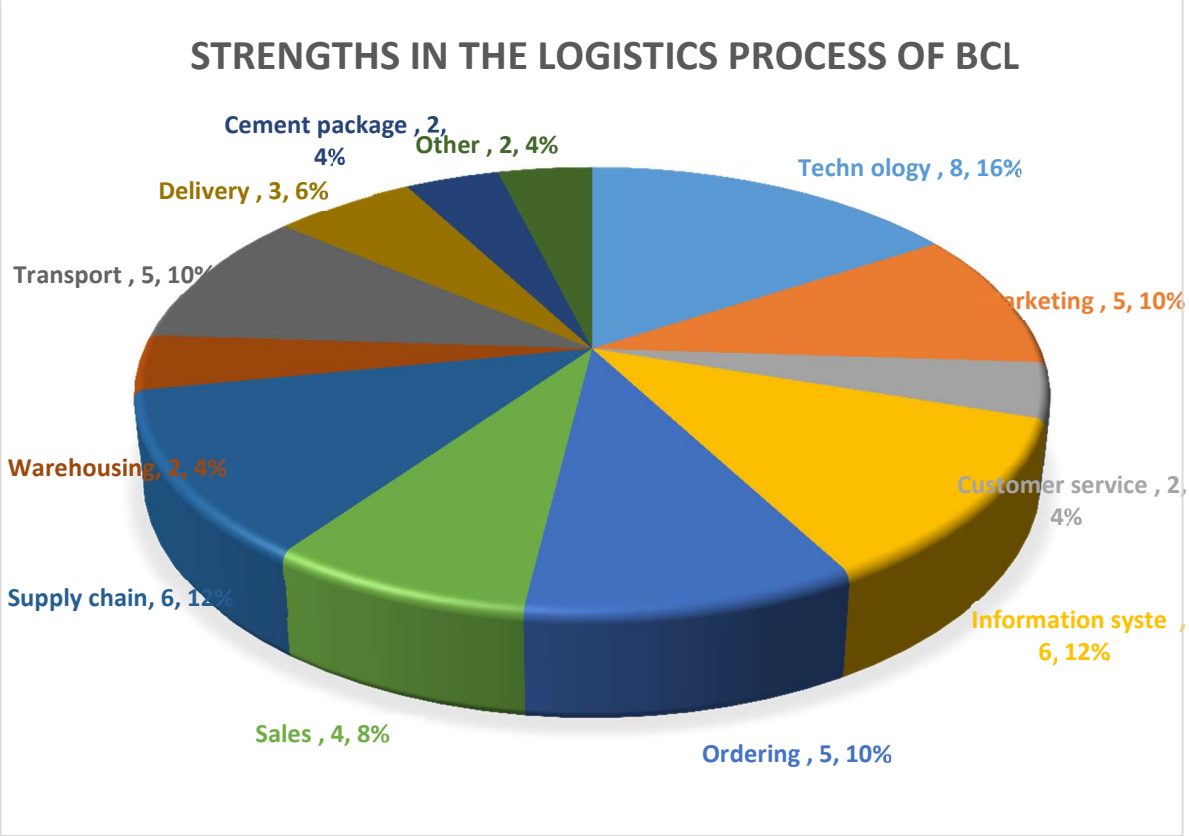


Figure 14-6: Strengths in the logistics process of BCL, n=50.

From several aspects, the respondents show their point of views towards the Strengths, weaknesses, opportunities and threats in the logistics process. Firstly, as we can see in Figure 18, 16 % of the respondents give their opinions of technology as the strength, 12 % consider supply chain is a great strength and only 4 % think of the cement package and transport are strengths for the company.

Marketing & customer services have the same proportion to be the strengths of BCL.

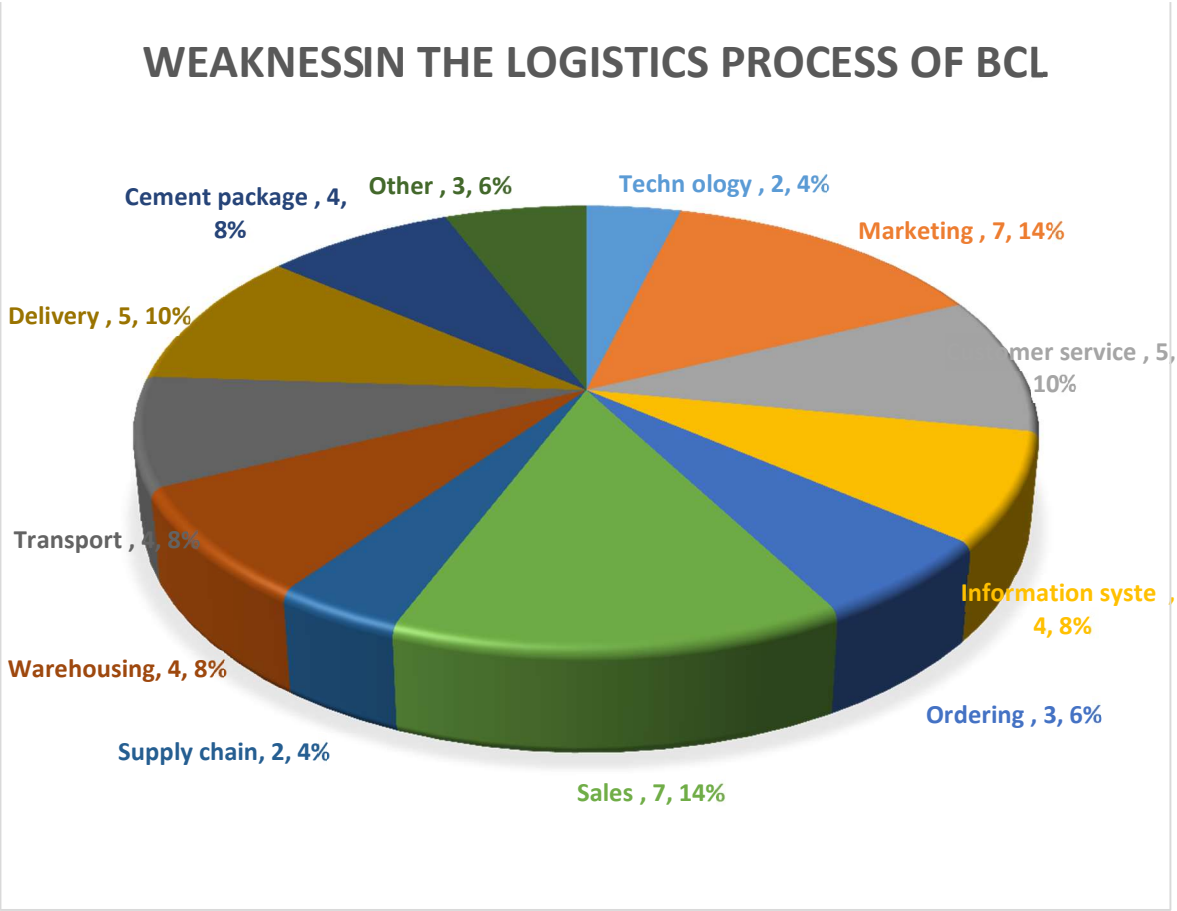


Figure 14-7: Weaknesses in the logistics process of BCL, n=50

Figure 14-7shows when mentioning the company's weakness, most of the respondents chooses Marketing & sales 14 % as the biggest weakness. People who decide information as weaknesses of the company have almost the same proportion 8 %. Customer service can be obviously seen also with a big weakness. 10 % of the respondents think so. Cement package and warehousing are regarded by 8 % of the respondents as weaknesses. Therefore, the company should improve delivery and marketing process.

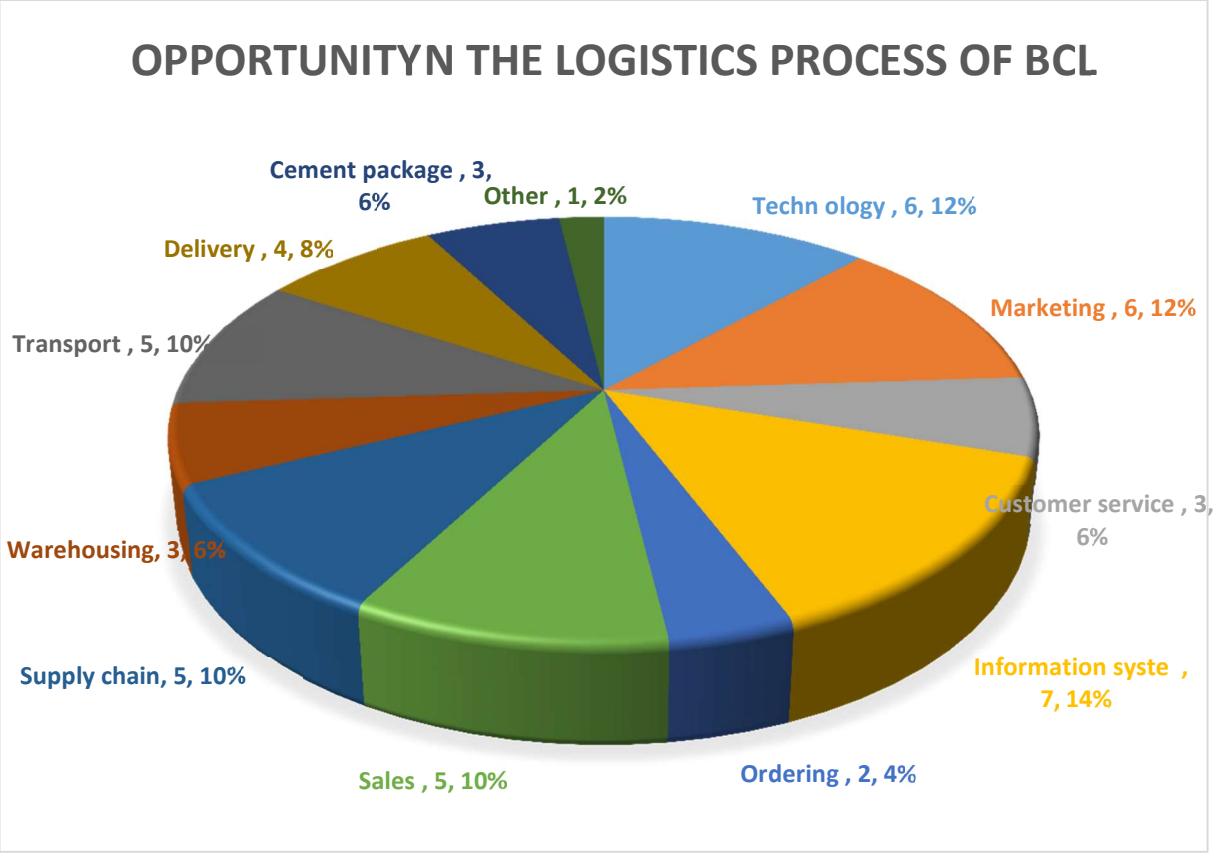


Figure 14-8: Opportunities in the logistics process of BCL, n=50.

Figure 14-8 indicates in their opinions, two big opportunities will be information system 14 % and technology 12 % in modern logistics development. Sales and marketing also take two big proportions 10 % and 12 %. Other aspects, like delivery, supply chain, warehousing, customer service and other aspects are all regarded as opportunities to better develop by the respondents.

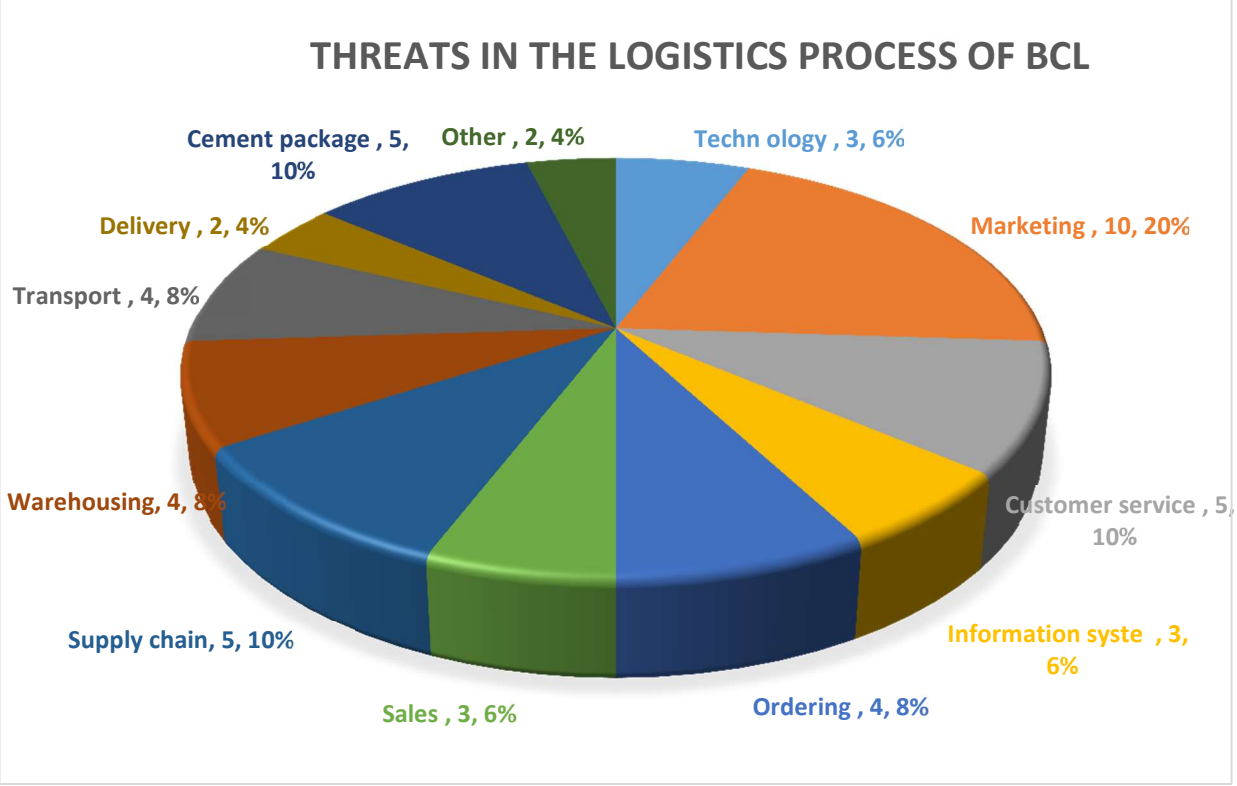


Figure 14-9: Threats in the logistics process of BCL, n=50.

In Figure 14-9, 20 % of people pay more attention to marketing as a threat for the company and meanwhile customer service and supply chain are considered by several large proportions like 10 %, and 10 %. Risks and threats usually lead to failure and loss. 10 % selected cement package as a threat for the company and 8 % of the respondents think of ordering and 4 % as delivery. From 3 % to 8 % of them are concentrating on transport, sales and other aspects to be considering threats.



Figure 14-10: Satisfaction with the departmental management, of BCL n=50.

This question is with a multiple choice and can be selected with 3 answers to show the satisfaction of employees with the departmental management. The result can help the company get feedback and improve human resource management. As Figure 14-10shows, we can get useful message from a range of options and answers. Through Excel analysis, about 16 % of the respondents feel social activities and 20% feel company welfare as their satisfactory aspects. Almost the same percentage 14 % of the respondents are satisfied with holidays and working atmosphere full of support. What's more, meanwhile about 10 % agree with working hours and salary and feel respected by others. The minority of people show their satisfaction with democratic rights and good leadership however.

1 SWOT analysis of the logistics process of BCL

According to the analysis of the results above, it is easier to get to know the main strengths, bad weaknesses, future opportunities and dangerous threats of the logistics process of BCL. In BCL, we can see in order to better development of the logistics process the company should pay attention to all parts' cooperation, like warehousing, marketing, customer service, transportation, information system etc.

Strengths	Weakness
• Market leader with countrywide presence. A high standard of cement quality, huge innovations & know-how • A suitable geography location, adjacent with river & road communication • Satisfactory customer service in BCL • Being innovative and flexible in market changes • Availability of skilled manpower • Manufacturing capabilities with national high quality standards in construction field • The company has obtained the ISO 9001-2015 making it a reliable producer for production of quality products in the international market	• High price than national competitors • Old facilities and existing workload too great • Promotional activities are not strong in electronic media, printing media or outdoor activities • Warehouse & transportation security • Low investments in supply chain • Environmental problems in logistics process. • Waste management
Opportunity	**Threat**
• Good chance to explore rapidly increasing cement markets. • Application of modern technology • Opportunity for export in international Market	• Increase the price of raw materials & dependency on international market for raw materials. Energy cost • Environmental issue
• Opportunity to spread marketing & distribution channel • Great potential for growth and profitability	• Governmental policies • Economic downturn Challenging regional market competition and price inflation stands out outside · Rapid development of smaller industries.

1.1 Strengths

BCL was founded in a suitable locations (Baradi, Sonargaon, Narayangonj) to develop cement production and logistics in Bangladesh. This Mills are situated besides the Meghna River & Dhaka-Chittagong highway.

So the transportation is also very convenient. The company's products have a high standard of quality. It has been widely applied in construction projects, building roads, bridges and Flyovers. In continuous years the cement of BCL has been designated as exempt products and has passed ISO9001: 2015 quality management system certification. The company transports cement by their own transportation logistics modes to reduce operating costs. BCL has there are hundred Trucks & forty vessels on its own fleet. For more than 03 years, many customers are satisfied with the logistics system and customer service. Furthermore, BCL constantly develops new products/mixtures with higher durability, sustainability and an improved ecological balance sheet in order to meet the growing expectations from shareholders towards greenhouse gas reduction. Finally and due to BCL- RTD & WTD , the company is logistically independent in what way transportation costs for the moisture sensitive and heavy products can be reduced, which in turn reduces the supplier power. The development of modern logistics industry keeps the company innovative, creative, flexible and informed on market changes and challenges. Besides, the company has availability of skilled manpower, manufacturing capabilities with national high quality standards in construction field and higher operational efficiency of employees.

1.2 Weaknesses

In spite of above strength, there are also some weaknesses in BCL. In the logistics process, cement sales, ordering and purchasing are affected a lot by the radius of transportation. It expands the market barriers for BCL. For instance, labor costs for workers of duties in warehousing, transporting and producing management are under an increasing level. Due to the fact that cement and aggregates are high-volume production products, BCL has built up high capacities of those products. In the wake of the financial crisis, prices suffered a drop due to the declining demand of construction building materials which in turn led to large excess capacities in the industry. As a result, BCL was urged to close down plants and introduced an austerity program in order to reduce operating costs. Promotional activities are not strong in electronic media, printing media or outdoor activities. There is great existing workload and limited security control in warehousing and transportation in the logistics department. Furthermore there are no advance technology in BCL to handle the waste generate from the mills. In the logistics process, there are a series of environmental problems for BCL to solve and keep sustainable development.

1.3 Opportunities

Bearing in mind that the world population is to grow by 3 billion people within the next 40 years, the potential for expansion of the Building Materials Industry is enormous. Especially BRIC states are expected to experience a significant population growth. Due to the sound global strategic position of BCL and its intact capital structure, the company is in a good position to continue its expansion strategy in order to acquire the necessary market/regional knowledge of its competitor. Efficient and environmental friendly handling of natural resources is a cornerstone within the Building Materials Industry. The attitude of the company turns more positive in recent years and it has more awareness of high and rising energy costs. During every busy season of cement sale,

there are many practical measures to be taken to develop cement logistics. The effects on making full use of warehousing volume, serving customers actively, keeping sustainable development, repairing and renewing devices are very obvious. Faced with new situation and introduction of modern logistics modes focusing on reducing costs to seek development, seizing opportunities to increase corporate overall strengths, tamping foundation of the inner management and expanding global market as a future goal with the application of new technology, like GPS and other softer. Finding a mixture/production process, in which carbon dioxin emission is significantly reduced, will lead to a first mover advantage within the industry. Besides, less emissions will also go along with less energy costs with regards to the production process and is clearly in favor of the company's overall cost structure

1.4 Threats

The Building Materials Industry is highly exposed to energy providing companies (coal, fuel, gas) due to fact that the production process requires a lot of energy. Consequently, growing prices would lead to higher production costs and would affect customers badly. The competition of regional market has intensified. As transportation and harbor costs have increased, they have resulted in inflation of cement prices. Additionally, the demand for cement is growing faster than the emissions per ton are falling posing a clear threat to the environment. This situation could lead to production restriction in the future what would have impacts on sales revenue of companies. Furthermore, even higher efforts and spending in terms of R&D have to be undertaken to improve products. Being highly active in emerging markets also bears the threat of unknown and unpredictable governmental actions and policies. Hence, production capacities might be reduced or employees might be largely influenced by the governments what would have negative impacts on the production process and revenues. Lastly, there is a clear link between GDP of a country and the consumption of cement and aggregate products. In terms of an economic slowdown this would lead to a reduction in sales revenue again

2 Conclusions

The purposes of this dissertation are to research on the logistic management of Bengal Cement Ltd through the strengths, weaknesses, opportunities and threats during its logistics process. The tdissertation is separated into two parts: theoretical part and practical part. The theoretical part mentions information about logistics process in details. Logistics is a part of supply chain. Here according to the case company and the real working process, mainly introduced purchasing and ordering, customer service, warehousing and transportation. The short-term objective is to improve the conditions of working process, service for customers and get feedback from employees of BCL about their complaints, satisfaction and demand of the company's and departmental inner management. The long-term purpose would be to expand the cement product to a bigger market through the modern logistics mode and to satisfy more customers with both good quality of cement and better customer service.

Meanwhile, employees can show their loyalty and sense of belonging to the company. The second part is research part. In this part, both qualitative and quantitative research methods have been used. In the qualitative research, through two different types of interview – personal interview and telephone interview, and a questionnaire, it is better

to understand logistics process is a key to execution and achieving results for a company, customer service survey has reflected the affection on customers' feelings, evaluations, opinions and comments towards products and related services and a good inner management leads to a good future for development and improvement.
For a developing country like Bangladesh, cement industry has a lucrative future. The government is looking to invest further in infrastructure while encouraging FDI in secondary sector. In addition, the standard of living of the population is increasing giving rise to demand for Real Estate.
Most cement factories are currently operating below their full capacity. Since demand of cement is positively correlated to GDP growth and with rising growth forecasts, demand for construction materials like cement is set to increase further in the coming years

3 Recommendations:

1. Share all information between supply chain members to reduce raw materials cost.
2. Introduce movable e-crane to load & unload raw materials.
3. Designing in the best quality and reliability right-the-first-time
4. Exchange data between suppliers, carriers & manufacturers.
5. Outsource transportation system to minimize cost & risk associated with delivery
6. To respond dynamically to the need of the end customers according to SCM
7. Enhanced customer service for greater competitive advantage.
8. Set benchmarks goal for the Logistics process to achieve competitive advantage from others through cost, quality & risk mitigation

9. Appendix1. Interview Questions with Bengal Cement Ltd.:

1. Can you present a brief introduction of the working process in cement logistics?
2. How BCL select the distribution channel? Please explain.
3. How does BCL decide on the location of the Dealers or Wholesalers?
4. Does BCL have its own DC? What are the types of ownership?
5. Do you work with any logistics service providers?
6. Whom do you regard as your target group?
7. How do you collect feed-back from your target groups/customers?
8. What do you think of the effects of new technologies on cement Logistics?
9. What is the lead time for supplier & for customer?
10. What is the P2P Cycle & O2C cycle of BCL?
11. How does BCL deal with supplier failure? Does the company have more than one supplier for similar kind of product?
12. What kind of WMS does BCL use? How does it help firm's operation?
13. What are the biggest risks and threats and how do you deal with them in daily business life?
14. What will be the most important strengths and strong points in your logistics process in the future?
15. Are there any training programs for the logistics staff?
16. Does BCL use any vehicle tracking tools? If yes, how it works?

10. Appendix2. Interview questions for customers of BCL

1. How did you get to know about BCL?

2. What attracted you to make a decision to choose it?

3. Can you make a comment on the company image?

4. When you have an inquiry or need to present more demand, can the customer service office solve the complaints in time or give a quick response?

5. How about their attitude of the staff when they are serving customers?

6. What do you think the speed of transporting the products? Is it fast or slow?

7. According to the current situation of BCL and modern logistics development, what aspects do you think are their most important strengths and weaknesses?

8. According to the current situation of BCL and modern logistics development, what would be the biggest opportunities and threats in their marketing environment?

9. What suggestions would you like to tell the company to make improvement for the customer service?

11. Appendix3. Interview Questions with Supplier of BCL

Please explain your working process in supplying goods to BCL.
Do you use information system compatible with BCL?
How do you maintain Lead Time for supplying materials?
Is there any development program held by BCL?
Do you think you have the mutual benefits operating with BCL?
How BCL set supplier evaluation & performance measurement?

12. Appendix4.Questionnaire for employees involves with logistics process of BCL

1. Your gender

□ Female □ Male

2. Your age

□ 21-30 □ 31-40 □ 41or over

3. Your educational level

□ Primary School □ Middle or High School
□ College or University

4. Your responsible field in BCL

□ Sales □ Warehousing □ Transportation □ Other

5. What is your most attractive issue in your current job?

□ Stability □ High income □ Social position □ Entertainment
□ Bright future for your career □ your interest □ Diversity □ Challenge
□ Other, what?

7. In the following aspects, what is the strength in the company during the logistics process?

□ Technology □ Marketing □ Customer service □ Informational system □ Ordering □ Sales □ Supply chain □ Warehousing □ Transport □ Delivery □ Cement package □ Other, what?

8. What is the weakness in the company during the logistics process?

□ Technology □ Marketing □ Customer service □ Informational system □ Ordering □ Sales □ Supply chain □ Warehousing □ Transport □ Delivery □ Cement package □ Other, what?

9. What is the opportunity in the company during the logistics process?

□ Technology □ marketing □ Customer service □ Informational system □ Ordering □ Sales □ Supply chain □ Warehousing □ Transport □ Delivery □ Cement package □ Other, what?

10. What is the threat in the company during the logistics process?

□ Technology □ marketing □ Customer service □ Informational system □ ordering □ Sales □ Supply chain □ Warehousing □ Transport □ Delivery □ Cement package □ other, what?

11. What aspects are you satisfied with the departmental management? (Choose three)

□ Feel respected by others
□Working atmosphere full of support
□ Social activities
□Working hours and salary
□ Holidays
□ Company welfare
□ Good leadership
□ Democratic rights

□ Other, what? _____
Thank you for your cooperation!

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