# MBA INTERNSHIPREPORT ON


**Steelmark Buildings Ltd.**

## INTERNSHIP TOPIC

"The Role of Consultancy and Construction Services in Ready Made Garments(RMG) and Infrastructure Development in Bangladesh"

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**Submission Date: 30 April 2019**

**LETTER OF TRANSMITTAL**

30 April 2019

To:

Dr. Md. Mamun Habib

Associate Professor

BRAC Business School

Dear Sir,

Subject: Submission of Thesis Paper

I am very much delighted to submit my internship report on "The Role of Consultancy and Construction Services in Ready Made Garments(RMG) and Infrastructure Development in Bangladesh" . A Case Study on Steelmark Buildings Ltd." that has been assigned to me as an important requirement of my MBA program. I have found the study to be quite interesting, beneficial & insightful. I have tried my level best to prepare an effective & credible report.

Finally, I am truly grateful and would like to express my heartiest gratitude to you for rendering this great opportunity to work on this report. Your guidance has made this study more effective. In addition, if you wish to enquire about any aspect of the report, I would be glad to answer your queries.

Sincerely Yours,

**Md. Raihan Habib**

Student ID:16264012

MBA

BRAC University

## ACKNOWLEDGEMENT

At first, all praises belong to the almighty Allah, the most merciful, the most beneficent to man and his actions.

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The author express his heartiest thanks to his fellow colleagues from Steelmark Buildings Ltd. for promoting valuable workable environment and enthusiastic encouragement during the whole study period. Last but not the least, the author pays deepest homage to his parents who they believe to be the cardinal source of inspiration for all of his achievements. Their constant moral support was phenomenal and exemplary throughout the course of the study.

## DECLARATION

I hereby certify that the thesis work presented in this paper has been completely prepared by me and this work or any part of it has not been submitted elsewhere for any other purposes except for publication.

30 April 2019 Md. Raihan Habib

## DEDICATION

This thesis is dedicated to my parents. Their uninterrupted inspiration, support, guidance made this effort possible.

## EXECUTIVE SUMMARY

In Bangladesh, the quality of the infrastructure is central to growth, poverty reduction, and achievement of the Millennium Development Goals. Consultants manage the project by the application of their skill, knowledge and experience. Project Consultancies face so many problems such as managing the team members, problems related to design issues, engineering issues, safety of workers on the site and so on. Awareness of various processes involved in construction work are the integral part of consultancy. Consultant has a wide variety of roles to play in the construction process in terms of Infrastructure development. Infrastructure development consist with study, design & construction of project, which gives benefits to the Customer / Client in terms of satisfaction and it consists of business development, profit, resources utilization, etc. Because of this consultancy plays a multifaceted part in projects, and is usually involved in the project from the project's inception to its completion. It is important to fully understand Consultancy and authority. Every project is different and unique, every project demands the full attention, professionalism and energy of its project team specially consultants, every project depends upon an experienced leader to make it happen

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CHAPTER-1

# INTRODUCTION

## 1.0 Background of the study

Bangladesh is now trying to establish itself as the next rising star in South Asia by Infrastructure development. Bangladesh, with its vision to become a middle-income country by 2021. As such, the budget for 2015-2016 has been set against this backdrop to face major economic challenges such as–decelerated economic growth due to stagnant investment, supply side constraints like inadequate infrastructure and deceleration in social sector spending. Growth in Bangladesh in Fiscal Year 2016 (ended 30 June 2016) exceeded expectations, aided by revived exports and sustained domestic consumption. Inflation was lower than projected, while larger exports and modest imports kept the current account in a larger surplus.[1] The economy however has to deal with a number of economic bottlenecks to reach the required GDP growth rate of 8-10% to fulfill Vision 2021[2]. The inadequacy in infrastructure is one of these major challenges. The infrastructure of the country is currently insufficient to keep pace with the growing economy. Among all infrastructure systems, a well-knit transport and communication system connecting all regions of the country is crucial for the advancement of a developing country such as Bangladesh. To enhance and facilitate the growing trade needs of the country, to accommodate the transportation needs of commuters, to attract foreign investments and to ease the transportation of goods throughout the country, a strong communication system is a must.

Pre-fabricated steel structures are gaining popularity in cities as corporate houses prefer these types of construction for safety and convenience. Industry insiders said local steel-building makers are expecting a bright future for the pre-fabricated building sector as an increasing number of conglomerates, foreign companies, are setting up such structures for industrial use.

They also said these types of buildings require short time to install and can resist natural disasters better during earthquakes."The demand for pre-fabricated steel structures is rising in the country as it provides safety and needs lesser lead time for building," Newaz Khan, chairman and chief executive officer of the PEB Steel Alliance Ltd, told The Asian Age.Dr. Mehedi Ahmed Ansary, professor of Department of Civil Engineering at Bangladesh University of Engineering and Technology (BUET) said "Steel buildings are being popular, due to cost effectiveness".

He said that steel building can be as safe as a concrete building, if proper designs and qualities

[1] https://www.adb.org/countries/bangladesh/economy
[2] http://www.asiatradehub.com/bangladesh/transport2.asp

are maintained. Demand for the construction of power plants, bridges, and manufacturing units such as Readymade garment (RMG) factory, textile mills and pharmaceuticals industry is rising, driven by the availability of locally produced steel and technology, according to sources. The annual demand for pre-fabricated steel products for the industrial sector is estimated to be Tk 40 billion, according to the Steel Building Manufacturers' Association of Bangladesh (SBMA).

The government, realizing this need, has come up with several projects to develop and expand the in-land communication infrastructure so as to achieve the sustainable economic welfare that the country dreams to have. Some of these projects are listed below[3].

- Padma Multipurpose Bridge Connecting Nearly 30 million Bangladeshis
- 2000 Meter Tunnel Underneath the Karnaphuli River in Chittagong
- Circular Rail Road Tracks and Waterways Around Dhaka City

In the trade and investment scene, Bangladesh witnessed a positive 2015. In September 2015, it transpired that trade confidence on Bangladesh is one of the highest globally according to HSBC's Trade Confidence Index[4]. The Index showed that trade confidence on Bangladesh rose sharply, by 38 points in 6 months till September 2015, which was the second highest among 23 countries globally. Bangladesh records the highest Trade Confidence Score in a survey of twenty five countries with respondents particularly positive about the outlook for trade volumes, trade with Europe and buoyed by lower costs for logistics and materials and higher profit margins. The report also forecasted steady growth for Bangladesh's share of garments & textiles exports, rising from 2.8% in 2010 to 3.8% in 2020, boosted by recent initiatives to further strengthen its health and safety standards. In order to prioritize large scale infrastructure, communications and power projects, right after formation of government in January 2014, and six projects were identified as 'fast-track', supervised directly by a committee headed by the Prime Minister herself, earmarked for speedy implementation. They are: Padma Multipurpose Bridge, Rooppur Nuclear Power Plant Project, Rampal Coal-fired Thermal Power Plant, Dhaka Mass Rapid Transit Development Project (Metro Rail Project), Sonadia Deep Seaport in Cox's Bazaar and Liquefied Natural Gas Terminal Construction Project. Recently, two important projects have been added to the list, namely, country's third seaport at Payra and Matarbari energy hub in Cox's Bazar.

To support relevant Government organization with consulting and construction services, growth in Construction Service has also embarked to a higher level. Many of the international and local consulting and construction companies have contributed in most of the projects in Bangladesh. Steelmark Buildings Ltd have construct different projects undertaken in Bangladesh. Study on

[3] http://www.plancomm.gov.bd/physical-infrastructure-division/

Steelmark Buildings Ltd(SMBL) is necessary to get overall information about the company as a consultant and construction services.

## 1.1 Problem and Purpose

## 1.2 Problem Statement

The problem statement of this report is as follows:

"The Role of Consultancy and Construction Services in Ready Made Garments(RMG) and Infrastructure Development in Bangladesh"

**Objectives of the Study**

With a view to fulfilling the objective some specific objectives have to be satisfied. The specific objectives are given below:

- Study the present scenario of Ready Made Garments(RMG) and Infrastructure Development in Bangladesh;
- Operation, implementation, maintenance & Project management of SMBL ;
- Analysis of SMBL's contribution to the Ready Made Garments(RMG) and Infrastructure Development of Bangladesh;

## 1.3 Scope of the Study

This study mainly concentrates on RMG and infrastructure development in different sectors of Bangladesh and the prospects of the related consultancy and construction firm and considering SMBL as case study. SMBL is working in most of the mega projects of Readymade garments sector, a study on this company can be a way forward to get a complete scenario on the development process, which is unknown to mass people to some extent.

## 1.4 Organization of the Thesis

This thesis paper consists of overall five chapters. All the chapters name with sequence are given below.

| | |
|---|---|
| **Chapter 1** | **Introduction** |
| **Chapter 2** | **Infrastructure and RMG Development & Construction services in Bangladesh** |
| **Chapter 3** | **The Consulting and construction Firm: STEELMARK BUILDINGS Ltd.** |
| **Chapter 4** | **Performance Analysis of SMBL in Bangladesh** |
| **Chapter 5** | **Conclusions and Recommendations** |

### 1.5 Methodology

This research is mainly exploratory and qualitative research based on Secondary and small scale of Primary data. Secondary Data collected from various sources like, SMBL annual report, Government reports, Journals, newspaper publications etc. Primary data sources are, Key respondent interview with an open questionnaire.

### 1.6 Literature review

This report is organized into three parts. The first part will emphasize on overview of the infrastructure development and RMG sectors in Bangladesh. This section has focus on different development projects and relevant consultancy and construction services. In second part, an insight of SMBL will be delivered in correspondent to the operation of consultancy and construction services in Bangladesh and globally. At the last part, the interrelation and other relevant data are provided with conclusion notes.

To develop the study few paper reviewed and summary of review given below.

Islam N., "Role of the Infrastructure Investment Facilitation Centre in the Development of Private Sector Infrastructure in Bangladesh", Transport and Communications Bulletin for Asia and the Pacific, Article No. 72, 2003; The paper highlights the need for an inside sponsor, draws attention to the significance of activities at the project development stage and focuses on the overall project development process conceptualized by Consultant. It discusses the different steps followed in the process and the role of consultant at these stages. It also discusses the functions and characteristics of consultant as an inside sponsor of private sector infrastructure projects and draws conclusions based on the experience of consultant. Consultants in infrastructure

development help clients improve on-time and on-budget delivery of major projects and get the most out of existing capital assets.

Zhang S.," The Role of the World Bank and Consultants in Infrastructure Development", FIDIC 2005 Annual Conference presentation of The World Bank. This paper discussed about the role of funding agencies in infrastructure development. They have ignored the issue of consultancy scope.

Atul R Nikumbh, Dr. S.S. Pimplikar, "Role of Project Management Consultancy in Construction Project", IOSR Journal of Mechanical and Civil Engineering (IOSR-JMCE), Jan. 2014. The purpose of this paper was to provide the analysis or breakdown of Role of Project Management Consultancy and study the Problems faced by PMC for implementing the project. Which was a partial description of Consultancy scope.

Anurag Sarda, , Snehal Dewalkar, "Role of Project Management Consultancy in Construction", International Journal of Technical Research and Applications Volume 4, Issue 2 (March-April, 2016), The purpose of this paper was to study the Role of Project Management Consultancy in Construction. This paper has discussed about one specific component of engineering consultancy business.

Engineering consultancy and construction sector is unknown subject for general people of Bangladesh as well all the project related documents is government owned issue. Access to these kinds of document is matter of time and permission. Sometime impossible to get them because of confidential.

## CHAPTER-2

## Infrastructure and RMG Development & Construction services in Bangladesh

### 2.0 Introduction

Bangladesh's infrastructure industry is one of the most underdeveloped in the world, a factor which has impeded economic growth in the country. However, growing bilateral ties between neighboring China and India has brought with it investments into the country's infrastructure industry.

In the World Economic Forum's Global Competitiveness Report 2016-2017, the country's infrastructure competitiveness was ranked 106$^{th}$ out of 138 countries, the lowest ranking among its South Asian neighbors, India (39$^{th}$), Sri Lanka (71th). Transport facilities are severely lacking in Bangladesh, causing traffic bottlenecks that drive up the cost of business and goods. The country's capital, Dhaka, is notoriously crowded and port congestion is a major problem.

Developing high-quality infrastructure requires development of technologies within the country. The vision and conceptualization of domestic consultancy organizations in our country was aimed at development of technology and turnkey expertise services for self-reliance. Unfortunately, we are still depending upon import of technology in the absence of domestic research and development (R&D), and technology development.

Globalization, increased competition, drive for innovation and technology development have propelled the demand for domestic consultancy. Domestic consultancy calls for significant growth to contribute effectively in the development process of the nation. Nevertheless, it is providing services in a number of areas of industry and infrastructure ranging from management advice to market surveys to engineering consultancies. With government giving boost to infrastructure development and with many large-scale projects driving the growth, the consultancy markets may witness a boom in time to come. In view of massive growth in infrastructure sector, the role of consultants has increased manifold.

Infrastructure is key to the competitiveness of any country and is related to development goals of the country. A budget of BDT 340,605 crore has been proposed for the FY 2016-17 setting the target of growth in GDP at 7.2 percent, with 6% target of inflation, revenue target proposed at BDT 242,752 crore. The overall budget deficit has been proposed at BDT 97,853 crore, which is five percent of GDP.[5]

Bangladesh has been showing strong growth performance with a GDP growth rate of 6-7%. The economy however has to deal with a number of economic bottlenecks to reach the required GDP growth rate of 8-10% to fulfill Vision 2021. The inadequacy in infrastructure is one of these

[5] http://mof.gov.bd/en/index.php?option=com_content&view=article&id=343&Itemid=1

major challenges. The infrastructure of the country is currently insufficient to keep pace with the growing economy.

Among all infrastructure systems, a well-knit transport and communication system connecting all regions of the country is crucial for the advancement of a developing country such as Bangladesh. To enhance and facilitate the growing trade needs of the country, to accommodate the transportation needs of commuters, to attract foreign investments and to ease the transportation of goods throughout the country, a strong communication system is a must.

The government, realizing this need, has come up with several projects to develop and expand the in-land communication infrastructure so as to achieve the sustainable economic welfare that the country dreams to have. Some of these projects are listed below:

- **Padma Multipurpose Bridge Connecting Nearly 30 million Bangladeshis**

The construction of Padma Multipurpose Bridge that is expected to create a direct road link between 19 districts of the south-west region and Dhaka bringing in a new dimension to the economy. The project is expected to be completed by 2019.

The project is expected to bring on a growth of 1.2 percent of GDP per year once completed, connecting nearly 30 million Bangladeshis living in the country's south-west region with major urban centers and facilitating regional trade. It will eventually help reduce poverty while accelerating economic growth and development of the country.

**Circular Rail Road Tracks and Waterways Around Dhaka City**

A circular river route has been built around Dhaka city and some water buses have been introduced. In addition, circular rail road track in Dhaka City has also been proposed. This will help to reduce pressure on roads, reduce transportation costs as well as increase safety across the board.

Sound infrastructure is essential to realizing the visionary goal. The efficient and safe movement of people and goods needs well-built efficiently operated and maintained physical infrastructure and transportation systems, along with reliable and affordable supplies of water, electricity and power, telecommunications, postal and waste management services. In addition to well-planned urbanization, attention needs to be given to multi-modal transport, integration of roads and highways, railways, water transport, rural transport and airports. Railways will receive much higher attention as a means of passenger and goods transportation throughout the country.

## 2.1 Sector wise Infrastructure development plan

### 2.1.1 Transport

**Roads & Highways**

Bangladesh, a densely populated country with an estimated population of 978 persons/sq km, has an extensive and diversified transport system comprising 103,536 km roads (20,948 km highways and 82,588 km rural roads), 2834 route km railways, 24,000 km inland waterways, 2 seaports, maritime shipping, and civil aviation etc.[6] Of multiple modes of transportation, the road transport by an order of magnitude in carriage of goods and passengers has apparently been playing the most dominant role.

While there have been advances and improvements in this sector, development is going on at slow pace. There are critical physical and nonphysical barriers to passenger and freight flows, and the continuing low productivity of state-run transport services. Deficiencies like poor maintenance of infrastructure, inadequate integration of multimodal opportunities, non-inclusive transport and emission policy, capacity constraints of ports, and lack of strategic international transit connectivity, presence of mixed traffic in the arterial city roads, lack of proper enforcement of traffic safety regulations, congestion and overloading as well as pollution etc. have limited the ability of the system to respond to user needs. Investment, particularly in asset preservation has been low due to resource constraint.

The Roads and Highways Department (RHD) is a lead infrastructure network development agency already established a corridor based road network all over the country. In RHD's jurisdiction there has been a total 17,546 km paved road of different category, 4507 no. of bridges with a total length of about 130 km and 13751 no of culverts with a length of 54 km. RHD is also responsible for the operation and maintenance of an extensive ferry system which are being gradually replaced with bridges.

The Local Government Engineering Department (LGED) since preparation of rural development strategy in 1985, has been developing the farm to market roads and has made significant progress in the sector. It has so far constructed total 82,588 km of rural roads and 804,635 meter bridges/culverts in the rural areas. [7]

Before 1998, the country was separated into two parts by the mighty river Jamuna. After construction of a 4.80 km long Bangabhandu bridge in 1998 with the assistance of ADB, WB and JICA, the transport sector as well as economy of the country got new dimension and added

[6] Road Maintenance and Rehabilitation Needs Report, Roads and Highways Department, 2012-2013
[7] LGED Annual Report 2015-2016

momentum further. After construction of the Bridge tremendous traffic has been witnessed which was not imagined before its construction.

Bangladesh Road Transport Authority (BRTA) is dedicated to regulatory functions like registration and fitness certification of vehicles under existing relevant laws. With the increase of road network and vehicle fleets road safety is a growing concern of the society.

**Railway**

Bangladesh Railway (BR), a state-run transportation agency of the country, has 2835.04 route Km rail line with 440 nos. stations, 286 nos. locomotives, 1503 nos. coaches and 10226 nos. wagons. Railway connected almost all important places of 44 civil districts and plays important role in the economy. It operates 261 passenger trains (Intercity 68, Mail & Express 66, Local 127) and 55 goods trains including container trains daily on an average. Besides, it operates the largest Inland Container Depot with capacity of 90,000 TEUs.[8]

**Waterways**

Bangladesh has about 24,000 km. of rivers, streams and canals that together cover about 7% of the country's surface. Most part of the country is linked by a complex network of waterways which reaches its extensive size in the monsoon period. Out of 24,000 km. of rivers, streams and canals only about 5,968 km. is navigable by mechanized vessels during monsoon period which shrinks to about 3,865km during dry period. The IWT sector carries over 50% of all arterial freight traffic and one quarter of all passenger traffic. [9]

Bangladesh Inland Water Transport Authority (BIWTA) gives pilotage facilities to about 7,000 inland water vessels. It regulates the movement of about 2000 passenger launches and maintains 21 inland ports along with about 800 launch ghats including terminals.

BIWTC is facilitating passenger and cargo movement in the inland waterways and also offshore islands in the public sector vis-à-vis private sectors. It is operating 35 no. of ferries in different routes. On the other hand, ocean shipping performs 80% of the export-import trade. A WB Study reveals that IWT has been the least expensive mode of transport, followed by rail and road. As such, considering the facts of leased land-man ratio and scarcity of land for further expansion of road networks in the country, IWT sub-sector has given the outmost importance specially dredging various river routes for making them navigable round the year by the present government as mentioned in its Election Manifesto.

Chittagong Port, Mongla Port and Bangladesh Shipping Corporation are playing important role in the export-import activities. Chittagong Port is now considered as the nerve center of

[8] http://railway.portal.gov.bd/
[9] http://www.biwta.gov.bd/website/?page_id=2

Bangladesh economy. Department of Shipping oversees the safety and environmental matters and the regulatory aspects of maritime shipping and also inland waterways. Marine Academy, National Maritime Institute and Deck & Engine Personnel Training Center are imparting education and training on merchant marine.

### 2.1.2 Current Transport Policy & Planning

Long-term planning has been missing from road development. Strategy and policy guidance comes from the National Land Transport Policy 2004, Integrated Multi-Modal Transport Study 2004, the 20-year Road Master Plan, National Integrated Multimodal Transport Policy, 2013, the government's Rural Road Master Plan, and the 20-year Railway Master Plan (2010–2030). The targets of the Bangladesh Roads and Highways Department under the Sixth Five-Year Plan include the construction of 4,672 km of new roads and the rehabilitation of 8,433 km of existing roads. The key issues are lack of periodic and routine maintenance leading to the deterioration of roads; vehicle overloading which caused damage to roads; lack of road safety; poor traffic management; and inadequate high-capacity bridges in many rivers.[10]

### 2.1.3 Power sector

Bangladesh's energy infrastructure is quite small, insufficient and poorly managed. The per capita energy consumption in Bangladesh is one of the lowest (136 kWH) in the world. Noncommercial energy sources, such as wood, animal wastes, and crop residues, are estimated to account for over half of the country's energy consumption. Bangladesh has small reserves of oil and coal, but very large natural gas resources. Commercial energy consumption is mostly natural gas (around 66%), followed by oil, hydropower and coal.

Electricity is the major source of power for country's most of the economic activities. Bangladesh's installed electric generation capacity was 4.7 GW in 2009; only three-fourth of which is considered to be 'available'. Only 40% of the population has access to electricity with a per capita availability of 136 kWh per annum. Problems in the Bangladesh's electric power sector include corruption in administration, high system losses, and delays in completion of new plants, low plant efficiencies, erratic power supply, electricity theft, blackouts, and shortages of funds for power plant maintenance. Overall, the country's generation plants have been unable to meet system demand over the past decade.

[10] Connecting Bangladesh: Economic Corridor Network, Dec 2016, Mohiuddin Alamgir

In generating and distributing electricity, the failure to adequately manage the load leads to extensive load shedding which results in severe disruption in the industrial production and other economic activities. A recent survey reveals that power outages result in a loss of industrial output worth $1 billion a year which reduces the GDP growth by about half a percentage point in Bangladesh. A major hurdle in efficiently delivering power is caused by the inefficient distribution system. It is estimated that the total transmission and distribution losses in Bangladesh amount to one-third of the total generation, the value of which is equal to US $247 million per year.

The present Government is committed to implement "Vision 2021" for building Bangladesh as a happy, prosperous country of medium income through maintaining macro-economic stability and achieving rapid economic growth by 2021. In the outline of Bangladesh Perspective Plan (2010-2021) projections of raising the existing 6 percent growth rate of GDP to 10 percent by 2021 and increasing the per capita income of US$ 690 to around US$ 2000 have been set up. A prerequisite for achieving this growth is the ensuring of adequate investment in National Priority Sectors.

Analyzing the investment situation of past years, it is observed that the contribution of public investment in the total investment has comparatively declined while the function of private sector has augmented. The lion's share of the investment will be achieved through Public-Private Partnership, Private Sector investment and Foreign Direct Investment. It need not be over emphasized that a strong infrastructure is necessary to attract private and foreign investment. The energy and power supply deficit in the existing infrastructure has become an impediment to achieve development goals. The Government is firm to create an investment-friendly atmosphere to attract private ventures according to the set target. The Government has given priority to infrastructure development especially in power and energy sector as means of attaining higher growth.

Currently, the shortage in electricity production is about 1500-1800 MW as per the demand of peak hours. As the concept of applying Energy Mix has not been given due consideration there is an overwhelming dependence on natural gas as primary fuel for power generation. At present, 88 percent of the power plants are run by natural gas. Due to limited gas extraction, these power plants cannot generate enough power.

Moreover, around 63 percent of total production comes from public sector while private enterprises contribution is inadequate. In addition, there are also problems relating to management of the growing demand. The Government has already adopted a comprehensive plan to resolve the prevailing difficulties. Besides, use of coal and other fuels will be enhanced in order to reduce dependence on natural gas for power generation. The demand for electricity will also be addressed through the use of renewable energy and regional cooperation. Initiatives

have been taken to bring qualitative change in demand side management and use of fuels in order to save power and energy. In future, such initiatives will continue and will be well-arrayed.

When the present Government assumed office, the power generation was 3525 MW which has now been increased to 4020 MW currently. The production capacity will be enhanced to 11,500 MW by 2015 and it requires USD 9.00 billion investment out of which USD 8.00 billion is expected to be provided by private sector.

Development and investment in the power and energy sector is different from other sectors due to the sector specific characteristics. Huge primary asset accumulation and procurement are required for investment in the power and energy sector. Strategies have been made to meet this need by involving private sector with Government. Keeping this in view, the importance of external investment is infinite. On the other hand, consumer's economic consideration is given priority over commercial interests in price calculation of electricity, gas and other fuel oil. Efforts are continued to attract private ventures considering the risks in large primary investment and profit. However, estimation and reevaluation of power and other energy is required price is to be made more with commercial consideration in order to involve the private sector.

A modest effort has been made through this brochure to reveal the adopted plans and their implementations by the persistent efforts of the Government in order to resolve the prevailing situation of power and energy sectors before the Nation through the Parliament. The power shortages in Bangladesh along with reasons for lower per capita electricity consumption compared to other developing countries have been analyzed in this pamphlet. At the same time, in order to overcome the problems of power sector after identifying those, the steps taken so far and steps to be taken are discussed here. Priority has been given to arrange enhanced power generation, renovate and extend the infrastructure facilities for transmission and distribution, attract investors through private sector and PPP initiatives, encourage the use of renewable energy, create multifarious fuels, demand side management etc. to the develop power sector.

Demand for electricity is increasing with the improvement of living standard, increase of agricultural production, development of industries as well as overall development of the country; but due to the failure in the last few years to increase electricity generation capacity proportionately to the demand, there exists 1500-1800 Megawatt electricity shortage at present. Especially a huge shortage exists during the evening peak demand. Due to the crisis of gas supply, lack of necessary maintenance and rehabilitation of old power plants, it is not possible to utilize the total installed capacity. The shortage of electricity can be from the load-shedding made during the peak demand (5800 MW) of summer which is about 1800 Megawatt each day.

#### 2.1.3.1 Power Sector in Outline Perspective Plan of Bangladesh

Following Vision for power sector development has been mentioned in the Outline Perspective Plan of Bangladesh (2010-2021):

- Electricity Generation in the country by 2021 - 20,000 MW
- Electricity for all by 2021

There is a planning of the Government of achieving the following objectives for making the vision a reality:

The Following issues have been identified to reach the objectives

- To ensure energy security
- Making the power sector financially viable and able to facilitate economic growth;
- Increasing the sector's efficiency;
- Introducing a new corporate culture in the power sector entities;
- Improving the reliability and quality of electricity supply;
- Using natural gas (including imported LNG), coal and oil as the primary fuels for electricity generation;
- Increasing private sector participation to mobilize finance;
- Matching supply and demand for electricity;
- To ensure energy security for all;
- To reduce the consumption of natural gas, thereby releasing gas for use as fertilizer, or to increase the use of coal for electricity production to release gas for alternative use;
- Finalization of the coal extraction plan;
- Reasonable cost-effective price policy for gas, coal and electricity, these being under government control;
- Energy mix for electricity generation;
- Energy conservation;
- Promotion of renewable;
- Efficiency of the power sector; and
- Reduction of system loss.

- Importation of LNG

To address the issues the following constraints, possibilities and strategies are identified:

### 2.1.3.2 Work Plan of Power Generation

In the Outline of Perspective Plan of Bangladesh, the main driving force for the Power sector would be the Public Private Partnership (PPP) initiative. Power sector is characterized by time consuming nature of raising fund and requirement of large scale initial investments. To address these limitations through PPP initiative, Independent Power Producer (IPP) policy has been formulated in 1996. Private sector has been drawn in to the power generation through IPP, SIPP, Rental, Quick Rental and Joint Venture policies under the PPP framework. In addition, Road-Shows have been organized in different part of world. These initiatives have prompted a huge positive response from the foreign investors.

Under the yearly power generation plan, Government has taken initiatives to produce 9426 MW by 2017 of electricity gradually. In addition to these, as large scale production plants requires 3-4 years of installation time, the Government has taken initiatives to set up 1000-1200 MW Quick Rental Power Stations which can produce electricity in the shortest possible time and help to reduce the power crisis to a tolerable level.

### 2.1.3.3 Transmission and Distribution

In addition to power generation, it is very important to develop a dependable and quality power transmission and distribution network to ensure quality and uninterrupted power supply to the consumers. To transmit the newly produced power to the doorsteps of the consumer, it is urgently needed to build new transmission and distribution infrastructure in addition to renovation and preservation of old distribution networks.

For resolving the electricity crisis, government has some plans for increasing electricity generation and at the same time has undertaken massive development plans for efficient and uninterrupted transmission and distribution system. At present total length of 230 KV electric line has been upgraded at 2644.5 circuit kilo meters and for 132 KV electric lines, the length is 5715 circuit kilometer. For strengthening the electricity transmission system and for meeting up the gradual increasing future demand for electricity, government has set a target of “Providing Electricity in every house by 2021”. As part of achieving this target, government has already undertaken a priority based investment plan (Three year road map for power sector reform) under which massive work plan has been chalk out for building an additional 3000 kilo meter of transmission lines by 2016. In this regard, PGCB has undertaken activities for building concerned transmission lines for supplying electricity through regional cooperation.

New projects are being undertaken for expanding the electrification program as well as for the development and capacity enhancement of the existing transmission and distribution system. Through these programs, initiatives have been made for building an additional 60,000 kilo meter distribution lines by 2016.

### 2.1.4 Energy Sector

In recent times, establishment of important physical infrastructures, setting up of new power plants and the pace of industrialization in the country has slowed down due to energy supply shortage. The sluggish industrialization which has hindered development activities is apprehended to create a negative impact on employment and consequently on the people's livelihood. This dismal state of energy sector has resulted from lack of initiatives and insufficient investment in the sector during the past years. Realizing the necessity for its improvement, the present government has indicated energy sector as a priority sector.

In our country, renewable energy such as biomass, solar power and wind power are being used since time immemorial. Especially in areas which are outside gas coverage, usage of biomass for cooking and solar power and wind for drying of different grains as well as clothes are known to all. However, we are still lagging far behind in the scientific use of such energy. Moreover, the use of renewable energy has become popular worldwide in view of depleting reserve of non-renewable fossil fuel. Renewable energy is environment-friendly. At present, the different categories of renewable energy that are being used in limited ways in our country are as follows:

- Hydro-electricity
- Solar power generation using solar rays
- Wind-mill power generation using wind power
- Production of bio-gas using waste
- Electricity produced by Biomass Gasification Method using wood, rice husk, etc.

#### 2.1.4.1 Current Position of Energy Sector

At present, Bangladesh has energy supply from both renewable and nonrenewable sources, 38 percent of which comes from biomass. However, 75 percent of commercial energy is provided from natural gas. Currently, gas production per day is 2000 MMCF in our country. Use of imported oil accounts for the lion's share of the rest of the energy requirement. Our annual requirement of fuel is approximately 3.7 million metric ton. Apart from natural gas and crude oil, coal is mainly used as fuel in the brick-fields and at the Boropukuria Thermal Power Plant. Moreover, power is also being generated by using solar home system in off grid areas. In addition there are some poultry and dairy farms in which bio-gas plants are being set up and

with this energy, power can be generated and is also used for cooking. The amount of power generation from such plants is currently about 1 MW. Steps have been taken to generate electricity by Bio-Mass Gasification Method in the country. We also have a bright potential to produce electricity from wind and mini-hydro or wave-energy. Recently, solar power based irrigation pump has been used in a number of areas of the country. Its wide use will lessen the pressure on diesel and electricity.

#### 2.1.4.2 Ready Made Garments (RMG)

The ready-made garments (RMG) sector of Bangladesh has got a greater facet than any other sector in terms of growth and foreign exchange earnings. It makes a significant contribution to the national economy by creating generous employment opportunities and reducing poverty through socioeconomic development. Despite unquestionable success story, this sector has got a number of formidable challenges for the future growth. The present study has made a search on different dimensions of contribution and challenges of RMG industry in Bangladesh. To accomplish the task, a descriptive research based on study of available records is conducted. The study reveals that since its inception, especially during the last three decades, the RMG industry contributed significantly through creation of physical infrastructure which is demonstrated by 4222 RMG units along with the development of human capital as around 4 million workforce are directly involved in this industry. It has also contributed tremendously through empowering women as almost 90 percent of its labor force is female which ranked the highest in South-East Asia. In terms of core economic consideration RMG holds almost 14.07 percent of the GDP of Bangladesh as well as the 81 percent of the total export earnings. The study however, identifies some challenges towards its future development including unskilled workers, improper infrastructure, energy crisis, bank loan and high rate of interest, high tax rate, intricate social compliance, political crisis, lack of market and product diversification, compliance pressure of accord and alliance and lack of integration. Therefore, collaborative and coordinated steps from both public and private sectors need to be initiated to overcome these challenges

### 2.2 Development Partners in Bangladesh

It has been emphasized that Bangladesh can develop through partnership and cooperation, as many other regions did. Institutions such as the Asian Development Bank, the World Bank and the United Nations at large are set to coordinate their activities towards supporting Bangladesh. Other development partners of Bangladesh are the developed and developing countries, which

are already giving assistance to Bangladesh in many forms. The role of development partners is to increase the flow of resources to Bangladesh and to provide technical assistance where necessary, based on the condition that Bangladesh fulfil its commitments of maintaining good governance, the respect for human rights. This also included the reviewing of international trade policy to give more market access for Bangladeshi products.

### 2.2.1 Bilateral Development Partners

Economic Relations Division (ERD) deals with the Bilateral Development Partners along with the Multilateral Development Partners in order to mobilize external economic and technical assistances for the development of the Bangladesh. The list of major Bilateral Development Partners are given below:

- North American countries:
    - USA
        - United States Agency for International Development (USAID)
        - United States Department of Agriculture (USDA)
        - Mennonite Central Committee (MCC)
    - Canada
        - Canadian International Development Agency (CIDA)
        - International Development Research Centre (IDRC)
- European Countries:
    - Belgium
    - Finland
    - Germany
        - GIZ
        - KfW
    - Switzerland
    - The Netherlands
    - United Kingdom
        - Department for International Development (DFID)
- NORDIC Countries:
    - Denmark
    - Norway
        - Nordic Development Fund (NDF)
    - Sweden
        - Swedish International Development Cooperation Agency (SIDA)
- Middle East Counties (Kuwait, Saudi Arabia, UAE):

- Saudi Fund for Development (SFD)
- Kuwait Fund for Development (KFD)
- Abu Dhabi Fund for Development (ADFD)

- Asian Countries:
  - China
  - India
  - Japan
    - Japan International Cooperation agency (JICA)
    - Japan Bank for International Cooperation (JBIC)
    - Japan International Cooperation Center (JICE)
    - Japanese Grant Aid for Human Resource Development Scholarship (JDS)
  - South Korea
    - Korean International Cooperation Agency (KOICA)
    - Economic Development Cooperation Fund (EDCF)
  - Thailand
    - Thailand International Development Cooperation Agency (TICA)
  - Malaysia
    - Malaysian Technical Cooperation Program (MTCP)
  - Pakistan
  - Australia
    - Australian Aid for International Development (AusAID)

### 2.2.2 Multilateral Development Partners

ERD deals with the all Multilateral Development Partners in order to mobilize external economic and technical assistance for the development of the Bangladesh. List of major Multilateral Development Partners are as follows:

- Asian development Bank (ADB)
- International Monetary Fund (IMF)
- Islamic Development Bank (IDB)
  - Islamic Corporation for the Development (ICD) of the Private Sector
  - Islamic Corporation for the Insurance of Investment & Export Credit (ICIEC)
  - Islamic Research and Training Institute (IRTI)
  - International Islamic Trade Finance Corporation (ITFC)
  - World WAQF Foundation
- Local Consultative Group in Bangladesh (LCG-Bangladesh)

- United Nations Organizations (UNO)
    - United Nations Development Programme (UNDP)
    - United Nations Children's Fund (UNICEF)
    - United Nations Capital Development Fund (UNCDF)
    - United Nations Population Fund (UNFPA)
    - United Nations Educational Scientific and Cultural Organization (UNESCO)
    - United Nations- Economic and Social Commission for Asia and the Pacific (UN-ESCAP)
- World Food Programme (WFP)
- United Nations Economic and Social Council (ECOSOC)
- Food and Agricultural Organization (FAO)
- International Fund for Agricultural Development (IFAD)
- International Labor Organization (ILO)
- United Nations Conference on Trade and Development (UNCTAD)
- United Nations Environment Programme (UNEP)
- United Nations Industrial Development Organization (UNIDO)
- United Nations Volunteers (UNV)
- United Nations High Commissioner for Refugees (UNHCR)
- International Trade Centre (ITC)
- World Intellectual Property Organization (WIPO)
- World Trade Organization (WTO)
- World Health Organization (WHO)
- Middle East Sources
    - OPEC Fund for International Development (OFID)
- European Commission (EC)
    - Commonwealth:
        - Commonwealth Secretariat
        - Commonwealth Fund for Technical Cooperation (CFTC)
    - Colombo Plan:
        - Colombo Plan Council
        - Colombo Plan Staff College for Technician Education (CPSC)
- World Bank Group
    - The World Bank
    - International Development Association (IDA)
    - International Bank for Reconstruction and Development (IBRD)

- International Finance Corporation (IFC)
- The Multilateral Investment Guarantee Agency (MIGA)
- The International Centre for the Settlement of Investment Disputes (ICSID)

### 2.3 Expected Role of/Support from Development Partners

Bangladesh has maintained an impressive track record on growth and development. In the past decade, the economy has grown at nearly 6 percent per year, and human development went hand-in-hand with economic growth. Poverty dropped by nearly a third, coupled with increased life expectancy, literacy, and per capita food intake. More than 15 million Bangladeshis have moved out of poverty since 1992. While poverty reduction in both urban and rural areas has been remarkable, the absolute number of people living below the poverty line remains significant. Despite the strong track record, around 47 million people are still below the poverty line, and improving access to quality services for this vulnerable group is a priority. There are also many people who could fall back into poverty if they lose their jobs or are affected by natural disasters. With nearly 150 million inhabitants on a landmass of 147,570 square kilometers, Bangladesh is among the most densely populated countries in the world. Sustained growth in recent years has generated higher demand for electricity, transport, and telecommunication services, and contributed to widening infrastructure deficits. While the population growth rate has declined, the labor force is growing rapidly. This can be turned into a significant demographic dividend in the coming years, if more and better jobs can be created for the growing number of job-seekers. Moreover, improving labor force participation and productivity will help to release the potential of the economy. Exploiting the potential of regional cooperation and making trade policy more conducive to a deepening and diversification of exports will also play a vital role in the growth process. Bangladesh aspires to be a middle-income country by 2021.This will require increasing GDP growth to 7.5 to 8 percent per year based on accelerated export and remittance growth. Both public and private investment will need to increase as well. Growth will also need to be more inclusive through creation of productive employment opportunities in the domestic economy. To sustain accelerated and inclusive growth, Bangladesh will need to manage the urbanization process more effectively, as well as prepare for adaptation to climate change impacts. Becoming a middle-income country will require substantial efforts on many fronts. These include maintaining macroeconomic stability; strengthening revenue mobilization; tackling energy and infrastructure deficits; deepening financial-sector and external trade reforms; improving labor skills, economic governance, and urban management; and adapting to climate change. Bangladesh can become an export powerhouse, with its labor-intensive manufactured and service exports growing at double digits

on a sustained basis, if it speeds up government decision-making. Without timely action, other countries (such as Vietnam and Myanmar) will take the markets being vacated by China. From the below table, amount of disbursements for Bangladesh during the last year is illustrated:

**Table 1 Development Partner wise Disbursements of Foreign Aid during 2014-2015**

| Development Partner Name | Disbursement (in USD Millions) | | |
|---|---|---|---|
| | Project Aid | | Total |
| | Grant | Loan | |
| 1 | 2 | 3 | 4 |
| **A. AID GROUP SOURCES** **A.(1) BILATERAL** | | | |
| 1. Australia | - | - | - |
| 2. Canada | 13.28 | - | 13.28 |
| 3. Denmark | 26.40 | 3.13 | 29.53 |
| 4. France (AFD) | - | - | - |
| 5. Germany | 30.08 | - | 30.08 |
| 6. Italy | - | - | - |
| 7. Japan | 12.18 | 354.29 | 366.46 |
| 8. Netherlands | 0.93 | - | 0.93 |
| 9. Norway | - | - | - |
| 10. South Korea | 0.13 | 55.60 | 55.73 |
| 11. Sweden | 10.15 | - | 10.15 |
| 12. Switzerland | 13.84 | - | 13.84 |
| 13. U.K. | 79.30 | - | |

| | | | |
|---|---|---|---|
| | | | 79.30 |
| 14. U.S.A. | 1.53 | - | 1.53 |
| **A.(2) MULTILATERAL** | | | |
| 15. A. D. B. | 8.94 | 706.82 | 715.76 |
| 16. E.C | 29.74 | - | 29.74 |
| 17. EIB | - | - | - |
| 18. I. D. A. | 108.02 | 869.87 | 977.89 |
| 19. I.F.A.D. | 1.91 | 40.38 | 42.29 |
| 20. NDF | - | 2.84 | 2.84 |
| 21. UNICEF | 39.16 | - | 39.16 |
| 22. UN System | 107.23 | - | 107.23 |
| Sub Total(A) | 482.80 | 2,032.93 | 2,515.73 |
| **B. NON-AID GROUP SOURCES B.(1) BILATERAL** | | | |
| 1. Belarus | - | - | - |
| 2. China | - | 50.69 | 50.69 |
| 3. India | 50.00 | 43.99 | 93.99 |
| 4. Kuwait | - | 7.22 | 7.22 |
| 5. Russia | - | 113.91 | 113.91 |
| 6. Saudi Arabia | - | 9.76 | 9.76 |

| | | | |
|---|---|---|---|
| 7. Spain | - | - | - |
| 8. Turkey (TIKA) | 0.16 | - | 0.16 |
| 9. UAE | - | - | - |
| **B.(2) MULTILATERAL** | | | |
| 10. I.D.B. | 0.33 | 132.59 | 132.92 |
| 11. O.P.E.C. | - | 10.61 | 10.61 |
| **B.(3) SUPPLIERS' CREDIT** | | | |
| 12.Buyers Credit(China) | - | 70.55 | 70.55 |
| **Sub Total (B)** | **50.49** | **439.32** | **489.81** |
| **Total(A+B)** | **533.30** | **2,472.25** | **3,005.54** |
| Source ERD, Ministry of Finance, Bangladesh | | | |

From the table above, we can summarize the data as below:

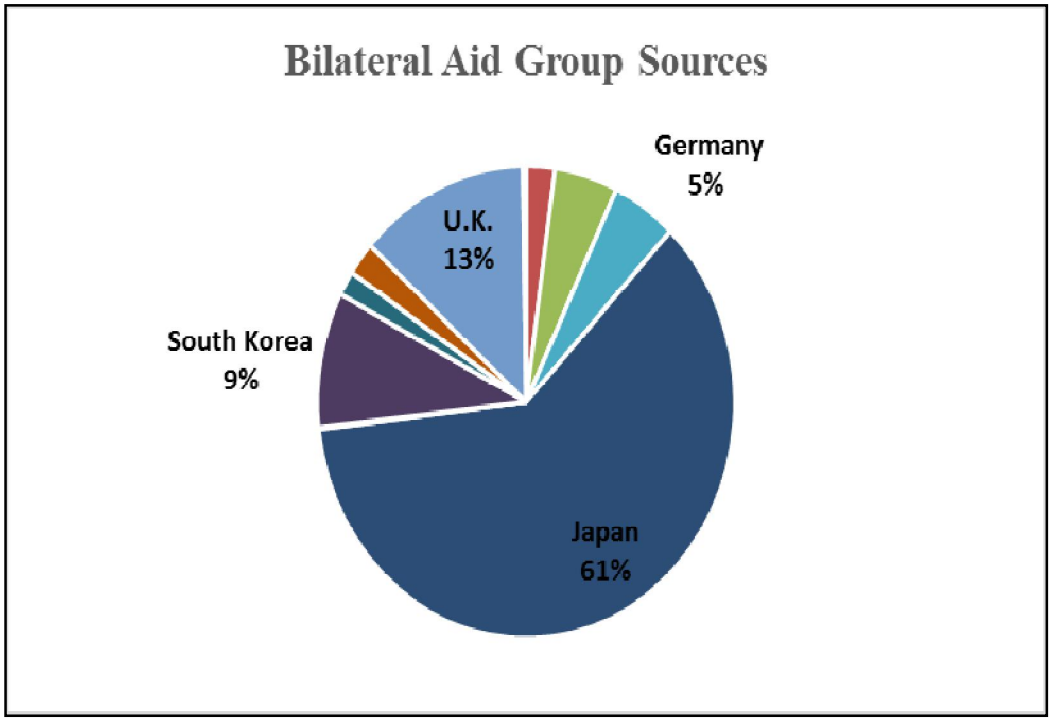



**Figure 1 Bilateral Aid Group Sources (Fiscal 2015)**

It is evident that more than 60% of bilateral aid comes from Japan. This shows a clear indication of friendly economic relationship between Japan and Bangladesh.

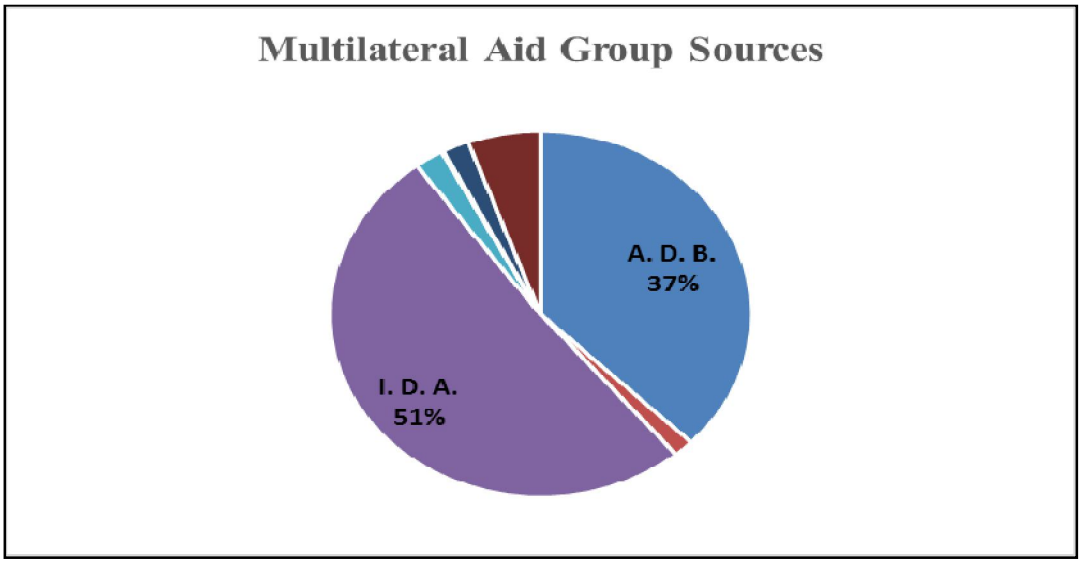
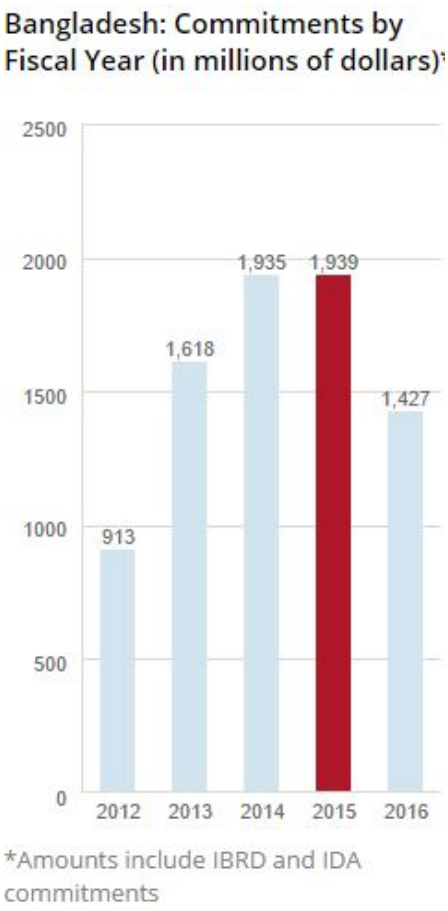



**Figure 2 Multilateral Aid Group Sources (Fiscal 2015)**

The International Development Association (IDA) has been supporting Bangladesh since 1972, just after the country's independence. Since then, IDA has provided more than $19 billion11 support to advance Bangladesh's development priorities.




The World Bank support has helped Bangladesh to reduce poverty and improve human development. Key elements of that support have been the Bank's long-term commitment to health and education, its support for rural infrastructure, and its engagement in policy dialogues that have created conditions for broad-based economic growth. IDA's support has also included a substantial body of analytical work and knowledge products that have contributed to the policy debate, IDA-supported operations, and, ultimately, development outcomes. Forty years of partnership have built a solid foundation for improvements in growth, empowerment, and social mobility.

Highlights of IDA's engagement in Bangladesh include:

Rural Infrastructure: IDA has been a major partner in the development of Bangladesh's rural infrastructure, having funded three rural road improvement projects. A recently completed rural road project has helped to improve and maintain more than 2,500 km of rural roads in 21 districts. These roads have improved access to schools and health clinics, reduced transport costs, and helped increase rural non-farm incomes. They also led to the creation of over 47,000 person-years of employment in the project area, with female employment increasing by 50 percent. The overall poverty effect of road improvement was significant, with poverty falling by about 1% and the poverty reduction rate almost doubling in project areas.

Agriculture: Bangladesh has made impressive achievements over the last 30 years in narrowing the gap between food crop production and the needs of the population, in large part due to expansion of irrigation. The country is nearly self-sufficient in rice (the main staple food) with production reaching more than 35 million metric tons per year. IDA is an active partner in the agriculture sector in Bangladesh, focusing support on technology and research and on

[11] http://www.worldbank.org/en/country/bangladesh/overview#3

rehabilitation of infrastructure for flood control, irrigation and drainage. Bangladesh is one of the first countries to receive a grant from the Global Agriculture and Food Security Program, with project results focused on enhancing agricultural productivity and livelihoods in two of the most agro-ecologically constrained areas of the country.

Energy: Bangladesh suffers from shortages of reliable electricity and natural gas service compared to demand. Total installed capacity is 8,050 MW, and IDA has contributed to more than 1,515 MW of that capacity, with another 335 MW under construction. IDA has supported public-private partnerships to build small power plants as well as large-scale independent power plants, such as the Haripur and the Meghnaghat plants. In addition, access to electricity is being provided in rural areas through off-grid technologies, and consumption of energy is being reduced through distribution of energy-efficient CFLs with IDA support. For example, more than 850,000 solar home systems have been installed through May 2012 in

remote villages, and every month about 50,000 new homes and shops in rural areas are being connected to electricity through the installation of these systems.

Education: Bangladesh has made impressive gains in improving access to education, reaching the Millennium Development Goal of gender parity at school enrollment well ahead of time. Today, the female primary school enrollment rate of 98% in Bangladesh is higher than those in Pakistan, Nepal and Bhutan and about the same as in India. Six million girls attend secondary school in Bangladesh today, rising from just 1 million two decades ago. IDA has contributed to these achievements by supporting both formal and informal education service delivery programs, including innovative models to improve performance and involve difficult-to-reach groups. Currently, IDA supports active projects in the primary, secondary, and tertiary sectors, including an initiative to bring out-of-school children back to school and a skill-building project to help develop a more competitive labor force.

Health: IDA has been a close partner of the government of Bangladesh to improve health, HIV and nutrition outcomes since 1975. The World Bank currently supports implementation of the government's Health, Nutrition, and Population Sector Development Program in partnership with other development partners to strengthen health systems and improve health services, particularly for the poor. With World Bank support, assisted deliveries have helped reduce maternal mortality rates by 40% in the past decade. Today, nearly 90% of Bangladeshi children receive vitamin A supplements and more than 80% are vaccinated, contributing to an impressive reduction in infant and child mortality by more than two-thirds since 1990. The country is on track to meet the

Millennium Development Goal targets for health, and received the 2010 United Nations Award for MDG 4 achievements. Nutrition, however, remains a challenge, as more than 40% of under-5 children are either moderately underweight or moderately stunted or both.

Livelihoods: IDA has been supporting community-driven development plans aimed at improving livelihoods; quality of life; and resilience to climate variability, natural hazards, and other shocks for the rural poor. Around 3.5 million people in about 1,000 villages have benefited from improvements in community infrastructure, such as access to drinking water; roads and bridges; and credit, markets, and opportunities for income generation.

Local governance: With IDA support, all 4,504 Union Parishads of Bangladesh have been provided with increased resources and delegated responsibility to deliver local services. For the first time, female Union Parishad members are managing 30% of the funds and plans. More than 35,000 community plans generating employment for poor people have been implemented so far, including construction or rehabilitation of roads, culverts, drainage and embankment systems; water and sanitation facilities; and schools and clinics. Current program innovations include performance-based grants to expand resources available to local governments.

Water supply and sanitation: In partnership with the government, IDA has contributed to providing access to safe and arsenic/pathogen-free water and improved sanitation services to 1.25 million people in rural areas and small towns. IDA is also supporting improvements in water supply and sanitation in Dhaka and Chittagong, two of the largest cities in the country.

ADB has provided Bangladesh with $17.2 billion in loans and $244.6 million for technical assistance projects since 1973.[12] In recent years, ADB development efforts in Bangladesh have focused on energy security, transport services and connectivity, education and skills development, water resources management, urban infrastructure, and finance. ADB will support Bangladesh's efforts to achieve objectives of faster, inclusive, and sustainable growth; the newly endorsed Sustainable Development Goals; and attainment of middle-income status by 2021. The Asian Development Bank (ADB) will increase public- and private-sector lending to Bangladesh to $8.0 billion for 2016 through 2020 to help the country build the infrastructure and skills

| | Total value of JICA programs (Unit: millions of yen) | Composition ratio |
|---|---|---|
| India | 190,655 | 59.0% |
| Bangladesh | 68,151 | 21.1% |
| Pakistan | 23,129 | 7.2% |
| Sri Lanka | 20,802 | 6.4% |
| Afghanistan | 9,136 | 2.8% |
| Nepal | 8,460 | 2.6% |
| Bhutan | 2,259 | 0.7% |
| Maldives | 365 | 0.1% |

[12] https://www.adb.org/publications/bangladesh-fact-sheet

needed for a strong, diversified economy and to strengthen trade links within the region.[13] Bangladesh has historically been a large recipient of financial assistance from bilateral and multilateral development partners. Foreign aid commitments equaled $5.3 billion in FY2015, with about 85% in the form of concessional loans. In FY2015, foreign assistance accounted for nearly one third of development program spending. Bangladesh's attainment of lower-middle-income status in 2015 is unlikely to have much impact on its external financing needs over the next 5 years, and Bangladesh will still need significant financing to achieve rapid and sustainable growth and eradicate the remaining poverty. Because domestic revenue mobilization remains weak, and the capital market undeveloped as a source of infrastructure financing, access to concessional assistance from development partners will remain an important way of financing these investments. The government is expected to increase the size of non-concessional external financing from multilateral sources and/or the market to finance revenue-generating infrastructure projects. With outstanding external debt of 12% of GDP in FY2015, and the continued low fiscal deficits, Bangladesh is at a low risk of external debt distress.[14]

To accelerate the country's economic development, JICA is extending its assistance for building and improving power plants to solve chronic electricity shortages, an urban railroad system to relieve serious traffic congestion in the capital city, a road network and bridges to strengthen intra-regional connectivity, urban infrastructure such as water supply and sewage systems and waste management, and special economic zones for the improvement of the investment environment, toward the realization of the Bay of Bengal Industrial Growth Belt (BIG-B) concept discussed at the Japan-Bangladesh Summit Meeting in 2014. The country is also highly vulnerable to natural disasters such as cyclones, floods, and earthquakes. Reducing poverty is an enormous challenge, as approximately 25% of the population is impoverished.

JICA has been supporting the development of South Asian region by building infrastructure such as transportation systems, electricity, water supply and sewerage services, and also by strengthening political systems and promoting cooperation with Japanese private companies. Total value of JICA programs in this region was 322,957[15] Million yen for the fiscal year 2015. Also in other fields such as education, agriculture, and rural development, JICA has been making efforts in achieving fair and high-quality growth that enables sustained poverty reduction by delivering projects that take into consideration the socially vulnerable and impoverished segments of the societies.

[13] https://www.adb.org/news/adb-boost-bangladesh-lending-8-billion-under-new-5-year-partnership
[14] Country Partnership Strategy-Bangladesh (2016-2020), ADB
[15] JICA Annual Report 2016

From the perspective of overcoming the vulnerabilities of Bangladesh's society, JICA is providing assistance to strengthen the country's capability to cope with natural disasters, to improve safety in construction, and also to improve primary science and mathematics education, maternal and child health care, and health systems. Furthermore, JICA is providing assistance in building infrastructure in rural areas that have been left behind in economic growth, enhancing local governments' administrative capabilities, as well as giving support to human resources development and anticorruption measures for public officials to improve governance by the Government of Bangladesh.

## 2.4 Consultancy Service

Consultants are an important part of infrastructure development. It has been discovered that hiring consultants and outside experts can save time and money. It also can increase competitiveness and professionalism. Also it provides a way forward for transfer of technology towards local experts in specialized works.

### 2.4.1 Importance of Consultancy

Government organizations engage individual consultants and consulting entities (firms, universities, NGOs, etc.) for a wide range of assignments. For example, consulting entities are retained for pre-investment, sector, or other studies, detailed design, contract preparation, and project supervision. Individual consultants, whether hired directly or through consulting entities, provide expert advice and help the organization to prepare studies, appraisals, and reports.

Consulting Services help clients to fulfill their company's respective strategic and tactical objectives as well as it provides them the ability to measure the cost and time required to complete different assignments successfully. These firms help in improving the working skills of all employees and they also provide management training solutions. These services train organizations on how to select candidates and how to upgrade their staffs' skills. With the help of this, employees become more efficient and more productive in their work.

Mostly, different firms that offer consulting services for project management employ highly trained, experienced and certified Project Managers who are capable of applying specific knowledge, tools, methods and skills that effectively manage all the activities needed to ensure successful project completion. Project managers are the people who will be initiating, analyzing,

executing and handling all the different aspects of a client's project from the time it is conceived up to the completion. These services also help in the employee mentoring and hence they improve employee engagement. Career development services, organizational development, strategy development, employee assessment with training and talent management consultancy are the different facilities through which these consulting firms can help employers. On the concluding note, it can be understood that, using the services of these consulting firms to help the brand development of the company will be one of the most effective investments any business enterprise will ever make. In many of these times, consulting services taken from these firms prove to be one of the single most effective factors behind the successful sales and improved revenues of the business enterprises. In brief these are following reasons why consultancy service is required:

- To provide a “short-cut” to know-how, knowledge and information that does not exist in the organization/country
- To provide a professional service that does not exist in the organization/country, or that is needed for a specified period of time
- To provide solutions to specific challenges and situations
- To validate ideas that have already been created in the organization/country
- To analyze, diagnose or criticize (constructively)
- To facilitate the search for ideas and solutions with existing resources
- To facilitate, create and implement methodologies and systems that enhance efficiency
- To access a network of business or government contacts
- To bring in an experienced “outsiders” evaluation and point of view
- To present, teach or implement “new” business/technical ideas and procedures

### 2.4.2 The Role of Consultants in Development Partner’s Infrastructure Program

It is evident that, as the infrastructure development grows, so will the role of professional engineering consultants.

- In all programs, but especially in high-risk/high-rewards projects (for example, hydropower/mega bridge facilities), the Development Partner and borrower need to ensure that technical, environmental, and social standards and requirements are met and that governance issues are properly addressed.

- In all, these are areas in which the work of professional engineering consultants will be indispensable.
- But just as the Development Partner's work in infrastructure is expanding to meet the realities of today's world, the role of consulting engineers will also have to be enhanced.

### 2.4.3 Quality of Consultancy Services

It is clear that the satisfactory delivery of infrastructure services is increasingly dependent on the executive and managerial capacity of responsible client agencies.

- What clients need from consultants, over and above their traditional professional commitment, is strategic advice and assistance on improving the bottom line.
- Unlike in the past, projects financed by the Development Partners are no longer limited to the provision of physical infrastructure and maintenance; today they include improving the business performance of a client's executing agency through institutional and organizational reform, leadership and management change, and systems integration. The advice clients need goes well beyond compliance in the purely technical realms.
- Thus consulting engineers will need to be able to expand from their core knowledge into the disciplines necessary for improving clients' business performance--often, by joining hands with other consulting professions (such as management, organization, and specialists from the human and social sciences).

It can be said that parameters that define the scope of consulting services are broadening, just as those defining the quality of professional services are evolving.

- These parameters need to be updated continuously to deliver the best-performing projects possible to clients.
- At the same time, the Development Partners certainly understand that, if consultants are to remain committed, they must be treated fairly, recognized for good work, and paid enough to render their business sustainable and worthwhile.

As projects are tailored to fit the reality of particular country systems, national consultants will be required to include.

- It is true that in countries that for several years have invested little in infrastructure, capable national engineers have left the consulting professions to start other activities, or

have left their country altogether.

- There could also be serious shortages of qualified consulting engineers.

In most countries, the government is the most important purchaser of consulting services.

- Thus the government is responsible not only for generating the demand for services, but also for creating the institutional and regulatory conditions that allow young consulting engineers and other professionals to look forward to a sustainable professional career in their own country.

### 2.4.4 Consultancy in Bangladesh

To support and embark the growth of mega infrastructure in Bangladesh, numerous consulting firms are engaged over the last few decades here. Those include both international and local firms. Some of the names are as below:

**Table 2 List of Consultancy Firms actively working in Bangladesh**

| **Local Consultant Firms** | **International Consultant Firms** |
|---|---|
| STEELMARK Buildings Limited | SMEC International Pty Ltd.-Australia |
| Development Design Consultants ltd. | COWI A/S-Denmark |
| Dev Consultants Limited | ARUP Ltd.- Hong Kong |
| AQUA Consultant and Associates Ltd | Oriental Consultants Global Company-Japan |
| BETS Consulting Services Ltd. | Katahira Engineering Institute-Japan |
| Desh Upodesh Ltd. | Nippon KOEI-Japan |
| Strategi Consulting Company Ltd. | Mott Macdonald-India |
| Shahidullah & Associates Ltd | AECOM-India |
| Kranti Associates Ltd | Eptisa Services Ltd.-Spain |
| SARM Associates Ltd. | STUP Consultants Pvt. Ltd.-India |
| BCL Associates Ltd | AARVEE Associates Ltd.-India |
| DPM Consultants Ltd. | Fichtner GmbH & Co.-Germany |
| Abode of Consultants Ltd. | Chodai Co Ltd.-Japan |
| Acumen Consulting House Ltd | ILF Beratende Ingenieure Gmbh,-Gremany |
| Axis Design Consultants Ltd | Korea Engineering Consultants Corp.-Korea |
| Dexterous Consultants Ltd | Korea Expressway Corporation-Korea |
| Engineering & Planning Consultants Ltd | Pyunghwa Engineering Consultants Ltd-Korea |
| Engineering Consultants & Associates Ltd | Sunjin Engineering and Architecture Co-Korea |

| | |
|---|---|
| HB Consultants Ltd. | Yooshin Engineering Corporation-Korea |
| House of Consultants Ltd | China Bangla Engineers & Consultants Ltd. |
| Modern Engineers, Planners and Consultants Ltd | Surbana Jurong Pvt Ltd.-Singapore |
| Prokalpa Upodeshta Ltd | High Point Rendel-UK |
| Utopia Consultants Ltd | Canarail Consultants Inc.-Canada |
| Resource Planning & Management Consultants Ltd | Dohwa Engineering Co Ltd-Korea |

### 2.4.5 Bangladesh Association of Consulting Engineers (BACE)

Bangladesh Association of Consulting Engineers (BACE) was founded in 1975 as a registered non-profit professional society to encourage a sound institutional development of the consulting industry in the country. The Association is administered by an elected Executive Council drawn up from representatives of member firms. Firms are admitted to membership of BACE only after they have satisfied the Council that they are professionally qualified and that they act independently of contractors and suppliers.

BACE is affiliated to FIDIC, ASPAC and TCDPAP and is a member of the Federation of Bangladesh Chamber of Commerce and Industry. Member Firms are individually registered as consultants with various international, regional and national development agencies. The Association subscribes to the general principle and standards of professional code of conduct laid down by FIDIC.

## CHAPTER-3

## The Consulting and Construction Firm STEELMARK Buildings Ltd.

### 3.0Introduction

SMBL is recognized around the Bangladesh for providing high-quality, practical solutions for construction and physical infrastructure projects. SMBL aligns technical expertise with local knowledge to address the needs of its diverse client base.

### 3.1 Company Profile

Steelmark Building Limited is one of the leading Pre-Engineered steel building manufacturers in Bangladesh. It carries the slogan "Relation Through People and Quality" and stand out in the industry as the "Innovator's Brand in Pre-Engineered Building".The present board of Directors of the company is as follows:

| Sl | Name | Qualification | Designation |
|---|---|---|---|
| 1 | Mr. Tanvir Ahmed Siddique | B.Sc. in Civil Engg. (BUET)<br>MBA (IBA, University of Dhaka) | Chairman |
| 2 | Mr. Md. RezwanulMamun | B.Sc. in Civil Engg. (BUET) | Managing Director |
| 3 | Mr. Ahmed Hossain | B.Sc. in Civil Engg. (BUET)<br>M.Sc AEM (BUET) | Director |
| 4 | Mr. Hamid-uz-Zaman | B.Sc. in Civil Engg. (BUET)<br>M.Sc, Ph.D in Construction Management,<br>University of Alberta, Canada | Director |

Steelmark is the most desired company in for any industrial construction ranging from Automobile, Textile i.e spinning, dyeing, composite, RMG etc, Power plant, Ship building, LNG station, Paper mill, Electric & Electronic assembly plan, Ceramic industry, Food industry, Leather and Footwear and also for the most unique and sophisticated steel structures in the country

## 3.2 History

Steelmark was initially established in 2003 as a part of Uttaran Structural Designers Ltd. and in two years was re-planned in to a separate business unit under the name of Steelmark Buildings Ltd. Steelmark group concerns areone of very few engineering companies in the country to be founded by five civil engineers, all graduated from Bangladesh University of Engineering and Technology (BUET).The most notable advantages Steelmark's buildings are world's best raw material sourcing, faster construction time, low maintenance cost, longer clear spans, infinite choice of layouts, inherent resistance to earthquakes, ease of future expansion, and unique attractive appearance. Since its establishment the firm has been successfully working on several projects in the pre fab steel building arena. The firm has already completed 800+ industrial building projects through which it has established a strong brand image of confidence and loyalty by providing international quality service

## 3.3 Quality Management

SMBL implements quality management principles on all projects, and has developed a Quality Management System (QMS) to comply with the requirements of ISO 9001:2008. SMBL's QMS provides systematic control of business activities to ensure that client expectations are being met, and where possible, exceeded. The QMS includes processes for planning, documenting, managing and controlling everyday business needs and activities, as well as review processes to monitor and measure performance and identify improvements. SMBL's QMS covers all stages of the project lifecycle, from inception through to handover, and provides a formalized and structured approach to project quality management. The QMS ensures: development of project quality objectives incorporating client operability, maintainability and delivery requirements; quantification of project risks through assessment; implementation of design management and review processes to manage critical design quality aspects; communication of risks and responsibilities through planning workshops; and development of risk auditing regimes.

## 3.4 Risk Management

SMBL maintains an appropriate system of governance and risk management applicable to all of the Company's locations, business units and functional groups in order to: implement a Risk Management System conforming to ISO 31000; clarify the roles and responsibilities of management and Boards; identify, assess and manage significant risks and opportunities; maintain the integrity of SMBL's assets, people and reporting; and comply with legal obligations in all jurisdictions in which SMBL operates. SMBL seeks to improve risk management through: appropriate charters for the Board and management groups (including obligations to their

various stakeholders); a Code of Conduct recognizing SMBL's responsibilities to all stakeholder groups; promotion of workplace culture, practices and behaviors which value and reflect honesty, integrity and professionalism; the identification and management of risks, issues and opportunities at team, project, business unit, subsidiary and corporate levels; alignment of controls with the SMBL governance and risk management policy and framework; and the application of policies, controls, and review processes to all business units and subsidiaries.

### 3.5 Health and Safety Commitment

SMBL is committed to promoting and maintaining a culture and working environment in which risk to health and safety is unacceptable. To meet this commitment, SMBL (in so far as reasonably practicable) provides safe and healthy working conditions for all people associated with the Company, including employees, contractors, visitors and the general public. In order to meet these responsibilities, SMBL: maintains a safe work environment (including work conditions, practices and procedures); ensures full compliance with all applicable statutory and licensing requirements; undertakes proactive reporting of near misses, hazards, drills and inspections to ensure that all incidents are accurately reported, recorded and lessons learnt are shared; involves all employees and management in health and safety management through consultation; develops safety awareness throughout the Company via formal and informal training; and minimizes or eliminates hazards within the workplace through risk identification, assessment, control and monitoring.

### 3.6 Environmental Management

SMBL invests in sustainable business practices to achieve long-term prosperity, and is committed to embedding a culture of sustainability and environmental awareness in all functional, operational and regional areas of the business. SMBL strives to undertake all project and office activities in an environmentally responsible manner, and to identify, manage and mitigate any risks that may impact negatively on the environment.

SMBL's Environmental Management System (EMS) provides a systematic and methodical approach to planning, implementing and reviewing SMBL's environmental performance. The objective of the EMS is to avoid (or minimise) environmental impact, while contributing lasting environmental benefits to local communities in which SMBL operates. Effective implementation of the EMS has assisted SMBL in creating a company culture that is focused on incorporating sustainable practices into everyday business decisions.

### 3.7 Company Strategy

**Client Focus**

SMBL is focused on the development of long-term relationship with clients built on collaboration, commitment and integrity. SMBL works with clients to understand their business objectives, drivers, resources and processes to deliver solutions with commercial advantage and sustainable project outcomes. SMBL is responsive to clients' changing needs and utilizes a dedicated Client Relationship Management (CRM) system to drive client-focused initiatives. SMBL's localization model strengthens global capabilities, and provides local experts who deliver cost-effective and tailored services to the meet the needs of a diverse client base.

**People Development**

SMBL will continue to invest in developing the technical capabilities, skills, experience and knowledge required for employees to excel in their roles. This includes increasing the number of Chief Technical Principals across the Company in order to promote innovation and continuous improvement. SMBL fosters a culture of mutual trust and encourages all employees to adopt a partnership approach. SMBL operates under an 'open door' philosophy of continuous disclosure and communication with all employees, clients and shareholders.

**Organic Growth**

Growing the business organically is a key priority for SMBL. This includes expanding and strengthening technical disciplines and developing capabilities to service the entire lifecycle of physical, social and environmental assets.

**Systems and Processes**

SMBL will continue to integrate systems and processes across the Company's global network. This will include an ongoing review of operational requirements to ensure systems and processes provide operational efficiency and improved access to information. SMBL will maintain investment in Information Communications Technology (ICT) to enhance networking across the Company's geographic divisions and provide increased support to employees throughout project delivery.

**Vision & Values**

SMBL's Vision is ‘to deliver outstanding infrastructure services for our clients and communities’. This Vision aligns with the Company’s ethos of ‘Local People. Global Experience.’ and supports SMBL's localization model of developing local people and being responsive to the needs of local clients.

SMBL's Values are:

- Teamwork & Trust
- Diversity & Delivery
- Integrity & Innovation
- Safety & Sustainability

These Values underpin the way SMBL operates, and define the way SMBL works. Employees are encouraged to adopt these values in a meaningful way. This will enable SMBL to continue to grow as a business and strengthen its reputation in the global markets a leading provider of high‐quality consultancy services.

### 3.8 Gender Diversity

SMBL is committed to promoting gender diversity, establishing an inclusive working environment and promoting engineering to women through active industry representation and participation. SMBL promotes a gender diverse workforce by: developing strategies to attract and retain female employees; measuring progress in gender diverse recruitment; encouraging the development of high-potential employees to establish a pipeline of female managers and leaders; and providing training to raise internal awareness of gender diversity and equal employment opportunity in the workplace.

### 3.9 Human Rights

SMBL supports and respects the protection of internationally proclaimed human rights, and ensures the Company is not complicit in human rights abuses through a broad range of policies and frameworks. SMBL works closely with clients to ensure the rights and heritage of indigenous populations are protected. This includes the completion of Indigenous Heritage Assessments and Management Plans as a component of Environmental Impact Assessments.

SMBL encourages active participation, skill development and long‐term employment opportunities for indigenous people wherever possible. SMBL's Child Protection Policy

establishes a zero-tolerance policy in relation to child exploitation and abuse. SMBL complies with national employment legislation and is committed to the elimination of all forms of forced and child labor. SMBL's Code of Conduct ensures that ethical employment and labour practices are implemented across the Company. SMBL is committed to attracting the best talent, and engages in recruitment and selection processes that are based on merit and free from bias.

### 3.10 Management Structure

SMBL is structured to meet the needs of clients and community through professional excellence and innovation. SMBL's management structure also supports the Company's regional and functional organisational matrix.

### 3.11 Audit and Risk Committee

The Audit and Risk Committee assists the Board with financial reporting, managing SMBL's material risks and ensuring that financial information (provided to investors and the Board) is accurate and timely. The Audit and Risk Committee must have at least three members, consist only of Non-Executive Directors, have a majority of independent Directors, and have an independent Chair (who is not the Chair of the Board).

### 3.12 Remuneration and Nominations Committee

The Remuneration and Nominations Committee assists in establishing a Board with an effective composition, diversity and size to adequately perform its responsibilities. The Committee aims to ensure that SMBL secures, motivates and retains highly skilled and diverse senior executives and employees in order to guarantee SMBL's long-term success. The Remuneration and Nominations Committee must have at least three members, consist only of Non-Executive Directors, have a majority of independent Directors, and have an independent Chair.

### 3.13 Executive Committee

The Executive Committee (EC) has primary authority for the management and monitoring of the Company's operations, and the implementation of the Company Strategy subject to policies and procedures approved by the Board of Directors. The EC is comprised of nine senior managers, all of whom have extensive experience in strategic and operational planning in the engineering industry. SMBL's CEO is the Chair of the Committee, and is responsible for all matters not reserved for the Board or individual Directors (generally described as the day-to-day operations and management of the SMBL Group). The EC's terms of reference and authority are approved by the Board.

### 3.14 SMBL in Bangladesh

Steelmark was initially established in 2003 as a part of Uttaran Structural Designers Ltd. and in two years was re-planned in to a separate business unit under the name of Steelmark Buildings Ltd.In Bangladesh, SMBL has had extensive involvement in infrastructure, power, urban, transport RMG sector and social sectors, having completed a whole range of projects. Currently, the company manages a portfolio of nearly 34 projects in the country. These projects are varied in scope, in sector and in magnitude.

structures and bridges), cost estimates, economic analysis, social and environmental assessment, procurement assistance, resettlement assessment and land acquisition and reporting.

### 3.15 Present Market situation

In consultancy and construction market, there are competitors form home and abroad in various sector of work. Maximum of the consultancy firm working on project as per their expertise on specific sector. For example, Mott MacDonald UK based multinational firm works in Water sector, CANARAIL Canada Based firm works in Railway sector, Oriental Consultant Japan based firm works in Transportation sector, DOWHA Engineering, SUNJIN, Korean Engineering Corporation, Korean firms works in Transportation sector. Development Design Consultants Ltd. (DDC), BCL Associates Ltd, DevConsultants Ltd, AQUA, AQUA Consultant PEB Aligns Limited, Steelpac Buildings Limited & Associates Limited, BETS Consultants Ltd etc. Local consulting firms' works in different sector of infrastructure development of Bangladesh.

All these firms work with each other for projects of Bangladesh as a consortium to enhance their strength as consultants. SMBL is working with each & every sector of Infrastructure development exists in Bangladesh along with its local subsidiary, other local and international firms. On the other hand, these consulting firms are competitor of each other for any project. Relationship between consulting firms depend on project opportunities & interest of work.

A consulting firm can win a project by its own capacity as a Sole consultant or can form a group with 2/3 other firms, some cases more than that to secure and serve a project. Consortium forms in terms of the requirement of the project (criteria, size, value, technical issue etc.).

In consultancy market, each and every firm is rival to each other as well partner to each other. This relationship depends on the interest of the project and facility. True challenge for the consultancy firms are the client concept and project requirements.

### 3.16 Critical analysis of the study on SMBL

With its diversified regional network and functional capability across the regions, SMBL has got a strong rapport in the industry. Although operation of SMBL in Bangladesh have to face crucial incidents these days. Some of the situations are as below:

- As the company grows, SMBL's vulnerability to possible project failures or sanctions will increase, thereby placing a growing reliance on risk management and quality control system
- Though lots of projects are there now and many more to come; scarcity of expert people remains. And thereby resourcing remain a major threat for the operation.
- Rate of competition has gone up in an alarming manner than previous years due to unfair means of business practices in some cases.
- Lack of liquid money for running project operation is one of the major hindrances. Clients seem to be reluctant during payment to the consultants.
- With the ever present risk of political unrest, criminal activity, terrorism, and epidemics, the security of SMBL field staff will be of increasing concern, requiring constant diligence.
- Clients are being non-considerate on issues which are beyond control and also unpredictable.
- Lack of know-how of the Client and therefore misusing available resource.
- Delay in project formulation from Government organizations

CHAPTER-4

**Performance Analysis of SMBL in Bangladesh**

## 4.0 Introduction

In order to analyze performance of Steelmark Buildings Limited in Bangladesh, a set of questionnaire has been set up. The questionnaire has been provided to respondents who are related to this business. The analysis of this qualitative research involves aiming to uncover and / or understand the big picture - by using the data to describe the phenomenon and what this means.

## 4.1 Process of analysis

The analysis process is described in below flow diagram:

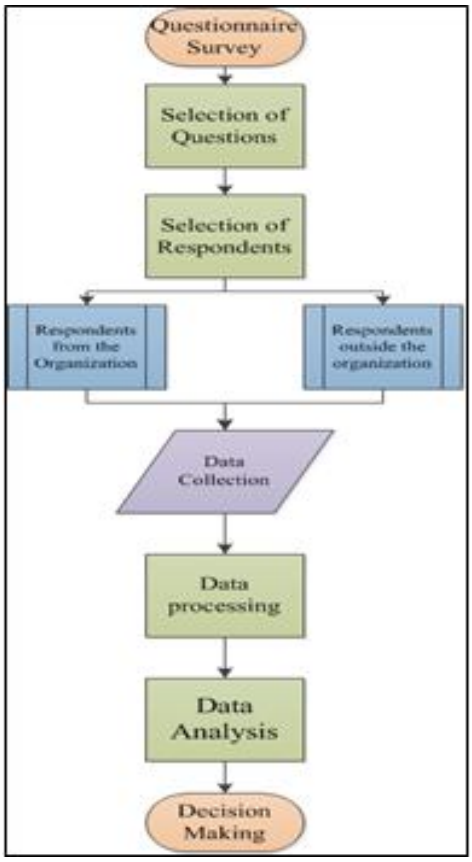



**Figure 3 Process of analysis**

**Data analysis process**

The questions has been set up keeping in mind of the type of responses. Also the respondents are selected who are well aware of the business concerned here. Both from inside and outside of the organization are selected as respondents to these questions. Outside of organization people include respondent from the Client, other consulting firms etc. After receiving the responses from respective respondents, data analysis has been performed.

## 4.2 Data analysis

- **Similarity of business operation between the Clients and SMBL**

50% of the respondents assume that the nature of business operation of SMBL is quite similar with that of the Client in Bangladesh. The percentage is higher to this side because of SMBL's long operational experience in this region.

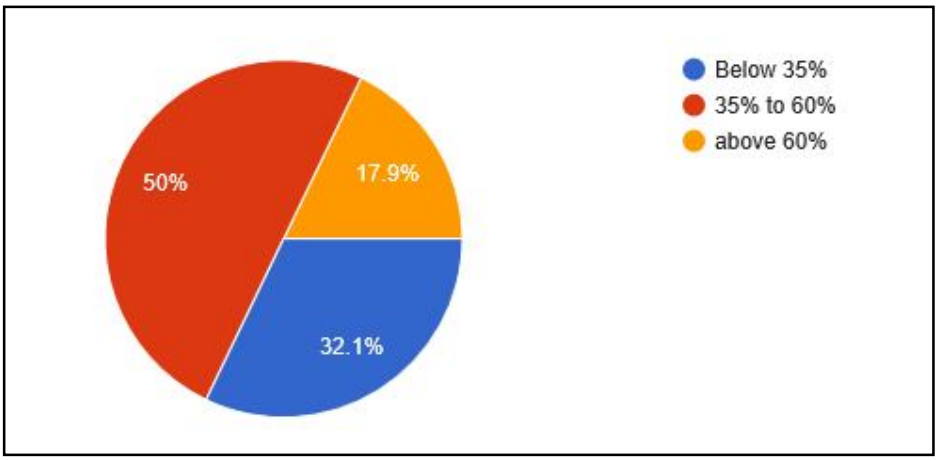



**Figure 4 Similarity of business operation**

- **Technical knowledge of client**

Around 60% of the respondents believe that clients in Bangladesh have average level of technical knowledge while undertaking mega projects. This gives an idea that how important it is to have consultants for highly specialized projects here

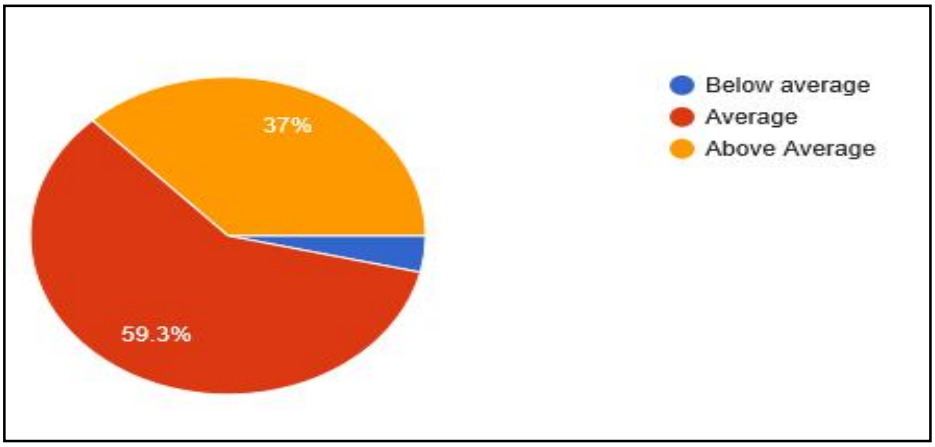



**Figure 5 Level of knowledge of Client**

- **Client's level of satisfaction**

More than 60% of the respondents have their views that 75% of the clients are satisfied with the performance of SMBL compared to other consulting firms. Remaining percentage of respondents believe that client's level of satisfaction is not that high as well.

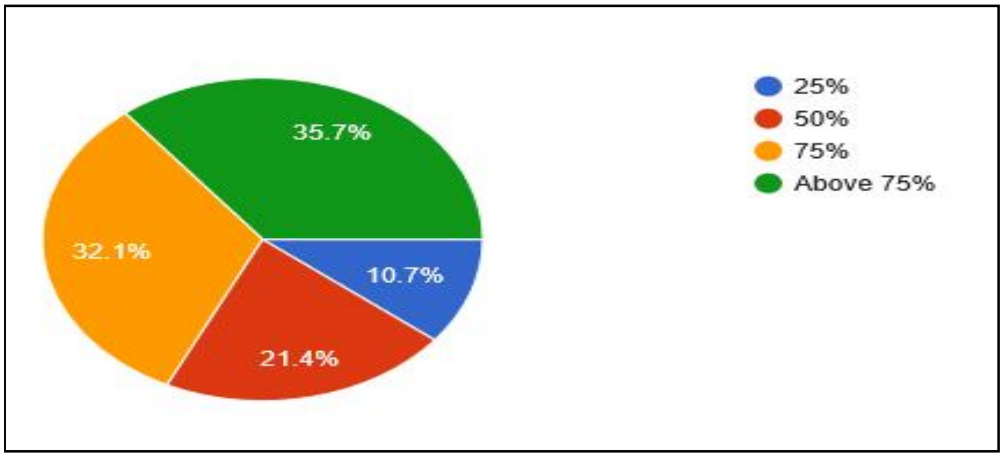



**Figure 7 Client's level of satisfaction**

- **Peoples' perception on consultancy services**

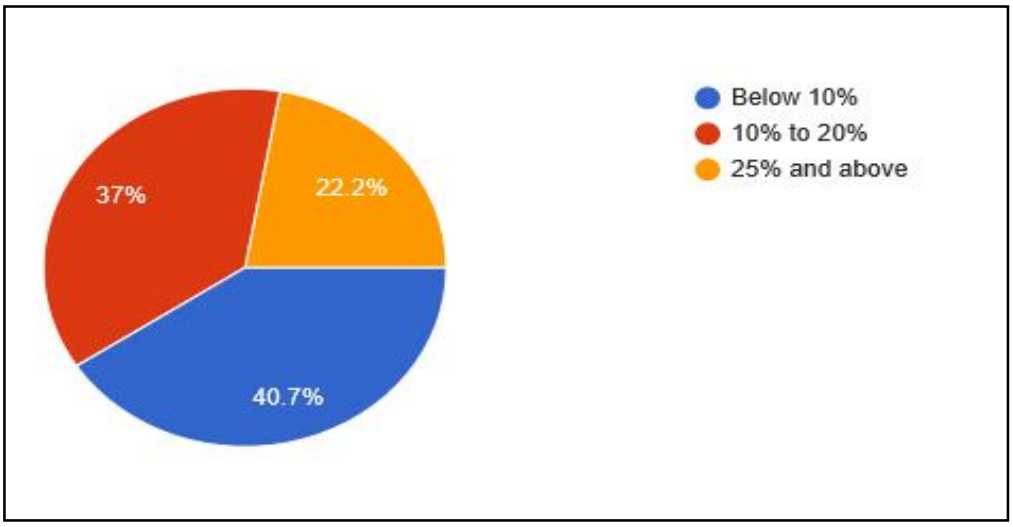



**Figure 6 People's perception on Consultancy and construction Service industry**

It is evident that there is a very low percentage of people who has got very minimum knowledge on this business sector in Bangladesh. This percentage is very high (40.7%) who thinks only 25% people have got the knowledge of Consultancy service in Bangladesh.

- **Major obstacles for project operation**

Of the four indicated obstacles, most of the respondent pointed out delayed process is the main obstacle for operating projects in Bangladesh. Other major obstacles are lack of resources and cash flow.

**Table 3 Factors affecting project operation**

| **Major Factors** | **Percentage** |
|---|---|
| Cash Flow | 39.3% |
| Works beyond contractual obligation | 42.9% |
| Delayed process | 64.3% |
| Lack of resources | 39.3% |
| **Source: Questionnaire Survey** | |

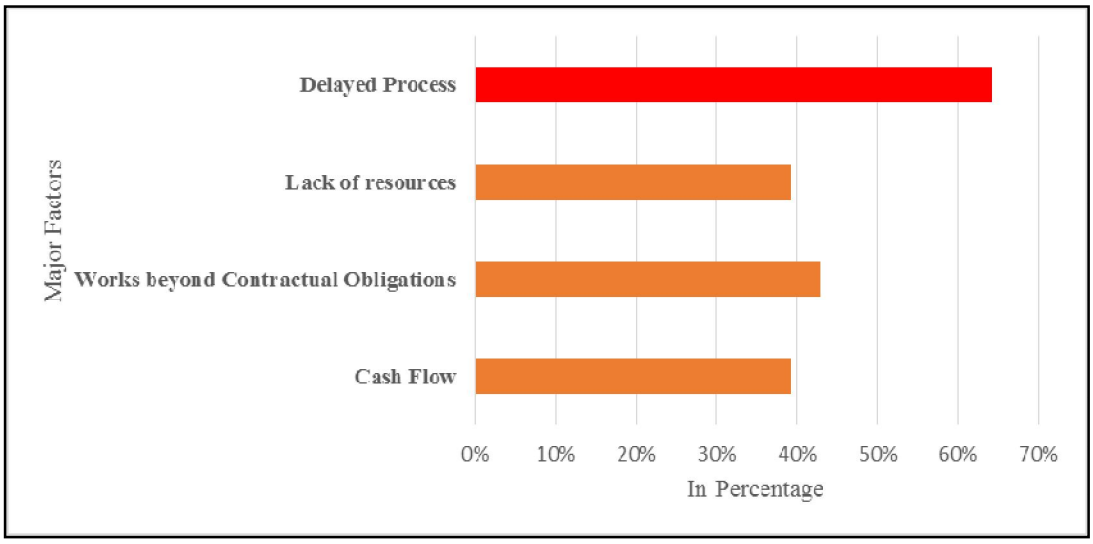



**Figure 8 Major obstacles for project operation**

- **<u>Factors affecting regular project operation</u>**

Approximately 80% of the respondents believe that unfair pressure from the Client side to accomplish the works affect the most for regular operation of projects.

**Table 4 Factors affecting regular project**

| **Factors** | **Percentage** |
|---|---|
| Political unrest | 21.4% |
| Security/Terrorism activities | 14.3% |
| Unfair competition | 46.4% |
| Client's pressure | 89.3% |

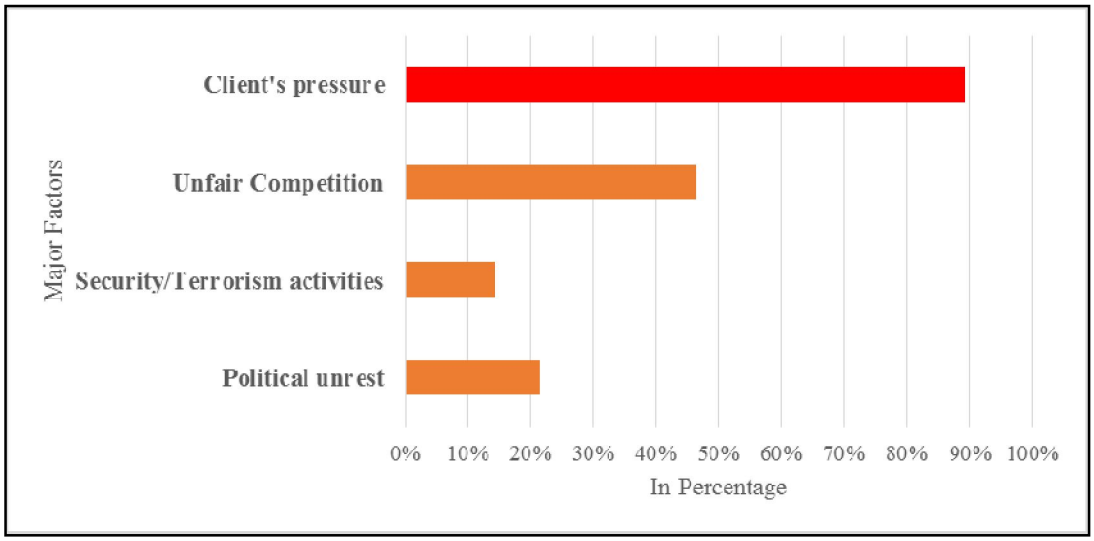



**Figure 9 Factors affecting regular project operation**

- **<u>Factors affecting SMBL to win new project in Bangladesh</u>**

Respondents have identified unfair competition and Client's predefined preferences are two major factors which hinders in winning new project in Bangladesh.

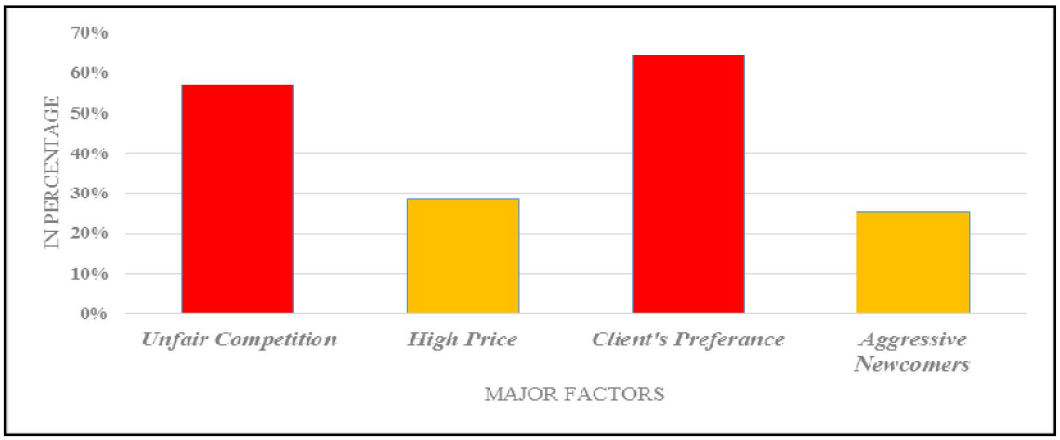



**Figure 10 Major obstacles to win project**

- **<u>Key Strength of SMBL</u>**

Respondents have identified following key strengths of SMBL:

**Table 4 Key Strength of SMBL**

| Strength | In percentage |
|---|---|
| Client Relationship | 23% |
| Regional Experience Network | 27% |
| Project Management Skill | 20% |
| Technical Expertise | 30% |

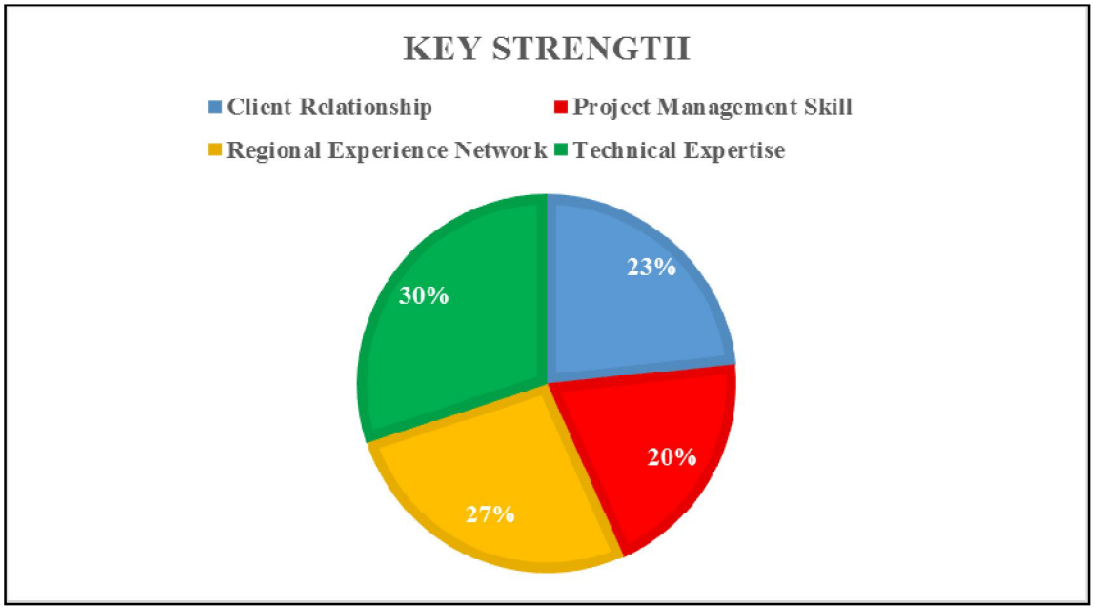



**Figure 11 Key Strength of SMBL**

- **<u>Weaknesses of SMBL</u>**

Major weaknesses according to respondent's responses are illustrated as below:


**Figure 12 Weaknesses of SMBL**

# CHAPTER-5

## Conclusions and Recommendations

### 5.0 Introduction

In Bangladesh, the quality of the infrastructure is central to growth, poverty reduction, and achievement of the Millennium Development Goals. Consultants manage the project by the application of their skill, knowledge and experience. Project Consultancies face so many problems such as managing the team members, problems related to design issues, engineering issues, safety of workers on the site and so on. Awareness of various processes involved in construction work are the integral part of consultancy. Consultant has a wide variety of roles to play in the construction process in terms of Infrastructure development. Infrastructure development consist with study, design & construction of project, which gives benefits to the Customer / Client in terms of satisfaction and it consists of business development, profit, resources utilization, etc. Because of this consultancy plays a multifaceted part in projects, and is usually involved in the project from the project's inception to its completion. It is important to fully understand Consultancy and authority. Every project is different and unique, every project demands the full attention, professionalism and energy of its project team specially consultants, every project depends upon an experienced leader to make it happen. The infrastructure development sector in Bangladesh has grown very fast with the construction of new projects. Due to the rapid expansion in the development sector, the services provided by the Consultancy need to be improved in terms of performance and quality of work to meet the project goals and objective and also the clients' satisfaction.

### 5.1 Limitations of the Study

The study had the following limitations:

- This study seeks change through practical actions at each level of executive responsibility. But the time allotted for the study is not much adequate.
- Due to limited time for the study, only brief comparisons with different years were made.
- Getting Relevant papers and documents were strictly prohibited.
- Non-availability of the most recent statistical data.
- Since the office personals were very busy, they could provide me very little time.
- Confidentiality of the information because of its commercial nature.
- Complexity of the system itself that restrain the capacity of individual to get into it full.