

Report On

**Project Financing of Summit Bibiyana Power Company
Limited**

By

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Student ID: 17104107

An internship report submitted to the BRAC Business School (BBS) in partial fulfillment of the requirements for the degree of Bachelor of Business Administration

Bachelor of Business Administration
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Declaration

It is hereby declared that

1. The internship report submitted is my/our own original work while completing degree at BRAC University.
2. The report does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.
3. The report does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.
4. I/We have acknowledged all main sources of help.

Student's Full Name & Signature:

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Letter of Transmittal

Ahmed Abir Choudhury

Lecturer,
BRAC Business School
BRAC University
66 Mohakhali, Dhaka-1212

Subject: Internship report on “Project Financing of Summit Bibiyana Power Company Limited.”

Dear Sir,

This is my pleasure to display my internship report regarding “Project Financing of Summit Bibiyana Power Company Limited”, which I was appointed by your direction.

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

I trust that the report will meet the desires.

Sincerely yours,

Ramisha Akther Zahan
Student ID: 17104107
BRAC Business School
BRAC University
Date: June 16th, 2022

Non-Disclosure Agreement

This Agreement is made and entered into by and between Summit Bibiyana Power Company Limited and the undersigned student at BRAC University, Ramisha Akther Zahan, ID of 17104107.

Acknowledgement

It was a great experience working on this project. Despite the fact that I encountered numerous challenges while working on this project, I was able to overcome them with the assistance of a few individuals. I want to express my gratitude to them for their direct and indirect assistance.

First and foremost, I want to express my gratitude to God.

I owe my sincere appreciation to our respected faculty member Ahmed Abir Choudhury, Lecturer at BRAC Business School, BRAC University, for providing me with the opportunity to conduct the project, for providing me with excellent guidance, and for unconditionally supporting me while working on this project. I would like to express my gratitude to the personnel at BRAC University's Ayesha Abed Library for assisting us.

I am very grateful to my supervisor – Monir Hossen (FCA) sir, the DGM of Finance and Accounts of Summit Bibiyana Power Company Limited, under whom I completed my internship program and all the employees of SBPCL, for their hearty co-operation in the learning process about Summit Bibiyana Power Company Limited. I want to express my deepest gratitude to all of the personnel for their excellent manners and attitudes toward me during the program.

Lastly, I would like to express my gratitude to Nuhash Rahman, Syed Saad Ul Kabir, Sadab Rahaman Ridam, Mujahid Omeo, and Sara Rahman for their support who assisted me with their thoughts, comments, and opinions while working on this project report. I appreciate their thoughtful ideas and suggestions, which helped improve in preparing this report.

Thank you.

Sincerely

Ramisha Akther Zahan

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Executive Summary

The process of using a non-recourse or limited recourse financial framework to fund or finance any long-term infrastructure, industrial projects, or public services is referred to as "project financing." Summit Group is Bangladesh's largest infrastructure company, with several business segments spanning electricity, shipping, and communications. Its power sector, which include both Turbine and Reciprocating Engine Divisions, have a total installed capacity of 1,941 MW. Project Bibiyana is a 341MW combined-cycle gas-fired power generation facility in Bangladesh's Habiganj district. Summit Bibiyana Power Company (SBPCL), a special purpose corporation established in 2010 under Bangladeshi regulations, conducted this project. Summit Power Limited, the parent business of SBPCL, is in charge of the firm.

One GE 9 FA Gas Turbine Generator, one Heat Recovery Steam Generator, and one Steam Turbine Generator are used to set up this project. The main goal of this project is to construct and operate power plants for energy generation and distribution. IFC, World Bank Group, ADB, and Bangladesh's Department of Environment (DOE) have all accepted environmental and social principles for Project Bibiyana Power Plant.

I have addressed the information I've received from working in a corporate atmosphere in the first section of the report and provided the idea of project financing of Summit Bibiyana Power Company Limited (SBPCL) as a whole along with the analysis of their past five years financial performance after project completion in subsequent sections of the report. This study provides information related to project finance, steps and different elements of the project finance, contracts and agreements, policies, project costs and assumptions present in the financial model of SBPCL, past five years financial performance, risks and challenges associated with project finance.

A small survey is conducted on around 50 people outside the organization and all of the survey results are appropriately examined in the report. Finally, the entire study has been summarized and concluded. Therefore, this report is a study and findings on project finance which would provide individuals from different industries with information related to project finance and get better understanding of the elements associated with it.

Keywords: project finance; SBPCL; agreement; risk management; financial performance;

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List of Acronyms

ADB – Asian Development Bank

BPDB – Bangladesh Power Development Board

COD – Commercial Operation Date

CTA – common terms agreement

CSR – corporate social responsibility

ECA – Export credit agency

EHS – environmental, health, and safety

EPC – engineering, procurement, and construction

ESIA – environmental and social impact assessment

ESAP – Environmental and Social Action Plan

ESMMP – environmental and social management and monitoring plan

FDR – fixed deposit receipt

GEE – GE Energy

GoB – President of The People’s Republic of Bangladesh

IFC – International Finance Corporation

IPP – independent power producer

IDB – Islamic Development Bank

ISO - International Organization for Standardization

IUCN – International Union for Conservation of Nature

JGTDSL Jalalabad Gas Transmission and Distribution System Ltd

LIBOR – London Interbank Offer Rate

LIESC – lender’s independent environmental and social consultant

LLA – Land lease agreement

LNG – liquefied natural gas

NEPC – First Northeast Electric Power Engineering Company

NO_x – nitrogen oxide

OHS – Occupational Health and Safety

OHSAS – Occupational Health and Safety Assessment Series

O&M – operation and maintenance

PAH – Project Affected Household

PGCB – Power Grid Company of Bangladesh

PPA – power purchase agreement

RRP – report and recommendation of the President

SBPCL – Summit Bibiyana II Power Company Limited

SCL – Summit Corporation Limited

SIA – Social Impact Assessment

SO₂ – sulphur dioxide

SPM – suspended particulate matter

SREDA - Sustainable and Renewable Energy Development Authority

tCO₂ – tons of carbon dioxide

WEIGHTS AND MEASURES

BDT – Bangladesh Taka

dB – decibel

GW – gigawatt

GWh – gigawatt-hour

kgoe - Kilogram Oil Equivalent

km – kilometer

kV – kilovolt

Mtoe – Millions of tonnes of oil equivalent

MW – megawatt

MWh – megawatt-hour

USD – United States Dollar

Chapter 1: Overview of Internship

1.1: Student Information: Name, ID, Program and Major/Specialization

I am Ramisha Akther Zahan (Student ID - 17104107). I am from BRAC Business School. Finance and Marketing are my double majors. With the exception of the internship, I began my journey in the Spring 2017 semester and completed all of my undergraduate coursework by the Fall 2021 semester.

1.2: Internship Information

1.2.1: Period, Company Name, Department/Division, Address

My internship journey started from 6th December 2021 in Summit Bibiyana Power Company Limited and ended on 6th March 2022. It was a three-month full-time paid internship program. The corporate office of Summit Bibiyana Power Company Limited (SBPCL) is located at Summit Centre at Kawran Bazar in Dhaka. I had dropped my CV and was invited for an interview by the HR department of the company. They requested a forwarding letter from my institution after a successful interview on December 2nd. BRAC University's OCSAR (Office of Career Service and Alumni Relations) sent a forwarding letter to SBPCL's HR department. On December 6th, I received my internship letter from Summit Bibiyana Power Company Limited's HR department and signed the joining letter.

1.2.2: Internship Company Supervisor's Information: Name and Position

My internship supervisor was Monir Hossen (FCA), the DGM of Finance and Accounts department of Summit Bibiyana Power Company Limited. He is the Deputy General Manager (Finance and Accounts) of Summit Turbine Division- Summit Meghnaghat II Power Company

Limited, Summit Bibiyana Power Company Limited, Summit Meghnaghat Power Company Limited and Summit LNG Terminal Company Private Limited. From the very first day, he guided me, provided vast information related to project finance, shared his work experiences, also provided me with various insight related to management and work culture. Under his supervision, I had the opportunity to know him and learn from him about project finance and ECA Financing. He is an exceptional individual with tremendous expertise in his profession because of his enormous knowledge and attention to his work, as well as his politeness and modest demeanor toward the people in his department and others. People from different departments like and respect him for his vast knowledge and prompt collaboration with every task that comes his way.

1.2.3: Job Scope – Job Description/Duties/Responsibilities

As a finance intern, my duties were very limited. However, under my supervisor's supervision, I was often asked to assist and learn from Md. Faridul Islam, assistant manager (Finance and Accounts) of Summit LNG Terminal Company Private Limited which included maintaining daily petty cash and expenses, those were done by preparing journal, clearing out vouchers collected from Md. Shamim Reza, Manager (Coordination/In Charge of Purchase) of SBPCL and as well as software entry in the server of accounts department. All these works were also checked and double checked by my supervisor before signing on to the reports and documents. My supervisor also shared the invoice of SBPCL for the month of December 2021 and asked me to write a brief report on it. Apart from these, my supervisor used to give key points related to project finance for my report on which I had to brief him at the everyday. I was responsible to sit with him, gathered knowledge as he shared his experiences and reported him briefly about

the daily tasks, he assigned me to do. He also used to share his insights and educate me about how the day-to-day work works, projects and tasks are done, so that I could learn more about Summit Bibiyana Power Company Limited.

1.3: Internship Outcomes

1.3.1: Student's Contribution to The Company

The ability to properly teach a new generation of young people how to complete tasks and achieve goals can create great personal motivation for employees of SBPCL to hold themselves to a higher standard and act as better leaders. This would encourage employees of SBPCL to mentor and educate others in the workplace to boost morale and multiply excellent leadership. Getting ideas and perspectives from people outside the company, team, or day-to-day operations can provide unexpected results. Internship programs that are properly implemented are no exception. As a student, I was not familiar with the company from the inside initially, but later on, with the help of my coworkers, I was provided with new insights on the business, strategy, and ambitions. Sometimes my coworkers had to deal with various stakeholders. I closely observed and learned how they deal with foreign workers, important stakeholders, and any troubled situation with patience. During work and lunch breaks, I used to sit with Rubiya Yesmin (Trainee Assistant Manager, HR & Admin), Md. Rafiqul Islam (Manager, Development), Md. Shamim Reza, Manager (Coordination/In Charge of Purchase) and Md. Rakibul Hasan (Trainee Assistant Manager, Development). They used to share their work experiences within the company, shared how they cope up with any difficulties and guided me

as mentors whenever I faced any difficulty. My supervisor not only assisted me in completing all of my work, but also encouraged me to build great relationships with him and others in the company.

1.3.2: Benefits to the student

As a student who will soon be entering the corporate world, I feel an internship program is a fantastic opportunity to kickstart a professional career. Traditionally, any graduate of BRAC Business School must complete his/her internship program. Hence, I had to search for internship possibilities in several firms to complete this 4-credit requirement. I sent my CV and resume to various organizations. As a result, I discovered the qualities that recruiters seek in a recent graduate or an entry-level employee through this screening procedure. Since joining the company, I've steadily learned the value of establishing corporate culture and how it affects employee performance. I've also learned how to engage with top management with the support of my supervisor and coworkers, how to maintain good connections by being affable, how to be more aware and responsible of gestures and attitude, and how to keep my professional and personal life separate. An internship, it could be stated, can effectively groom a fresh graduate for a successful corporate career.

1.3.3: Recommendations (for and suggestions to the company on future internships)

After working as a finance intern for three months at SBPCL, I have gained essential expertise. As an intern in SBPCL, it was my first corporate experience after my undergraduate program, and I am very satisfied with the workplace environment.

However, I have few short suggestions. SBPCL has a number of referral candidates among the students they hire and even those they don't. When it comes to job search resources, applicants prefer referrals from current or former coworkers over all others. SBPCL can create an easy-to-join employee referral program and provide students with recruiting marketing resources such as social media postings so that they can readily share their work experience with others.

While SBPCL does allow interns to raise questions, discuss their work, learn new ways improve, receive feedback regularly, one-on-one meeting with their supervisor but they could also conduct exit interviews to receive feedback on every intern's experience regarding work and relationship with their peers and hiring manager and company culture as a whole. Interns can use these sessions to advance their careers, provide feedback on ways to improve their internship program, and ensure they are getting the job experience they need.

Chapter 2: Organization Part: Overview, Operations, and a Strategic Audit

2.1: Introduction (Objective, Methodology, Scope, Limitation and Significance – for chapter 2)

2.1.1: Objective

The major focus of this internship report is to convey the knowledge that I have gained from a corporate setting and provide the idea of project financing of Summit Bibiyana Power Company Limited (SBPCL) as a whole along with the analysis of their past five years financial performance after project completion. My internship program, taught me how to function as a

corporate employee, assessed by her surroundings and whose demeanor toward others determines her overall performance relative to her supervisors. Furthermore, analyzing financial performance while being employed by the same company provides an invaluable opportunity to evaluate every detail in the annual reports of SBPCL.

2.1.2: Methodology

The process and method by which data is gathered to create a report are referred to as methodology. I incorporated both primary and secondary data for this section of the study. Most of the information is primary, which refers to data that I discovered personally and physically gathered from SBPCL's accounts department. I gathered yearly records from Maruf Hasan, (Manager, Accounts) of Summit Bibiyana Power Company Limited, for financial performance analysis. I've also used secondary sources. To do the SWOT and PESTEL analysis, I gathered information from the organization's, other stakeholders' official websites, and many articles available on the internet.

2.1.3: Scope

This study can provide valuable information related to project finance and risks associated with it which can prove to be useful for those who are looking forward to working on projects. The report would also provide individuals from different industries with information on project finance to help better mitigate problems associated with their future projects.

2.1.4: Limitations

Regardless of the fact that I learned a lot during my internship at SBPCL, there were few limitations that I encountered. Since my internship occurred during the time of COVID

pandemic, our office was in rotation where two groups of employees take turns inhabiting the physical space. The main idea behind office rotation was to bring fewer individuals together in the workplace, allowing for simpler social distance while also minimizing COVID-19 transmission. But due to this, my work experience in SBPCL was less than 3 months. As a result, I was only able to gain a professional real-world experience for a short period of time. Another limitation is that I was not a permanent employee, and interns were not granted access to Summit Turbine Division's internal software for security reasons. Hence, I missed out on the chance to work on the internal software, Microsoft Dynamics DMV Software, which is adapted to their needs and utilized for accounting. This software is commonly used in all Summit Turbine Division transactions including internal operation details.

2.1.5: Significance

Students interested in conducting internships in infrastructure development enterprises or the power industry will find this report useful. This internship program provided me with significant experience, and all of the in-depth analysis of project financing conducted through primary and secondary research is explained in detail. This project finance report can assist any reader interested in learning more about infrastructure development and the power business. Because I've worked in a corporate atmosphere, therefore I'm more likely to act competently in any working environment in the coming days. Finally, because my undergraduate degree at my university requires a four-credit internship, this report fulfills an academic prerequisite for me to complete my degree.

2.2: Overview of the Company

2.2.1: Overview of Power Industry of Bangladesh

Bangladesh is classified as a country with middle-income and growth rate of its GDP is among the highest in the world. Development is required for any country's GDP to continue to increase. Energy is the key driver of the country's development. Energy efficiency is critical for meeting the country's expanding energy consumption and moving from a middle-income to a developed country. Energy is critical to accomplishing Vision 2021, Vision 2041, and the Sustainable Development Goals. (Energy Scenario Bangladesh 2020-21, 2021) Total energy usage of Bangladesh is estimated to be around 56.92 Mtoe. According to HCU Data Bank reports, the average annual growth in energy usage is nearly 6%. The reports also informs that Bangladesh has a per capita energy consumption of 335 kgoe and a per capita electricity generation of 560 kWh, with a 99.5 percent access to power, which is lower than neighboring South Asian countries. The HCU Data Bank further adds that in June 2021, overall power generation capacity in the public and private sectors was around 25,235 MW, with 20% capacity set aside for maintenance and forced outages. As per report, without fuel constraints, usable generation capacity should be around 20,188 MW. Also, the allocation of overall generation capacity is 46 percent for public sector and 49 percent for private sector companies, with imports accounting for 5%.

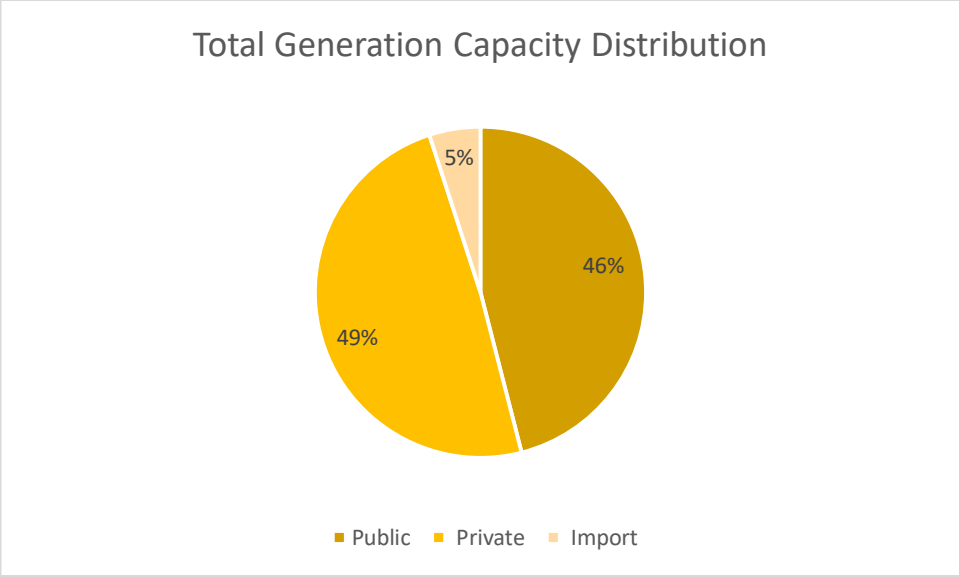


Figure 1: Total Generation Capacity Distribution

Types	Amount
Electricity Growth (%)	8.27
Number of Power Plants	146
Installed Capacity (MW)	25,235
Maximum Generation (MW)	13,792
Total Consumers (in Millions)	40.7
Transmission Lines (km)	12,836
Distribution Lines (km)	612,000
Grid Substation Capacity (MVA)	50,359
Per Capita Generation including Captive (Kwh)	560
Access to Electricity including Off-Grid Renewable (%)	99.5
Overall System Loss (%)	11.11

Figure 2: Bangladesh’s Power Sector: At a Glance (2020-21)

[Source: Power Division Annual Report 2020-21, BPDB Annual Report 2020-21]

Power Production Capacity (Technology wise)	Installed Capacity (MW)	%
Gas Turbine	1211	5%
Reciprocating Engine	8100	37%
Steam Turbine	3268	15%
Combined Cycle	7933	36%
Hydropower	230	1%
Solar	129	1%
Electricity Import	1160	5%
Total	22031	100%

Figure 3: Power Production Capacity (Technology wise) in MW 2020-21

[Source: Power Division Annual Report 2020-21]

According to International Trade Information (ITA), electrical generation capacity has increased from around 5 GW in 2009 to 25 GW in 2021, and approximately 95 percent of Bangladesh's population has access to electricity. Quality and reliability of electricity are still serious concerns which needs to be improved with the availability and dependability of power and energy in general, while retaining affordability, is essential to Bangladesh's continuing economic progress. The fuel mix of Bangladesh's power plants is dominated by natural gas and as native natural gas resources diminish, Bangladesh's government aims to increase its use of imported liquified natural gas. In addition, Bangladesh completed a large-scale Solar Home System (SHS) project, deploying 5.8 million SHSs around the country. Home solar is expected to generate 327 megawatts in Bangladesh by 2020, according to SREDA.

According to International Trade Information, a significant rise in the power generation capacity was achieved over the last decade in spite of weak transmission and distribution infrastructure, poor thermal efficiency in a many of older power plants, and a mismatch between the fuel mix

available and the types of energy required by existing plants (*Bangladesh - Power and Energy*, 2021). Private power plants account for around half of the total installed capacity.

2.2.2: Overview of Summit Bibiyana Power Company Limited

Summit Bibiyana Power Company Limited (SBPCL) was established in Bangladesh as a Public Limited Company limited by shares under the Companies Act 1994 on December 21, 2010, with its registered office at Summit Centre, 18 Kawran Bazar, Dhaka 1215. Summit Power Limited, the parent company, controls the operation of SBPCL. Bibiyana Project is a 341MW greenfield gas-based combined cycle power project in Bangladesh's Habiganj district. SBPCL, a special purpose corporation established in 2010 under Bangladeshi legislation, carried out this project. The project's commercial operation began on June 6, 2015, with the company reaching its Simple Cycle Commercial Operation Date on June 6, 2015, and its Combined Cycle Operation Date on December 28, 2015.

This project Bibiyana comprises of

- One GE 9 FA Gas Turbine Generator,
- One Heat Recovery Steam Generator
- One Steam Turbine Generator

The Bibiyana Power Plant project complies with all environmental and social requirements established by the IFC, World Bank Group, ADB, and Bangladesh's Department of Environment (DOE).

2.3: Management Practices

2.3.1: Strategic Approach and Objectives of Summit Bibiyana Power Company Limited

Bangladesh is the company's main market, and SBPCL anticipates that it will show continuous growth in the future. SBPCL plans to serve the people of Bangladesh with sheer diligence using the best of their abilities, as they have for the previous two decades, by increasing their power generation portfolio throughout the country and delivering dependable, safe, and competitive electricity to the expanding power grid. Summit Power Limited has a rich pipeline of new project opportunities, including SBPCL, comprising more than 3 GW. Summit Power Limited intends to continue to expand its pipeline, with the expectation of securing and completing a reasonable number of these opportunities, based on their track record.

Their goal is to improve the quality and safety of their plant operations on a constant basis, evaluating themselves against the top IPPs both regionally and globally, and optimizing the technical, commercial, and financial elements of their operations. SBPCL strives towards high environmental, social, and governance standards, comparing themselves to national rules and multilateral organizations' criteria.

Beyond Bangladesh, Summit Power Limited is carefully expanding into neighboring countries such as India, Sri Lanka, Nepal, Malaysia, and Vietnam, leveraging their experience in the power business and the expertise of their partners. They plan to participate in government bids or private sales in these nations in order to replicate Bangladesh's growth strategy. They will look for chances in renewable energy and battery storage, putting themselves in a good position to thrive in the new energy economy.

2.3.2: Nature of business of SBPCL

The main activity of SBPCL is to build and operation of power plants for the generation and distribution of electricity. As per Bangladesh's Private Sector Power Generation Policy, the Company built a natural gas-based power plant with a capacity of 341 MW in Habigonj, Sylhet, on a Build-Own-Operate basis. On June 6, 2015, the company completed its Simple Cycle Operation (SCO), and on December 28, 2015, it completed its Commercial Operation Date (COD). The company sells the electricity it generates to the Bangladesh Power Development Board (BPDB).

2.3.3: Management structure of SBPCL

SBPCL has a simple management system that facilitates their operations. Summit Bibiyana Power Company Limited was founded and is led by Mr. Muhammed Aziz Khan. If we talk about the management, Summit Bibiyana Power Company Limited has a Deputy Managing Director, a Finance Director, one COO, one CTO and S. M. Noor Uddin as both CEO and Managing Director. Aside from that, there are managers and employees that report to them for each department to keep the system more accurate.

Turbine Division: SBPCL Organogram

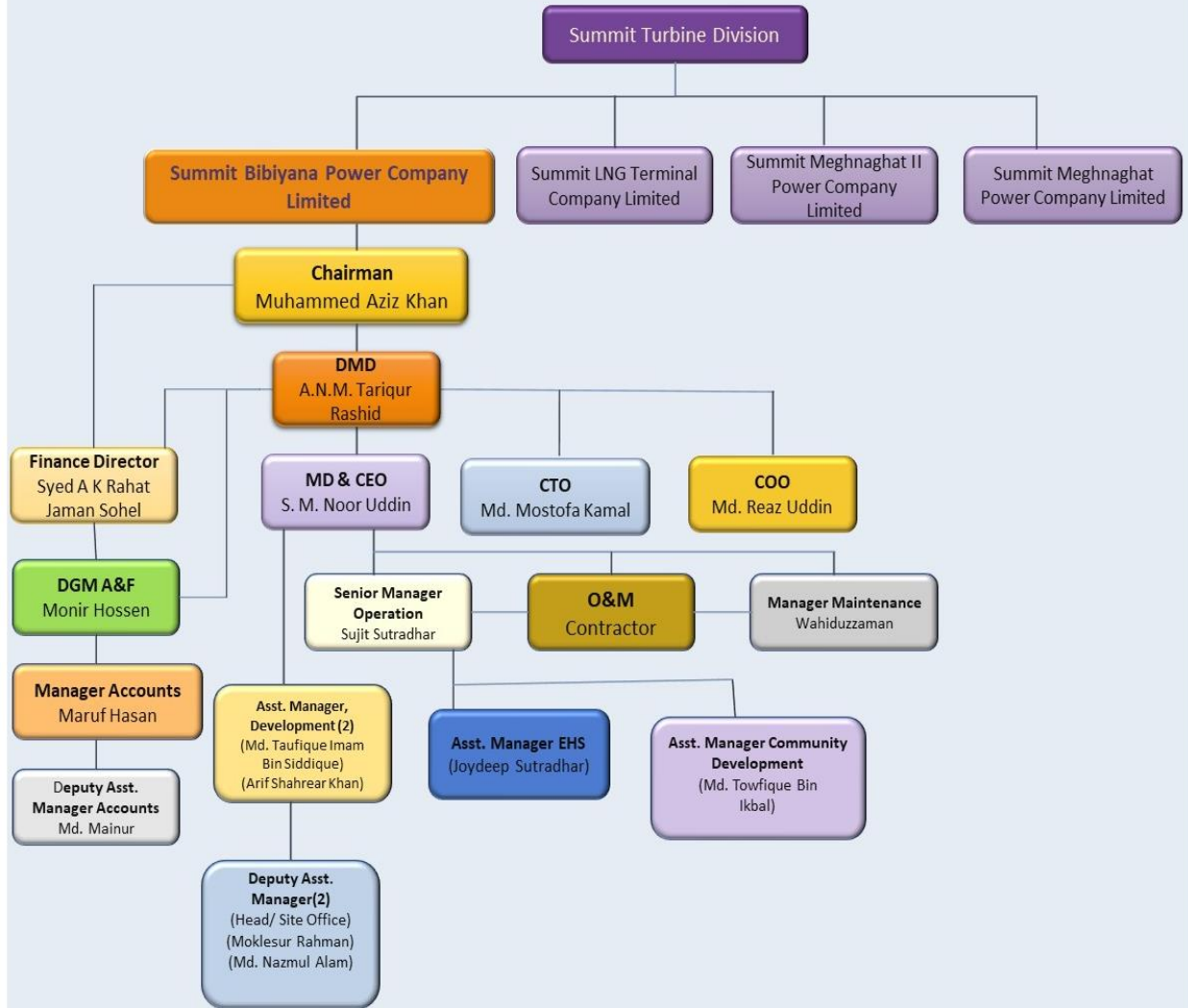


Figure 4: SBPCL Organogram

2.4: Financial Performance

2.4.1: Financial Performance of Summit Bibiyana Power Company Limited at a Glance

Particulars	30-Jun-20	30-Jun-19	30-Jun-18	30-Jun-17	30-Jun-16
Operating Data (Taka)					
Revenue	6,154,299,540	5,083,584,522	5,094,901,490	4,563,210,787	3,289,447,493
Cost of Sales	3,974,364,801	2,999,271,788	3,015,577,572	2,781,171,536	2,062,391,432
Gross Profit	2,179,934,739	2,084,312,734	2,079,323,918	1,782,039,251	1,227,056,061
General and administrative expenses	94,008,623	93,186,846	82,957,509	127,285,074	108,770,489
Operating profit	2,086,025,909	1,991,741,888	1,996,366,409	1,654,754,177	1,118,285,572
Interest & Financial Charges	1,031,200,682	1,133,123,922	1,007,248,262	880,416,618	414,564,448
Profit for the year	1,090,282,435	760,195,770	432,330,993	376,568,834	762,441,883
Balance Sheet Data (Taka)					
Paid up Capital	7,373,982,241	7,304,416,371	7,217,459,033	6,956,587,020	6,956,587,020
Shareholder's Equity	8,595,631,223	8,077,355,908	7,781,335,100	8,628,472,281	7,788,319,677
Non-current Liabilities	13,805,335,210	13,816,640,883	14,699,817,320	15,130,056,105	13,115,482,043
Current Assets	3,928,225,952	3,019,128,024	2,995,561,333	3,886,676,055	1,387,385,660
Current Liabilities	2,853,559,850	1,853,383,792	1,804,297,214	1,733,789,321	2,375,418,090
Total Assets	23,640,922,104	23,285,823,643	24,024,875,381	24,997,384,605	23,247,524,678
Total Liabilities	16,658,895,060	15,670,024,675	16,504,114,534	16,863,845,426	15,490,900,133
Financial Ratios	FY 2016 Year 1	FY 2017 Year 2	FY 2018 Year 3	FY 2019 Year 4	FY 2020 Year 5
Liquidity					
Current Ratio	1.26	2.23	1.66	1.63	1.38
Quick Ratio	1.24	2.23	1.66	1.63	1.38
Asset Management					
Fixed Assets Turnover	0.16	0.22	0.23	0.24	0.31
Total Assets Turnover	0.15	0.19	0.20	0.21	0.26

Source: Summit Bibiyana Power Company Limited Annual Report (2016-2020)

Debt Management					
Total Debt to Total Asset	59.60%	59.34%	61.19%	59.33%	58.40%
Solvency Ratio	35.32%	33.82%	31.30%	32.71%	29.53%
Times Interest Earned	2.74	1.91	1.98	1.79	2.07
Profitability					
Gross Profit Margin	65.15%	71.69%	67.96%	69.59%	59.77%
Net Profit Margin	23.18%	18.41%	8.45%	14.95%	17.71%
Return on Total Assets	5.07%	6.41%	8.31%	8.55%	8.83%
Return on Common Equity	9.79%	9.74%	5.73%	9.98%	15.62%
Net Debt/EBITDA	10.98	7.76	10.97	7.79	5.61
Loan Life Coverage Ratio (LLCR)	1.47	1.17	1.14	0.93	0.73
DSCR	4.03	1.79	2.69	2.08	2.16
Other data					
EBITDA(Taka)	1,522,308,351	2,377,996,113	2,724,845,603	2,755,665,741	2,875,238,891
Depreciation (Taka)	404,022,779	742,813,798	728,474,345	763,923,853	788,870,995
EPS (USD)	1.10	1.21	0.60	1.04	1.48

Figure 5: Financial Performance of Summit Bibiyana Power Company Limited at a Glance

Source: Summit Bibiyana Power Company Limited Annual Report (2016-2020)

Fuel Price (USD, per GJ)	2016	2017	2018	2019	2020
Gas	1.10	1.10	1.10	1.10	1.57
Heat Rate (Payment)					
Combined Cycle (Gas)	7,614.0	7,614.0	7,614.0	7,614.0	7,614.0
Heat Rate (Cost)					
Combined Cycle (Gas)	7,420.0	7,420.0	7,420.0	7,420.0	7,420.0
Annual Fired Hours	6421	7469	7392	7776	7776
Energy Generation					
Energy Generation for Fuel Payment by BPDB			18,152,298	17,327,775	18,465,321
Energy Generation for Fuel Cost Incurred by SBPCL			17,893,646	17,105,761	18,255,257
Fuel Payment by BPDB (USD)			20,226,412	18,853,461	29,907,070
Fuel Cost Incurred by SBPCL (USD)			19,665,677	18,401,689	29,202,467

Figure 6: Fuel Payment & Cost of SBPCL

Source: Summit Bibiyana Power Company Limited Annual Report (2016-2020)

2.4.2: Financial Performance Analysis





Figure 7: Five Years Trend Graphs of SBPCL on Financial Performance

Despite the COVID-19 pandemic condition in Bangladesh, SBPCL has maintained its operational efficiency and financial performance over the years via strategic planning and timely initiatives. Over the years, the company has managed to boost its total profitability and profits growth while maintaining a consistent cash dividend declaration.

Revenue

In 2019-20, consolidated revenue of SBPCL rose by 21.1 percent compared to the previous year. The rise in income was made possible by BPDB's increased demand for power generation.

Cost of Sales

In 2019-20, the consolidated cost of sales has risen by 32.5 percent compared to the previous year. The rise in cost of sales of SBPCL is mostly attributable to increased gas usage as a result of increased power output. However, the expenses of gas consumption are totally passed through to revenue income and have no bottom-line influence on financial performance.

Gross Profit Margin

The consolidated gross profit margin of SBPCL improved by 4.6 percent in 2019-20 compared to the previous year. This increase in gross profit revenue is due to increased variable revenue net of variable expenses and strict control over other operational costs.

Net Profit Margin

Over the 2019-20 fiscal year, the consolidated net profit margin of SBPCL compared to previous year increased by 43.4 percent. The improved net profit margin is due to effective control of costs and contribution of increased revenue.

Total Assets

SBPCL's total assets in comparison to previous year have risen by 1.5 percent throughout the 2019-20 fiscal year. The rise in total asset value has been primarily due to an increase in trade receivables, an increase in gas supplier advances, an improved cash position via FDRs, and IFRS-based straight line revenue recognition within PPA contractual terms.

Total Liabilities

The value of total liabilities of SBPCL has also increased by 6.3% over the 2019-20 fiscal year compared to previous year. The rise in SBPCL's total liabilities has mostly resulted from an increase in trade payables for gas supply as well as operations and maintenance fees payable.

Equity Attributable to Owners of the Company

During the 2019-20 fiscal year, shareholders' equity increased by 6.4 percent compared to previous year. The rise was mostly attributable to the inclusion of retained earnings of current year financial performance and an increase in the fair value of the LIBOR-based SWAP instrument which resulted in increase in shareholder's equity of SBPCL.

Operating Profit

In 2019-20, the consolidated operating profit of SBPCL compared to previous year improved by 4.7 percent, owing mostly to higher variable revenue net of variable costs and strict control over other operating costs.

Earnings Per Share (EPS)

Over the 2019-20 fiscal year, EPS of SBPCL has declined by 9.2 percent per share in comparison to previous year.

Property, Plant and Equipment

Property, plant, and equipment of SBPCL declined by 3.5 percent during the 2019-20 fiscal year in comparison to previous year. This decrease is due to a few additional purchases in plant and machinery in the form of spare parts, which were offset by routine monthly depreciation charges on assets.

Current Assets

Current assets of SBPCL increased by 30.1 percent in the 2019-20 fiscal year compared to the previous year, owing to a growth in trade receivables, an increase in advances paid to gas suppliers, and an improved cash position in the form of FDRs.

Long Term Liabilities

SBPCL's long-term liabilities have dropped by 0.1% over the 2019-20 fiscal year due to payments of quarterly installments on a long-term foreign currency loan, annual installments on redeemable preference shares, and favorable reserve liabilities on a LIBOR-based SWAP instrument.

Return on Total Assets

SBPCL's return on total assets is 5.07 percent in 2020 compared to 6.41 percent in 2019. The ratio has dropped due to the larger asset base (for the reasons stated above), allowing the consolidated profitability to remain consistent over the years.

Return on Equity

•SBPCL's return on equity for 2020 is 9.79 percent compared to 9.74 percent in 2019. Because of consistent profitability throughout the years, the ratio has become nearly steady.

2.4.3: Horizontal Analysis

Particulars	FY 2020 Change [20 vs 19]	FY 2019 Change [19 vs 18]	FY 2018 Change [18 vs 17]	FY 2017 Change [17 vs 16]
FINANCIAL PERFORMANCE				
Revenue	21.1%	-0.2%	11.7%	38.7%
Cost of Sales	32.5%	-0.5%	8.4%	34.9%
Gross Profit	4.6%	0.2%	16.7%	45.2%
EBITDA(Taka)	-36.0%	-12.7%	-1.1%	-4.2%
Operating profit	4.7%	-0.2%	20.6%	48.0%
EPS (USD)	-9.2%	102.4%	-42.7%	-29.6%
Profit for the year	43.4%	75.8%	14.8%	-50.6%
FINANCIAL POSITION				
Paid up Capital	1.0%	1.2%	3.7%	0.0%
Shareholder's Equity	6.4%	3.8%	-9.8%	10.8%
Non-current Liabilities	-0.1%	-6.0%	-2.8%	15.4%
Current Assets	30.1%	0.8%	-22.9%	180.1%
Total non-current assets	-2.7%	-3.6%	-0.4%	-3.4%
Property, plant, and equipment	-3.5%	-3.6%	-0.4%	-3.4%
Current Liabilities	54.0%	2.7%	4.1%	-27.0%
Total Assets	1.5%	-3.1%	-3.9%	7.5%
Total Liabilities	6.3%	-5.1%	-2.1%	8.9%

Figure 8: Horizontal Analysis

2.4.4: Vertical Analysis

Particulars	FY 2020	FY 2019	FY 2018	FY 2017	FY 2016
FINANCIAL PERFORMANCE					
Revenue	100.00%	100.00%	100.00%	100.00%	100.00%
Cost of Sales	64.58%	59.00%	59.19%	60.95%	62.70%

Gross Profit	35.42%	41.00%	40.81%	39.05%	37.30%
EBITDA(Taka)	24.74%	46.78%	53.48%	60.39%	87.41%
Operating profit	33.90%	39.18%	39.18%	36.26%	34.00%
Profit for the year	17.72%	14.95%	8.49%	8.25%	23.18%
FINANCIAL POSITION					
Paid up Capital	31.19%	31.37%	30.04%	27.83%	29.92%
Shareholder's Equity	36.36%	34.69%	32.39%	34.52%	33.50%
Non-current Liabilities	58.40%	59.33%	61.19%	60.53%	56.42%
Current Assets	16.62%	12.97%	12.47%	15.55%	5.97%
Total non-current assets	83.38%	87.03%	87.53%	84.45%	94.03%
Property, plant and equipment	82.68%	86.97%	87.49%	84.44%	94.03%
Current Liabilities	12.07%	7.96%	7.51%	6.94%	10.22%
Total Assets	100.00%	100.00%	100.00%	100.00%	100.00%
Total Liabilities	70.47%	67.29%	68.70%	67.46%	66.63%

Figure 9: Vertical Analysis

2.5: Industry and Competitive Analysis

2.5.1: SWOT Analysis of Summit Bibiyana Power Company Limited

Strengths:

1. Low Labor Cost

In any project, labor costs are a major consideration. SBPCL's planned plant's labor cost can be viewed as a strength because they can obtain it at a lower cost in Bangladesh than in any other country.

2. New transmission lines and refurbishment of existing transmission lines

Construction of new transmission lines, as well as maintenance and capacity expansion of existing power grids, are critical for ensuring smooth power transmission from plants like Bibiyana power plant to the rest of the country. As a result, a plan was developed by the

government to build approximately 10,000 circuit kilometers of transmission lines by 2021(Aman, 2014). Along with increased generation capacity, the capacity of transmission lines and grid stations are increased through ongoing and planned projects to ensure that the generated electricity is transferred to consumers on time and without interruption.

3. Selling Assurance

Any production-oriented project's ultimate purpose is to generate revenue through product sales. There is already significant demand for power in the market, and the government is prepared to purchase power to meet this demand. As a result, there is no need for SBPCL to be concerned about the certainty of selling their electricity.

Weakness:

1. Decreasing availability of Natural Gas

Bangladesh's main abundance of natural resources is natural gas. However, the natural gas supply is depleting by the day. Despite government's efforts to lease gas reserves to foreign investors, the overall supply of fossil fuels, coal and natural gas to the national grid is still insufficient to meet the needs of prospective gas-based power projects.

2. Absence of Substitute Products

There are no byproducts in this proposed plant, hence power is the only product. Other than byproduct, it is tough to generate more profit from only selling power.

3. Lack of Skilled Manpower

For private investors, the power business is still a relatively new and growing sector. The majority of the time, investors must rely on hiring expensive foreign expertise. As a result, the project's shortcoming is often a shortage of skilled manpower.

Opportunities:

1. Incentives from the Government

To encourage investment in power plants, the government has offered tax breaks and incentives for overseas investment and foreign investors. For a period of 15 years, investors are immune from corporate income tax, according to the announcement. They are also permitted to import, without paying customs duties to equipment and machinery, as well as their spare parts for a period of 12 years of commercial operation, up to a maximum of 10% of the total machinery and equipment's initial worth. For overseas investors, the Bangladesh government has proposed tax breaks on royalties, technical know-how, and technical assistance costs. International investors are also exempted from paying taxes on loan interest taken out in another country. They also get a tax break on capital gains from the investing company's share transfers.

2. Demand for Power

SBPCL's biggest opportunity in the power industry is the country's strong need for electricity. As businesses become more automated and the country becomes more industrialized, the need for power rises at the same time. Demand is also rising as the country's living standards improve, agricultural production rises, existing industries flourish, and the country as a whole develops. As a result, the government is attempting to enhance electricity generation to order to provide adequate supply to the population.

Threats:

1. Influence of politics in the industry

The power business faces a challenge from political interference. Political influences can be found in Bangladesh's tender bidding procedure (Aman, 2014), as well as the Concern

Company's selection process. Donor agencies tend to withdraw their support for specific projects owing to political pressure. Because of this political influence, donors may revoke their contributions and funding even in the final phases of the selection.

2. Competitors' potential to seize market

Considering power is such a valuable business segment, numerous competitors tend to enter the market. As a result, given this rivalry, it may be tough to remain in the market with an expanding profit graph for an extended period of time.

2.5.2: PESTLE Analysis of Summit Bibiyana Power Company Limited

SBPCL assesses the macro (external) forces it faces on a regular basis and plans activities accordingly.

Political Analysis

SBPCL believes that guaranteeing power and energy security entails a constant expansion in power generating capacity, modernization of the country's agricultural process, and the establishment of an energy mix that will reduce reliance on a single source.

Economic Analysis

SBPCL acknowledges that the installation of the megaprojects like project Bibiyana necessitates increased power consumption. SBPCL also recognizes that as a growing market participant in this sector, Bangladesh's shift from Least Developed Country (LDC) to Developing Country provides a chance for increased power consumption.

Social Analysis

During the pandemic, growing reliance on Ecommerce resulted in higher power requirements and social isolation, driving individuals to rely more on digital entertainment (OTT Platform).

Due to a lack of gas supply in households, electricity-based cooking systems were more used, resulting in increased demand for power.

Furthermore, power plants demand more educated staff than labor, therefore power plant occupations are traditionally seen as more desirable professions.

Technological Analysis

SBPCL recognizes that rising digital technology application necessitates higher power consumption. The viral pandemic has expanded the usage of long-distance communication technologies, as well as the reliance on online services/servers, which demands continuous power supplies.

Environmental Analysis

Increased energy consumption as a substitute for gas, charcoal, firewood, chips, pellets, sheets, and sawdust aids in environmental conservation. SBPCL intends to encourage electric and hybrid vehicles to reduce carbon emissions and fossil fuel use, leading to increased demand for renewable energy sources as it prioritizes ecologically sound activities.

Legal Analysis

Because of its size and nature, SBPCL is obligated to follow all laws and regulations while being closely monitored. Even though, SBPCL is exempt from paying taxes initially. However, SBPCL eventually needs to provide the government with excellent National Exchequers.

Power companies, such as SBPCL, recruit highly qualified individuals. As a result, SBPCL will need to provide a decent working environment and policies for them.

2.6: Summary

To encapsulate, it can be remarked that Summit Bibiyana Power Company Limited is indeed a true patron to the power generation and distribution of electricity to our middle-income country. Being a natural gas-based power plant with sufficiency of 341 MW which is located in Habiganj, Sylhet, it is comparatively more conservative in the terms of environmental effects. Means it's greener. The management system of the company is quite intelligible. Their management system produces employees' day to day operations much more efficient by the leadership of Mr. Muhammad Aziz Khan the chairman and the founder of the company. Its reports show straight up improvement and development of the company where their revenue increased well by 21.1% over 2019-20 year. It also managed to increase its assets, liabilities, operating profits, EPS, ROE, gross profit margin, net profit margin etc. which clearly indicates that it is a very profitable company which is actively working to fulfill the country's power needs.

Chapter 3: Project Financing of Summit Bibiyana Power Company Limited

3.1: Introduction

3.1.1: Background Information

Company Name: Summit Bibiyana Power Company Limited

Project Name: Bibiyana 341 MW Power Plant on Build, Own & Operate (BOO) basis

Type: Combined Cycle Gas Turbine

Project Bibiyana is a greenfield 341MW gas-based combined cycle power plant project located at Bibiyana in Habiganj district, Bangladesh. Bibiyana Project's principal activity was to set up and operate the power plant to generate and supply of electricity by selling the generated electricity to BPDB. The Project was awarded on a build, own, and operate basis in 2010 by BPDB, Bangladesh's main state-owned power utility, to a consortium consisting of Summit Industrial and Mercantile Corporation Ltd. (SIMCL) and GE Energy LLC (GE), which was selected as the winning bidder through an international competitive bidding process. BPDB will purchase power from the Project under a 22-year Power Purchase Agreement (PPA).

3.1.2: Objectives

The main objective of this report is to express the learning I have received from working in a corporate setting and to offer an overview of project financing of Summit Bibiyana Power Company Limited (SBPCL) as a whole. Every study needs several purposes. The following objectives will be taken into consideration when preparing this report. These objectives are, but are not limited to:

- Define project finance
- Identify the steps and different elements of the project finance of SBPCL
- Figure out the contracts and agreements related to project financing of SBPCL
- Identify policies of SBPCL
- List the project assumptions present in the financial model of SBPCL
- List the project costs present in the financial model of SBPCL

- Identify risks and challenges associated with project finance
- Assess environmental, health, safety & social (EHS&S) compliance

3.1.2.1: What is Project Finance?

The use of a non-recourse or limited recourse financial framework to support by funding or financing any long-term infrastructure projects, industrial plants, public infrastructure and welfare programs is referred to as “project financing”.

History of Project Finance

Although project finance practices are employed in many sectors at present, such techniques were practiced by ancient Greece and Rome in the form of financing for naval operations and development of infrastructure (Dewar, 2019). Loans were granted to merchants with the expectation that they would be returned via the sale of shipped commodities, allowing shipping merchants to mitigate the risks inherent in maritime trading. In other words, the project's domestically generated cash flows would be used to repay the loan. In the form of public-private partnerships, the Roman concession framework can be directly traced in project finance in Civil Law countries across continental Europe.

Dewar in his article reports that when the 1978 Public Utility Regulatory Policy Act was enacted, project financing gained popularity in the Anglo-American region in the mid-20th century, when it was utilized to fund mining and rail industries. In the 1980s, commercial banks largely utilized it to fund the building of power plants and natural gas projects in North America and Europe. Growing markets in the Middle East, Latin America, and Asia enhanced project finance techniques introduced in the 1980s. In the 1980s and 1990s, most of the project sponsors and financiers were based in New York, London, and Tokyo (Dewar, 2019).

Commercial banks around the world dominated the project finance lending industry before the financial crisis; nevertheless, there has been a scarcity of liquidity from these institutions in recent years. Dewar further mentions in his article that the application of the Basel III framework, which entails commercial banks to allocate a bigger percentage of their liquidity to long-term commercial debt financing, has exacerbated the problem. As a result, many sponsors have had to hunt for alternative sources of funding, and we've seen a wave of new project finance players emerge in recent years, including Asian commercial banks and commercial banks from the Middle East and Latin America. This led to increasing roles for ECAs and DFIs.

Involvement of ECA financing in Project Finance

Due to commercial banks' funding constraints, ECA direct financing has become a more prominent aspect of greenfield infrastructure financing in emerging nations. The Islamic finance market, as well as the bond markets (for larger projects), have contributed funds. Several institutions such as Japanese commercial banks that are participating to cover the budget vacuum left by European banks, seem to have comparatively substantial pools of lower-cost dollar capital, minimal sovereign debt exposure, and are vigorously expanding their lending portfolios in terms project financing.

The participation of an ECA in project financing of a project can be significant, not only because they offer private loans and credit security for the proposed project, but also because they act as essential connectors and enablers in attracting commercial banks to club contractual arrangements or syndications where banks might otherwise be reluctant to accept due to risk allocation or credit concerns. Suitable contribution from a development finance institution (DFI) such as the African Development Bank, ADB, or IFC can be critical in providing a project with a "halo" effect.

3.1.2.2: Key elements of project financing: Project Bibiyana

- Natural resource projects (mines, hydrocarbons, etc.), infrastructural improvements such as power plants and new industrial plants including factories are commonly financed using project financing.
- Prior to the completion of the infrastructure, the financing of Project Bibiyana was made accessible, and the funds were invested.
- Outside of the project, the project lenders have no "recourse" (or just "limited recourse"). This means that if the project company is unable to repay its loans, the project financiers will have limited recourse to the assets and profits of the project business (Bagaria, 2013).

As a result, except for the security supplied by the project company, there are no assurances of the project firm's pledges to repay and settle debts.

3.1.2.3: Project Financing Flowchart

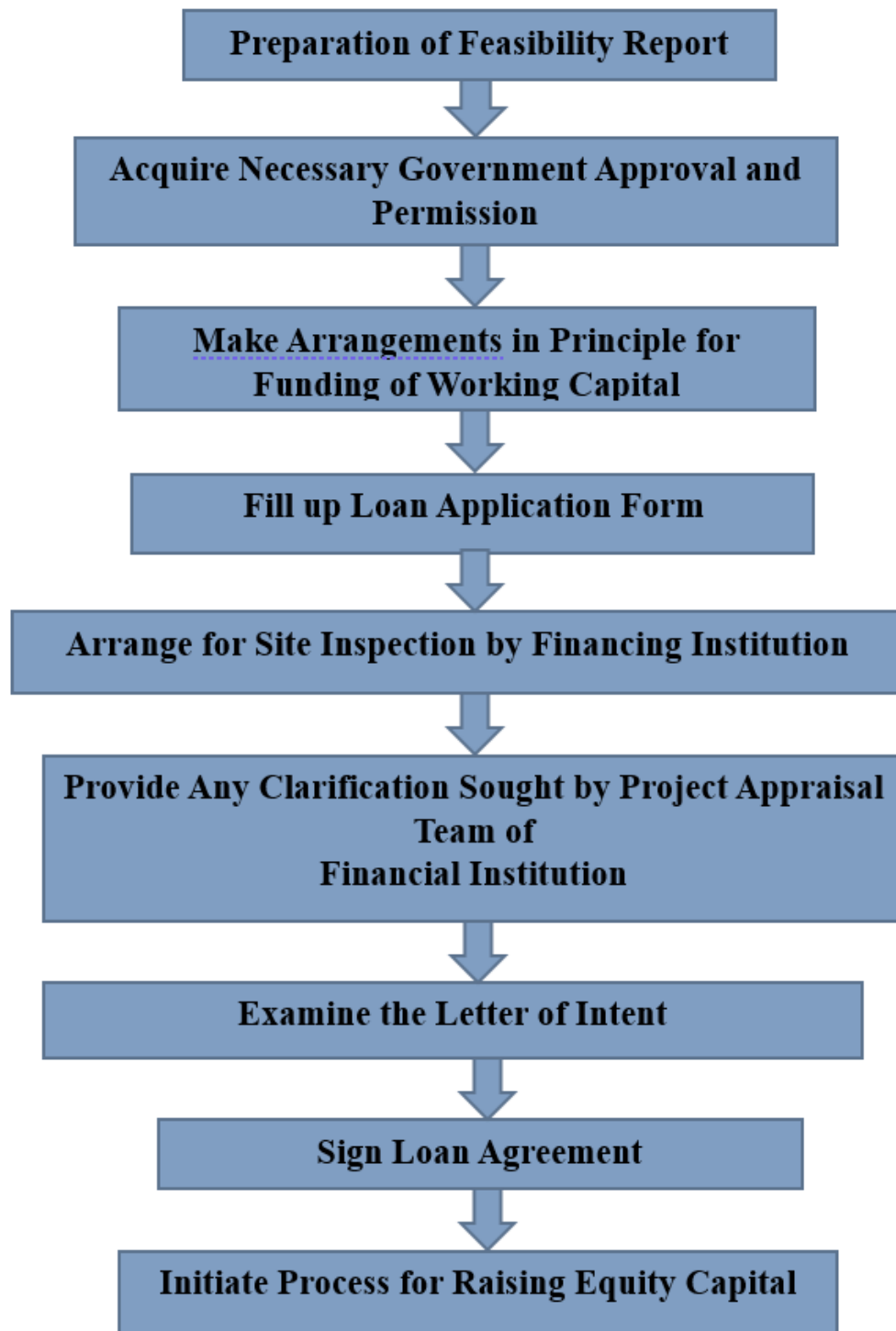


Figure 10: Project Financing Flowchart (Bagaria, 2013)

3.1.2.4: Project Financing Participants

Sponsor/Developer: The project sponsor or developers are the individuals that arranges all the other participants and usually manages and invests in the corporation or other organization that owns the project. If there are multiple sponsors, they will usually create a company or may sign into a partnership or some other agreement to control the project and define their respective roles, rights and obligations.

Project sponsors of Bibiyana are SIMCL and GE. SIMCL owns 80 percent of the company, while GE Energy owns 20 percent. SIMCL is the Summit group's flagship company, having been founded in 1985. SIMCL and its subsidiaries are involved in power production, energy, oil, shipping, port development, trading, telecommunications, and merchant/investment banking, among other things. GE Energy LLC is the energy division of General Electric Corporation USA and one of the world's top suppliers of power generating and distribution technologies. GE is also assisting with project implementation and administration by delivering equipment to the project.

Construction Contractor: The project company engages in a contract with the construction contractor for project design, engineering, and construction.

As per an article reported in Asian Power, Summit Bibiyana and NEPC signed a US\$ 220 million Engineering, Procurement, and Construction contract, which assisted the Bibiyana 341 MW combined cycle power project to provide much-needed 341 MW of electricity by June 2014 at the lowest cost of Tk1.90 per kWhr.

This allowed China to demonstrate its technological prowess by constructing an advanced class "F" technology most efficient power project in Bangladesh, which employed more than 200 Chinese technicians. According to the Asian Power article, it also highlighted Bangladesh's capabilities, particularly that of the private sector, to own and operate such large-scale projects.

The contract was signed by Faisal Karim Khan, director of Summit Bibiyana II Power Company Limited, and Qian Xuegang, President of First Northeast Electric Power Engineering Company, as per the Asian Power article.

Operator: The project firm enters into a long-term deal with the project operator for the project's day-to-day operation and maintenance.

In December 2014, full O&M Contract (including all spare parts minus LTSA scope) was signed between China Northeast Electric Power Engineering & Services Co. Ltd. (NEPCS) and Summit Bibiyana II Power Company Limited.

Feedstock Supplier: The feedstock suppliers sign a long-term deal with the project firm to provide feedstock which includes energy, raw materials, or other resources to the project.

GE combines technology, expertise, and individuals offering the most cost-effective simple-cycle and combined-cycle power plants by making them available anywhere in the world. This power is generated from technologies that lower the lifecycle cost of turning fuel into energy.

Their Heat Recovery Steam Generator, Steam Turbine Generator and 9FA gas turbine accommodates a diverse with a range of fuels and manages to deliver consistent performance, ideal for combined cycle applications of Bibiyana Project.

Jalalabad Gas Transmission and Distribution System Ltd. (JGTDSL) is the authorized and licensed distributor of gas to SBPCL. As per ADB reports, SBPCL has signed a 22-year agreement with JGTDSL which is a subsidiary of Bangladesh Mineral Oil and Gas Corporation, i.e., Petrobangla for natural gas purchases from the Bibiyana gas field.

Product Off taker: The project firm enters into a long-term deal with the product off taker(s) to sell all of the project's energy, services, or other products. According to ADB reports, the product off taker of the Bibiyana Project is BPDB, an entity owned by the state, with a 22-year take-or-pay power purchase agreement.

Lender: In the domain of project financing, a lender is a single financial institution or a consortium of financial institutions that grants a debt to the project business for designing, developing and building the project taking suitable security interest in all the assets of the project. Asian Development Bank, International Finance Corporation and Islamic Development Bank financed the Bibiyana Project.

3.1.2.5: Legal Form

Project sponsors use a variety of legal structures to hold project ownership. The specific structure adopted for any given project are then determined by a number of criteria, including the amount of equity necessary for the project, the project's management concerns, the availability of project-related tax benefits, and the requirement to distribute tax benefits among project company investors in a certain manner.

There are three fundamental types of project ownership:

1. Corporations: Corporation is the most basic type of project ownership in project financing. According to Bagaria's analysis, a special purpose company can be incorporated under the laws

of the jurisdiction where the project is located, or it can be formed in a separate jurisdiction and qualified to conduct business in the project's jurisdiction.

Under the Common Terms Agreement (CTA), SBPCL has been established to develop, finance, construct, install, equip, operate, and maintain an approximately 341 MW gas-fired combined-cycle power plant project.

2. General Partnerships: A general partnership between the sponsors could be formed. According to Bagaria's research, in most countries, a partnership is recognized as a separate legal organization, allowing it to own, execute, and finance projects under its own name. Even though a partnership is needed to file tax returns for reporting reasons, credits, deductions, items of income, loss and gain are distributed among the partners, who use the allotted portion of their share in determining their respective individual taxes.

As a result, when the tax benefits associated with the projects are large, a partnership is typically utilized. Since a partnership's general partners are jointly and substantially liable for all of the partnership's obligations and liabilities, the sponsor will usually establish a single-purpose, wholly-owned subsidiary to operate as the partnership's general partner.

3. Limited Partnerships: According to Bagaria's research, limited partnerships in project finance are similar to general partnerships, with the exception that limited partners have limited control over the partnership's business and are only liable for the partnership's debts and liabilities to the extent of their capital contributions. When the sponsors lack sufficient resources and the project requires huge amounts from external investment, a limited partnership may be effective for project finance.

3.1.2.6: Principal Contracts and Agreements of SBPCL

According to Bagaria's analysis, sponsors and other equity investors will engage in a company's shareholders agreement, general or limited partnership agreement, or other agreement that sets down the terms and conditions under which they will create, own, and run the project, depending on the kind of project company chosen for a particular project financing.

Common Terms Agreement

The common terms agreement as dated 30 April 2015 and made among Summit Bibiyana II Power Company Limited (SBPCL), a public company duly organized and existing under the laws of Bangladesh, Asian Development Bank (ADB), International Finance Corporation (IFC), and Islamic Development Bank (IDB).

SBPCL has been established to develop, finance, construct, install, equip, operate and maintain an approximately 341 MW gas-fired combined-cycle power plant project to be located near Bibiyana, Bangladesh. According to the CTA, SBPCL will make available and generate electrical capacity and energy for sale and delivery to the power purchaser upon the terms and conditions set out in the PPA. In order to finance the project, SBPCL entered into this agreement and certain other financial documents.

At the very least, such an agreement should have the following clauses: The project cost statement and financial plan, Conditions of disbursement, Prepayment, early payment, and cancellation, Changes to the calculation of interest, Fees, costs and expenses, Representations, Undertakings, Events of default, Tax gross-up and indemnities, Increased costs, Other indemnities, Changes to the parties, Conduct of business by the finance parties, Payment mechanics, Set-off, Notices, Calculations and Certificates, Partial Invalidity, Remedies and

Waivers, Counterparts, Governing Law, Arbitration, Waiver of Immunity. The agreement consists of 17 schedules which includes:

- Schedule 1 The Financiers
- Schedule 2 Conditions Precedent
- Schedule 3 Representations and Warranties
- Schedule 4 Undertakings
- Schedule 5 Events of Default
- Schedule 6 Insurance Plan
- Schedule 7 Requests
- Schedule 8 Costs Certificate
- Schedule 9 Project Development Budget
- Schedule 10 Form of Operating Budget
- Schedule 11 Form of Annual Development Effectiveness Report
- Schedule 12 Form of Compliance Certificate
- Schedule 13 Hedging Plan
- Schedule 14 Form of Construction Progress Reports
- Schedule 15 Form of Environmental and Social Monitoring Report
- Schedule 16 Form of Letter to the Auditor
- Schedule 17 Project Cost Statement and Financial Plan

Project Cost Break Down

Particulars	Amount (USD)
Project development	\$3,021,313
EPC cost	\$235,096,982
Spares cost	\$11,000,000
Site housing, O & M Mobilization Cost, start-up cost and training	\$5,997,250
Engineering, consultants/advisors	\$2,505,125
Insurance	\$2,580,000
Margin required for Performance Guarantee	\$920,700
DSRA LC Margin	
Financing cost	\$38,876,871
Total cost	\$299,998,241

Figure 11: Break Down of Project Cost

Source: Summit Bibiyana Power Company Limited Financial Model

Financial Plan

Particulars	Amount (USD)
IFC	\$74,999,384
ADB	\$74,999,384
IDB	\$60,000,000
Total Loan	\$209,998,768
Total Equity	\$89,999,473
Total Financing	\$299,998,241

Figure 12: Financial Plan

Source: Summit Bibiyana Power Company Limited Financial Model

Source and Use of Funds

Uses of funds	US\$ in millions	%	Sources of funds	US\$ in millions	%
EPC cost	235	78%	Equity	90	30%
Initial spares cost	11	4%			
Performance security deposit	1	0%	Senior debt		
Initial development cost	3	1%	IFC	75	25%
Legal and technical consultancy	3	1%	ADB	75	25%
O&M mobilization and other startup costs	5	2%	IDB	60	20%
Land lease rental	1	0%		210	70%
Insurance	3	1%			
Interest during construction	39	13%			
Contingency	-	0%			
Total	300	100%		300	100%

Figure 13: Source and Use of Funds

Source: Summit Bibiyana Power Company Limited Financial Model

Project Indicators of SBPCL

Investment USD	299,998,240.75
Discount rate	7.00%

Present Value of Cash Inflows

Year	Cash Inflows (CFAT)	Discount Factors	Present Value
0.5	909,301.63	0.9667	879,055.06
1.5	18,882,763.81	0.9035	17,060,426.91
2.5	29,438,635.74	0.8444	24,857,545.07
3.5	32,320,870.66	0.7891	25,505,851.65
4.5	32,386,826.33	0.7375	23,885,888.07
5.5	33,906,119.00	0.6893	23,370,462.37
6.5	34,920,628.00	0.6442	22,495,077.32
7.5	27,865,227.18	0.6020	16,775,839.23

8.5	35,234,463.24	0.5626	19,824,650.95
9.5	33,677,918.13	0.5258	17,709,216.56
10.5	32,552,202.24	0.4914	15,997,448.08
11.5	35,387,794.61	0.4593	16,253,243.98
12.5	21,480,625.61	0.4292	9,220,398.78
13.5	34,692,800.01	0.4012	13,917,407.83
14.5	36,146,141.06	0.3749	13,551,805.59
15.5	17,615,075.78	0.3504	6,172,142.75
16.5	27,427,225.42	0.3275	8,981,513.85
17.5	27,327,585.92	0.3060	8,363,444.11
18.5	23,461,957.97	0.2860	6,710,646.55
19.5	27,642,610.38	0.2673	7,389,165.39
20.5	28,830,362.73	0.2498	7,202,490.00
21.5	27,836,815.06	0.2335	6,499,326.04
22	10,597,133.83	0.2257	2,391,912.62
	630,541,084.34		315,014,958.77
NPV of Project		15,016,718	

Figure 14: Present Value of Cash Inflows

Source: Summit Bibiyana Power Company Limited Financial Model

IRR and EQUITY IRR of the Project

Internal Rate of Return (IRR) of the Project

8.00%	
Year	Cash flow
06/17/15	-299,998,240.75
06/30/15	909,301.63
06/30/16	18,882,763.81
06/30/17	29,438,635.74
06/30/18	32,320,870.66
06/30/19	32,386,826.33
06/30/20	33,906,119.00
06/30/21	34,920,628.00
06/30/22	27,865,227.18
06/30/23	35,234,463.24
06/30/24	33,677,918.13
06/30/25	32,552,202.24
06/30/26	35,387,794.61
06/30/27	21,480,625.61

Cash Equity IRR

18.77%	
Year	Cash flow (US\$)
06/17/15	-89,999,472.33
06/30/15	9,537,132.78
06/30/16	0.00
06/30/17	54,663,691.25
06/30/18	11,580,653.86
06/30/19	7,193,853.55
06/30/20	10,839,236.96
06/30/21	12,594,042.00
06/30/22	5,548,592.42
06/30/23	10,618,685.43
06/30/24	10,326,599.78
06/30/25	6,110,896.64
06/30/26	6,934,576.96
06/30/27	6,391,727.54

06/30/28	34,692,800.01
06/30/29	36,146,141.06
06/30/30	17,615,075.78
06/30/31	27,427,225.42
06/30/32	27,327,585.92
06/30/33	23,461,957.97
06/30/34	27,642,610.38
06/30/35	28,830,362.73
06/30/36	27,836,815.06
06/30/37	10,597,133.83
	8.00%

06/30/28	10,769,514.55
06/30/29	11,071,559.41
06/30/30	33,840,646.63
06/30/31	28,880,653.44
06/30/32	29,466,194.81
06/30/33	30,622,100.52
06/30/34	31,053,338.77
06/30/35	33,999,765.74
06/30/36	35,184,074.26
06/30/37	22,929,347.84
	18.77%

Figure 15: IRR and Equity IRR Project

Source: Summit Bibiyana Power Company Limited Financial Model

NPV	15,016,718
Project IRR	8.00%
PBP on Equity	10.63 year(s)

Figure 16: NPV, IRR & PBP of Bibiyana Project

Source: Summit Bibiyana Power Company Limited Financial Model

Payback Period

Yr	Investment (a)	CF (b)	CF (a+b)	Cum CF
0	-299,998,240.75		(299,998,240.75)	(299,998,240.75)
1		909,301.63	909,301.63	(299,088,939.13)
2		18,882,763.81	18,882,763.81	(280,206,175.31)
3		29,438,635.74	29,438,635.74	(250,767,539.58)
4		32,320,870.66	32,320,870.66	(218,446,668.91)
5		32,386,826.33	32,386,826.33	(186,059,842.58)
6		33,906,119.00	33,906,119.00	(152,153,723.58)
7		34,920,628.00	34,920,628.00	(117,233,095.58)
8		27,865,227.18	27,865,227.18	(89,367,868.41)
9		35,234,463.24	35,234,463.24	(54,133,405.16)
10		33,677,918.13	33,677,918.13	(20,455,487.04)
11		32,552,202.24	32,552,202.24	12,096,715.20
12		35,387,794.61	35,387,794.61	47,484,509.82
13		21,480,625.61	21,480,625.61	68,965,135.42
14		34,692,800.01	34,692,800.01	103,657,935.44

15		36,146,141.06	36,146,141.06	139,804,076.50
16		17,615,075.78	17,615,075.78	157,419,152.28
17		27,427,225.42	27,427,225.42	184,846,377.70
18		27,327,585.92	27,327,585.92	212,173,963.62
19		23,461,957.97	23,461,957.97	235,635,921.59
20		27,642,610.38	27,642,610.38	263,278,531.97
21		28,830,362.73	28,830,362.73	292,108,894.70
22		27,836,815.06	27,836,815.06	319,945,709.76
23		10,597,133.83	10,597,133.83	
Payback Period				10.63 year(s)

Figure 17: Payback Period

Source: Summit Bibiyana Power Company Limited Financial Model

Power Purchase Agreement

The Bangladesh Power Development Board and Summit Bibiyana II Power Company Limited signed into a Power Purchase Agreement on May 12, 2011.

In the People's Republic of Bangladesh, BPDB is a public utility that generates, transmits, distributes, and sells electric capacity and energy. On July 15, 2010, BPDB issued a Request for Proposals for the design, engineering, manufacture, financing, construction, completion, permitting, testing, commissioning, insurance, ownership, operation, and maintenance of Bibiyana, which would provide 341 MW of combined cycle electric power generation capacity.

Through a competitive tendering procedure, SBPCL was selected as the entity to implement the project, and the corporation committed to implementing the project and selling reliable capacity and net energy output of the facility to BPDB in accordance with the terms and conditions of the agreement.

SBPCL signed an Implementation Agreement with the Government of Bangladesh and the Power Grid Company of Bangladesh, the Land Lease Agreement with BPDB and Gas Supply Agreement with JGTDSL. BPDB has agreed to purchase the dependable capacity and net

energy output of the facility from SBPCL in accordance with the terms and conditions set forth in the agreement.

Gas Supply Agreement

Jalalabad Gas Transmission and Distribution System Ltd and Summit Bibiyana II Power Company Limited signed a Gas Supply Agreement on May 12, 2011.

SBPCL is committed to designing, engineering, manufacturing, financing, building, finishing, permitting, testing, commissioning, insuring, owning, managing, and maintaining the Bibiyana Project. SBPCL has signed Implementation Agreement, Power Purchase Agreement, and Land Lease Agreement. JGTDSL is the authorized and licensed distributor of gas within its franchise territory and within which the facility is located in Bangladesh. SBPCL desires to purchase and JGTDSL is willing to supply gas for use at the facility to generate net energy output for sale to BPDB, under and pursuant to the terms and conditions in the PPA. SBPCL came to an agreement to construct, test, and commission the transportation facilities and thereafter transfer the transportation facilities to the Gas Supplier.

Implementation Agreement

The Implementation Agreement was entered into 12th May 2011 by and between the “The President of The People’s Republic of Bangladesh” represented by The Ministry of Power , Energy and Mineral Resources, hereinafter referred to as the “GoB”, The Power Grid Company of Bangladesh Ltd.(PGCB) and Summit Bibiyana II Power Company Limited.

As a matter of policy, the GoB decided to include the private sector in the generation of power for sale to the national grid. In accordance with the Government of Bangladesh's Private Sector

Power Generation Policy, which was published in October 1996, SBPCL came to an agreement to design, engineer, manufacture, insure, finance, acquire, construct, complete, permit, test, commission, own, operate, and maintain the Bibiyana Project in order to supply electric power to BPDB using gas acquired from Titas Gas Transmission and Distribution Company Ltd, the Gas Supplier.

PGCB decided to set up a 230 kV electricity transmission line from Fenchuganj to Bibiyana terminating at a 230 kV /400 kV substation and a double circuit 400 kV transmission line from Kaliakoir to Bibiyana which, following their commissioning, that connects the facility to PGCB's Grid System. The GoB and SBPCL signed this arrangement so that the company's commitment to developing the facility could be carried out in a way that reflected the close cooperation between the public and private sectors in the generation of energy for sale on the national grid.

Land Lease Agreement

The Bangladesh Power Development Board and Summit Bibiyana II Power Company Limited signed a land lease agreement on May 12, 2011.

According to the land lease agreement, SBPCL committed to design, engineer, manufacture, finance, construct, complete, permit, test, commission, insure, own, manage, and maintain the gas-fired 341 MW combined cycle power plant in Sylhet, Bangladesh, for BPDB under a Power Purchase Agreement. BPDB has, under and through an agreement with the GoB, obtained an area of property of around 37 acres. From which the GoB previously purchased land, which comprised the demised premises and covered around 10 acres, the Access Road Corridor and the

Local Road Corridor as well as any appurtenances, rights-of-way and access to and from public highways at Bibiyana, approximately 180 kilometers northeast of Dhaka.

3.1.2.7: Project Finance Risk Management

Projects are at risk if they are not completed on schedule or within budget, if they are not running to their full capacity, if they do not generate enough money to repay loans, or if they are discontinued prematurely. A three-step risk minimization method can be implemented to prevent the following occurrences from occurring and negatively impacting the project.

Step 1 Risk Identification and Analysis

A feasibility report can be prepared by project sponsors, which is carefully assessed by financiers in cooperation with experts. The accuracy of future cash flows and the precision of cost estimates are particularly important to financiers. The project's repayment capacity is then assessed using a variety of financial models to detect concerns.

Step 2 Risk Allocation

Risks must be assigned to the right parties who have the financial means to bear them after they have been identified. Risks are assigned to parties with an interest or stake in the project by financiers.

Step 3 Risk Management

Risks in projects must be controlled to reduce the likelihood of a risk event occurring. To reduce the severity of the effects if the scenario occurs. The larger the project's risk, the greater the control financiers have over it.

Types of Risks

1. Completion Risk: Completion risk exists during the design and construction phases. Completion risk refers to the possibility of failing to finish a project on time owing to time, budget, or technology constraints. As a result of these occurrences, loan repayment is delayed, and debt accumulates. To reduce risk before lending, get completion guarantees from sponsors, forcing them to cover all debts if the project doesn't finish on time, ensure that sponsors have a strong financial stake in the project in order to keep their promise, and that the project is developed on a fixed-price, fixed-time basis under the supervision of reputable developers.

2. Resource Risk: During the operation phase, there is a risk of running out of inputs and not being able to provide appropriate returns. Expert reports must validate the existence of inputs, establish long-term supply contracts for inputs as a safeguard against shortages or price variations, and acquire assurances for minimum input levels to limit this type of risk.

3. Operating Risks: Operating risks include inefficiencies in operations, a shortage of skilled labor, and other risks that affect cash flows and project generation potential. The risks can be reduced prior to lending by ensuring that the project is supervised by a reputable and financially stable operator.

Detailed activities demonstrating the use of obtained funds should be prepared during the loan duration. This ensures that the funds are only used for authorized operating expenses.

4. Market/Off Take Risks: The concern of not being able to find a buyer at the predetermined price in order to generate appropriate cash flows is known as market/off take risk. Entering into a forward sales contract with a financially strong company reduces this risk.

5. Credit Risks: The repayment capacity of the borrower is a factor in credit risk. If the financier has a certificate of satisfaction in terms of experience, personnel, and financial soundness, this type of risk can be reduced.

6. Technical Risks: Technical risk refers to the possibility of technical problems during the project's construction and operation. This can be reduced to a minimum by primarily implementing new, established technology.

7. Currency Risks: Currency risk refers to the depreciation of loan and revenue currencies, which results in higher costs and lower cash flows. By entering into appropriate hedging contracts and matching the currencies of supply contracts, this risk can be reduced.

8. Approval and Political Risks: Political and economic volatility are associated with approval and political risk. Also, political uncertainty has a negative impact on the project. These threats can be reduced by following the law and following the necessary procedures.

Risk Management SBPCL

SBPCL's Board of Directors is in charge of establishing and overseeing the company's risk management strategy. SBPCL's risk management policies are implemented to identify and assess the risks that the company faces, define appropriate risk limits and controls, evaluate risks, and adhere to limitations. Risk management policies, practices, and methods are evaluated

The following risks are associated with the company's use of financial instruments:

- Credit Risk
- Liquidity Risk
- Market Risk

Credit risk, according to SBPCL, is the risk of monetary loss to the organization if a client or counterparty to a financial instrument fails to satisfy its contractual commitments, and it derives primarily from SBPCL's receivables from customers and investment securities. Trade and other receivables are the major sources of credit risk in SBPCL. The company has a credit policy in place, and credit risk exposure is assessed on a regular basis.

The receivables of SBPCL are from the Bangladesh Power Development Board (BPDB), to whom the firm sells power under the terms of the power purchase agreement.

a) Exposure to credit risk

The carrying value of the financial assets indicates the highest level of credit risk. For the next three years, the maximum credit risk exposure at the reporting date was:

In BDT	30-Jun-20	30-Jun-19	30-Jun-18
Trade and other receivables	1,615,764,610	1,058,274,686	974,015,439
Receivable from related parties	12,599,970	12,600,000	12,600,000
Advances, deposits and prepayments	180,267,049	170,325,167	157,203,430
Cash and cash equivalents (other than cash in hand)	2,119,513,036	1,777,860,986	1,851,678,763
Total	3,928,144,665	3,019,060,839	2,995,497,632

Figure 18: Credit Risk Exposure

Source: Summit Bibiyana Power Company Limited Annual Report 2020

b) Ageing of trade and other receivable and receivable from related parties

In BDT	30-Jun-20	30-Jun-19	30-Jun-18
Not past due	1,133,515,603.3	1,058,274,686.0	974,015,439.0
Past due 0 - 90 days	482,249,006.7		
Past due 91 - 180 days			
Past due over 180 days	12,599,970.5	12,600,000.0	12,600,000.0
Total	1,628,364,580.5	1,070,874,686.0	986,615,439.0

Figure 19: Ageing of Receivables

Source: Summit Bibiyana Power Company Limited Annual Report 2020

c) Impairment losses

Based on the past receivable history, there were no impairment losses to be recognized for this year as BPDB is the only trade receivable party and SBPCL is maintaining business relationship with BPDB from the commercial operation date (COD).

Liquidity risk

The liquidity risk that SBPCL will have, is trouble meeting the obligations related to its financial liabilities that are resolved by delivering cash or another financial asset. SBPC's approach to liquidity management is to ensure that it has enough liquidity to cover its liabilities when they are due, in both normal and stressed situations, without running out of cash or risking damages to the company's image.

Exposure to liquidity risk

The remaining contractual maturities of financial liabilities at the reporting date for 2019 and 2020 are mentioned down below. The figures are gross and undiscounted, and they include expected interest payments that are not affected by netting agreements.

Contractual cash flows for 2020 and 2019

BDT	Carrying amount	Total	6 months or less	6-12 months	1-2 years	2-5 years	More than 5 years
Non-derivative financial liabilities							
Long term loan	13629615951	-13729073558	-614734686.3	-641462267	-1327470529	-4463508201	-6681897875
Trade payables	1083129002	-1083129002	-1083129002				
Liability for expenses	358094152	-358094152	-358094152				
Payable to related parties	9262141.15	-9262141.15	-1750116.1		-7512025.05		
	15080101246	-15179558853	-2057707956	-641462267	-1334982554	-4463508201	-6681897875
Derivative financial liabilities							
Interest rate swap	1112058270						
-Inflow		14375267728	730627954.8	749418558.4	1532635172	5005879426	6356706617
-Outflow		-14781085220	-787279061.9	-805380039	-1632109529	-5166003253	-6390313337
	1112058270	-405817492.3	-56651107.12	-55961481.1	-99474356.54	-160123827.3	-33606720.23
	16192159516	-15585376345	-2114359063	-697423748	-1434456910	-4623632028	-6715504595

Figure 20: Contractual cash flows 30 June 2020

BDT	Carrying amount	Total	6 months or less	6-12 months	1-2 years	2-5 years	More than 5 years
Non-derivative financial liabilities							
Long term loan	14715458189	-14825860381	-541219289	-612198951	-1251015233	-4249902742	-8171524166
Trade payables	302210006	-302210006	-302210006				
Liability for expenses	276858688.4	-276858688.4	-276858688.4				
Payable to related parties	8357030.605	-8357030.605	-845015.605		-7512015		
	15302883914	-15413286106	-1121132999	-612198951	-1258527248	-4249902742	-8171524166
Derivative financial liabilities							
Interest rate swap	114025349						
-Inflow		5197184824	255352563	266735725	527215071	1723468719	2424412746
-Outflow		-5317852159	-255615676	-278690406	-559482204	-1789684325	-2434379548
	114025349	-120667335	-263113	-11954681	-32267133	-66215606	-9966802
	15416909263	-15533953441	-1121396112	-624153632	-1290794381	-4316118348	-8181490968

Figure 21: Contractual cash flows 30 June 2019

Source: Summit Bibiyana Power Company Limited Annual Report 2020

Market risk

Market risk, according to SBPCL, is the possibility that changes in market pricing, such as foreign exchange rates and interest rates which will have an impact on the SBPCL's revenue or the value of its financial instrument holdings. Management's goal is to manage and limit market risk exposures within permissible ranges while optimizing return.

a) Currency risk

Certain costs, such as the procurement of spare parts, the reception of service from servicing contractors, and the acquisition of capital items, subject SBPCL to currency risk. The majority of the SBPCL's foreign currency transactions are in US dollars (USD).

Exposure to currency risk

The following is a summary quantitative data concerning the SBPCL's exposure to currency risk as disclosed to management for the years 2019 and 2020:

BDT	30-Jun-20	30-Jun-19
Foreign currency denominated assets		
Cash and cash equivalents	1,734,986,948.8	14,526,286,112.5
Foreign currency denominated liabilities		
Trade payables	815,244,615.6	(233,742,548.0)
Payable to related parties	9,262,141.2	(71,402,500.0)
Long term loan	-	(1,244,440,913,215.5)
Liability for expenses	327,358,427.4	(16,121,233,466.0)
	2,886,852,132.9	(1,246,341,005,617.1)

Figure 22: Currency Risk Exposure

Source: Summit Bibiyana Power Company Limited Annual Report 2020

b) Interest rate risk

The risk of interest rate fluctuations on borrowings and bank deposits is known as interest rate risk as per SBPCL. The interest rate profile of the SBPCL's interest-bearing financial instruments at the reporting date was:

BDT	30-Jun-20	30-Jun-19
Fixed rate instruments		
Financial assets		
Fixed deposits	1,032,000,000	1,100,000,000
Financial liabilities	-	-
	1,032,000,000	1,100,000,000
Variable rate instruments		
Financial assets		
Financial liabilities		
Foreign long term loan	(13,629,615,951)	(14,715,458,189)
Effect of interest rate swap	13,629,615,951	5,294,937,692
	-	(9,420,520,497)

Figure 23: Interest Rate Profile

Source: Summit Bibiyana Power Company Limited Annual Report 2020

Interest Rate SWAP

In 2019, SBPCL signed an Interest Rate SWAP (IRS) Agreement with ADB and IFC to hedge the fluctuation of cash flows resulting from movement of LIBOR for its variable interest rate denominated loans. As in 17 June 2019, the company had IRSs with notional amount of USD 62,661,986 for ADB loan, and as at 15 December 2019, the Company had IRSs with notional amount of USD 108,674,502.41 for IFC and IDB loan which were designated as cash flow hedge.

Hedge effectiveness

The hedged item generates an obligation to pay 6-month USD LIBOR interest on USD 171,336,487.41 notional, settled semi-annually from June 2019 to June 2029 for ADB and December 2019 to June 2029 for IFC. Since an interest rate swap on the same notional generates an equal and opposite interest receipt and fixed interest payment, an economic relationship appears between the hedged item and the hedging instrument.

The credit rating of SBPCL and the counterparty to the interest rate swap raises credit risk. SBPCL analyzes credit risk for adverse fluctuations for the benefit of both the company and its lenders. The risk connected with SBPCL and the lender is regarded as small but it will be reassessed if either party's circumstances change significantly.

The designated hedge ratio should be the same as the actual hedge ratio, as long as it does not create ineffectiveness that is contrary to the purpose of hedge accounting.

3.1.2.8: Environmental and Social Mitigation Measures

According to the disclosure, IFC's assessment considered the project's environmental and social management planning process and documentation, as well as any gaps between these and IFC's standards. Corrective measures, if necessary, are outlined in the following paragraphs and (if relevant) in an agreed-upon Environmental and Social Action Plan (ESAP) to fill these gaps within an acceptable timeframe. The disclosure further informs that the project is expected to be planned and run in compliance with Performance Standards (PS) objectives as a result of the execution of these measures.

PS 1 – Management and Assessment of Environmental and Social Risks and Impacts

SBPCL has a formal Environment, Health, Safety, and Security (EHSS) Plan and Manual in place, which outlines the scope of EHSS management during the project's development and operation phases. For the Project, SBPCL has an Environmental Policy and a Health & Safety Policy that describe the company's environmental, health, and safety goals. The EPC contractor implemented EHS management systems that have been certified to ISO 14001 and OHSAS 18001 standards (*Disclosure, 2015*) and were on show at the job site. A substantial portion of the Project site is at an elevation of 7.8 meters above sea level, but the highest recorded flood was at a height of 10.15 meters. Approximately 300,000 cubic meter of sand was removed from six sites to elevate Project site levels by 3.4 m (*Disclosure, 2015*).

The ESIA addressed the E&S consequences of sand mining. SBPCL designed a climate change adaptation policy, while increasing the site is intended to reduce any increase in flood levels. According to the study, a significant negative impact on ecosystem services is unlikely. Despite the fact that the Kushiyara River is home to 32 fish species, none of them are included on the IUCN Red List as critically endangered, endangered, or vulnerable. The greenbelt was constructed using native species, and invasive species were not present at the site, according to the ESMMP. Within the Project's sphere of effect, no areas have been designated as ecologically sensitive.

Fuel, combined or open cycle, no-development, and sand mining locations were also examined as alternatives. The ESIA did not include the site selection or alignment of the gas pipeline and access road (*Disclosure, 2015*). Based on the audit findings, SBPCL agreed on a corrective action plan to guarantee that the Project is built and operated in conformity with national

regulations. Contractually, SBPCL obliged the Project's engineering, procurement, and construction (EPC) contractors to follow all applicable social and environmental legal/national obligations. Emissions to the air, ambient noise, water usage, and contamination risk are among the mitigation and monitoring measures.

The EPC contractor created and implemented the plans outlined in the ESIA that are relevant to the Project's construction stage. Large utilities and government bodies are in charge of the development of connected facilities.

PS 2 - Labor and working conditions

At the site, 1650 people were employed, with about 1300 of them being contract workers. During the 36-month construction phase, 1200 workers were scheduled to be employed on average. Before the Commercial Operation Date (COD), SBPCL implemented HR policies and procedures that complied with national legislation and PS2 requirements (*Disclosure, 2015*). SBPCL took SIMCL's HR practices into consideration when creating its own HR policies. SBPCL directed the EPC contractor to identify all national labor and employment legislation and PS2 compliance standards that applied to its employees and subcontractors' workers.

The Chinese personnel and workers of the NEPC were accommodated in a separate camp within the Project's boundaries. There were several gaps in PS2 services, including insufficient living space, poor drainage, the lack of a fire extinguisher, a lack of storage space, and the lack of recreation facilities, among others (*Disclosure, 2015*). The EPC Contractor's EHS Department was in charge of the staff and workers' occupational health and safety. There was a total of 15

EHS personnel on site at the time. There was a First Aid Centre, and an ambulance that connected to a local hospital in Sylhet, some 40 kilometers away.

To respond to crises, SBPCL hired a full-time doctor and paramedical team to be on site. Occupational health and safety (OHS) was addressed in the O&M phase by SBPCL's proposed OHSAS 18001 certified OHS management system (*Disclosure*, 2015). SBPCL assigned site-specific EHS personnel to ensure that contractual terms relating to labor working conditions and safety were followed. NEPC contracted 7 contractors, which employed approximately 1300 contract workers on the construction site.

PS 3 - Pollution Prevention and Resource Efficiency

Airborne dust, noise, water consumption, hazardous materials and trash processing, storage, and transport are all potential environmental issues (*Disclosure*, 2015) and impacts from construction operations for the Project and its accompanying infrastructure. Through the use of standard construction environmental controls, the EPC contractor and subcontractors are expected to keep these at acceptable levels. SBPCL ensures that the drinking water provided on the project site and in the workers' quarters fulfills Government of Bangladesh potable water requirements or WHO Drinking Water standards. A closed-loop cooling water system are used at the SBPCL power plant, with make-up water from the Kushiara river projected to be around 10,500 m³/day (*Disclosure*, 2015). The Project was expected to emit 1.012 million tCO₂e in direct yearly greenhouse gas emissions (GhG).

As reported in the disclosure, the baseline levels of NO₂, SO₂, and CO, according to ambient air quality baseline data, are all within Bangladesh's National Ambient Air Quality Standards. A sewage treatment plant is expected to build by the company. The temperature of the treated

wastewater discharged from the facility needs to be less than 3 degrees Celsius over the Kushiyara river's ambient temperature (the receiving water body) For disposal, the DM plant wastewater must be neutralized and combined with the condenser cooling water. Compressor cleaning water is required to be generated on a regular basis and transported to a hazardous waste treatment and disposal facility in a tanker. Before being released into the Kushiyara river, sewage from the transformer batching plant needs to be cleaned.

Surface runoff from areas with the potential for contamination, such as the transformer secondary containment area, needs to be collected and treated using an oil-water separator. Storm water/surface runoff water from places not likely to be contaminated must be collected and channeled into subsurface drainage via gulley and surface drains.

Noise modeling for the plant as constructed anticipates a noise increase of less than 3dB at sensitive receptors as a result of the Project. Near the clinic, bio-medical waste is collected and stored separately. The nature of sanitary and biological waste created during the operation period were mainly comparable to that generated during the building phase. Gas cylinders, diesel, hydrochloric acid, sulfuric soda, sodium hypochlorite, solvents, lubricating oils, transformer oil, and other chemicals were among the hazardous goods (*Disclosure*, 2015) held on site during construction. To avoid any inadvertent spillages, SBPCL demanded the EPC contractor to improve hazardous materials storage and management on site, particularly containments.

PS 4 – Community Health, Safety and Security

The majority of the construction took place on the Project site, although there was also some work planned in public areas. Waterways were used to convey the majority of the construction materials, heavy machinery, and equipment (*Disclosure*, 2015) needed for the Project. During the construction phase, there was an increase in road traffic due to the transportation of labor and construction materials. SBPCL prepared a detailed transportation and traffic management strategy and required the EPC contractor to update the Emergency Response Plan to cover all crises, designate a certified emergency coordinator, and conduct awareness training, including drills.

SBPCL established procedures to analyze previous records of private security personnel deployed and to ensure that security personnel have defined objectives and acceptable activities.

PS 5 – Land Acquisition and Involuntary Resettlement

The main plant is located on 11 acre single crop agricultural land and under the Land Lease Agreement (LLA), SBPCL got this land from BPDB for a period of 22 years. The total land requirement for the accompanying facilities is approximately 90 acres. The land take for the main plant and its accompanying facilities affected around 19 mouzas/villages. The main plant, switchyard, and access road have all been compensated. Payment of land compensation has been delayed in some situations due to a lack of land records and ownership disputes among the landowners' family members.

The government has leased each resettled household 7 decimal (247 decimal = 1 hectare) of land for 99 years (*Disclosure*, 2015). SBPCL developed a Livelihood Restoration Framework (LRF) that contains provisions for delivering jobs, job training, and income generation training, as well

as seed cash, to at least one individual from each Project Affected Household (PAH). By acquiring goods and services from the PAHs, SBPCL also supported local businesses. In discussion with the affected households, the planned livelihood restoration strategies were evaluated and finalized, and an independent consultant created a detailed Livelihood Restoration Plan (LRP) by February 2015.

Land acquisition and requisition for the Project impacted 376 houses with around a population of 2,598 persons. Landowners along the site's gas pipeline were expected to lose revenue and livelihood for a while. Once the gas pipeline work was completed, the requisitioned land was to be returned to the original landowner. The SIA identified eight PAHs who have lost their land as a result of land acquisition for SBPCL and its accompanying facilities under the 1982 Acquisition and Requisition of Immovable Property Ordinance (*Disclosure, 2015*). PGCB was in charge of land compensation and relocation of physically displaced families. All PAHs were covered by the LRF (including those impacted by the associated facilities including sharecroppers and khas land cultivators).

3.1.3: Significance

This study can provide crucial information on project finance and the risks that are associated with it, which can be beneficial to those who are planning to work on projects. Individuals from many industries would also benefit from the report's project financing information, which would assist them better minimize problems with future projects.

3.2: Methodology

Primary Data

- Agreements, financial model, HR manual, annual reports, and organogram collected from SBPCL
- Interviews conducted within the organization and a survey conducted on around 50 people outside the organization

Secondary Data

- Information retrieved from organization's and other stakeholder's official website
- Existing data generated by institutions as a tool for organizational record-keeping, from which data are then collected and retrieved from more diverse data files.

3.3: Findings and Analysis

In this research, there were total of 50 questionnaire forms been distributed and only 47 responded to the questionnaires. Reporting of the result and findings of this study derives from the distribution of questionnaires by using Google Form and by sharing the forms through social media platform, collection of data, analyses of data and reporting of the result findings. The collection of data is conducted via social media platform.

Age Range
47 responses

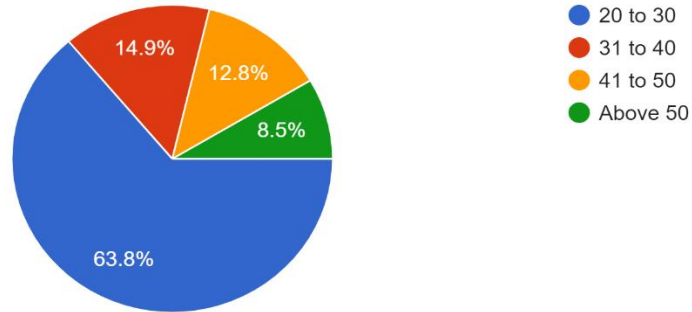


Figure 24: Age Range

Are you aware of Project Finance?
47 responses

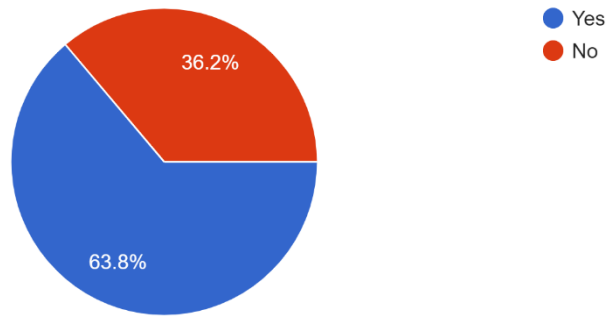


Figure 25: Are you Aware of Project Finance?

Here we can see that the responses that is accumulated varied from age 20 to 50 above. In total 47 responses were recorded where we can see most responses came from the age group of 20 to 30 which covered 63.8% of the total response. Following that 14.9% response came from the age group of 31 to 40, 12.8% came from 41 to 50 and the rest 8.5% came from above 50 years

of age. Among all the responses in terms of the knowledge of Project Finance where they were asked if they were aware of it, 63.8% responded in affirmative and 36.2% were not aware of this at all. It shows that the majority of the people had some knowledge of project finance.

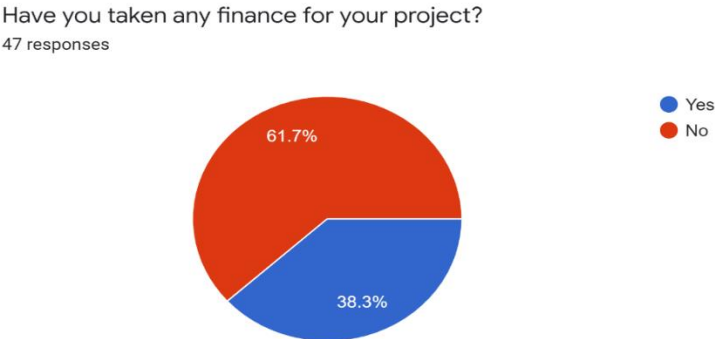


Figure 26: Have you taken any finance for your project?

But we see a turnaround on the next question. When they were asked if they had taken finance for their project 61.7% said No and 38.3% said Yes. So, we see the complete opposite from the previous question which raises a surprising fact that even though the majority didn't take finance for their project they were very much aware of Project Finance!

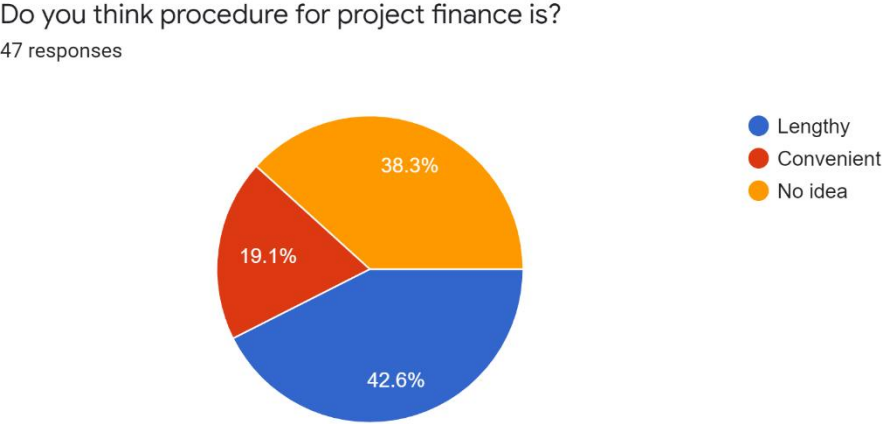


Figure 27: Do you think procedure for project finance is?

Which bank would you like to prefer for taking finance for projects?

47 responses

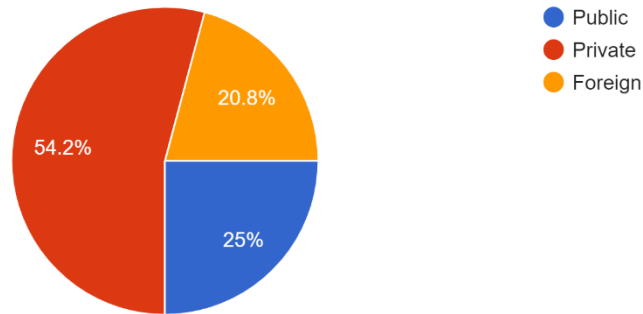


Figure 28: Which bank would you like to prefer for taking finance for projects?

On the next question they were given three options to determine the length of the procedure for the project and we can see different opinions regarding the fact of the procedure where 42.6% agreed that it is indeed lengthy where 38.3% had no idea and the rest 19.1% said it is convenient. Basically, in response like this where there are more than two options we can see more clearly of the opinions and from a statistical point of view since the majority gravitated towards the procedure being a lengthy option so the general opinion of this statement should be what majority thought of it. And then again, we see people are given three choices for their preference on banks where they would like to take finance for projects and more than half, 54.2% opted for Private, 25% thought Public banks should be the way to go and 20.8% felt better with Foreign banks. The percentage difference in the responses for Public bank and Foreign bank are very close only differed by 4.2%. But the majority seems to prefer Private banks.

What type of interest rate would you prefer?

47 responses

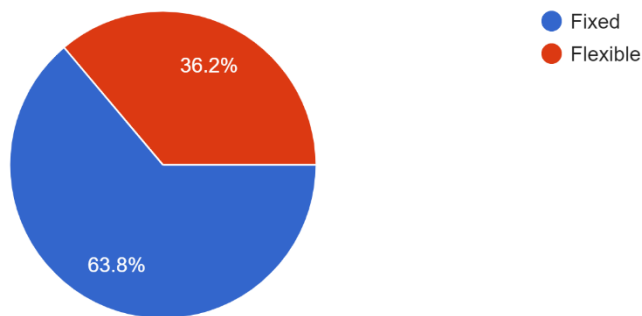


Figure 29: What type of interest rate do you prefer?

Interesting preference can be seen in the next question. When in terms of interest rate, they were asked if they wanted Fixed or flexible interest 63.8% wanted Fixed interest and only 36.2% wanted Flexible one. This is a popular opinion since it is returning higher rates than Flexible ones. And since it is guaranteeing the fixed rate, most people opt for it which is visible from the responses.

Do you think Project Financing possess too many risks?

47 responses

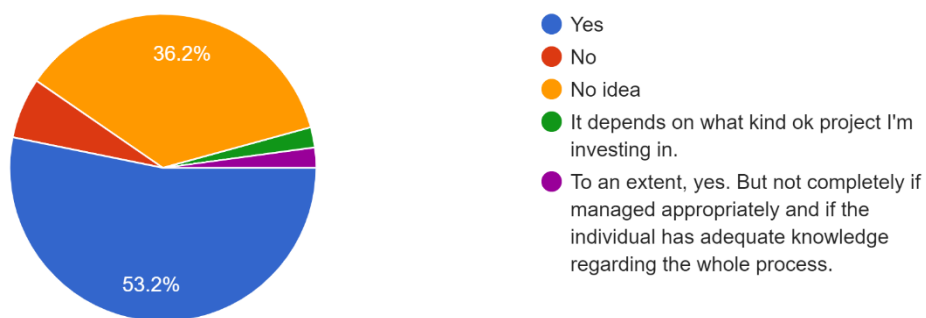


Figure 30: Do you think Project Financing possess too many risks?

The final question is really compelling, and it was given various options where we can see much more variations and opinions from individuals. When they were presented with options to choose for the question of whether Project Financing possessed too many risks, we see two major opinions on the major side about 53.2% agreed that it does possess too many risks and voted Yes, 36.2% said they had no idea and small percentage, about 6.4% disagreed and voted No. 2.1% believed that it depends on the kind of project they are investing in and the last 2.1% agrees partially and replied that it possessed risk to an extent they believe but not completely and if managed appropriately and if the individual has adequate knowledge regarding the whole process. Here we saw the majority flocked towards agreeing that it indeed has too many risks. It shows general concern about the people on the Project Financing. But there is no reward to reap without any risk. Higher the risk chances of reward get higher as well. General concern shows realistic data. To summarize, all the responses showed peoples opinion regarding the Project Financing their real thoughts and concerns regarding all the questions they were given to fill.

3.4: Summary and Conclusion

3.4.1: Summary

Being a private company where vision of SBPCL focuses solely on Bangladesh, some menaces come from political interference in terms of tender bidding, which leads to some cold feet among donors in the last phases of the excerpt process. It can be remarked that Summit Bibiyana Power Company Limited is indeed a true patron to the power generation and distribution of electricity to our middle-income country being a natural gas-based power plant with sufficiency of 341 MW. It is comparatively more conservative in the terms of

environmental effects which means it's greener. Under the guidance of Mr. Muhammad Aziz Khan, the company's chairman and founder, their management approach makes workers' day-to-day operations far more efficient. Its results demonstrate a clear upward trend in the company's growth and development, with revenue increasing by 21.1 percent in the 2019-20 fiscal year. It also increased its assets, liabilities, operational profits, EPS, ROE, gross profit margin, net profit margin, and other metrics, indicating that it is a very lucrative corporation that is working hard to meet the country's electricity demands. Nevertheless, since Bangladesh is moving forward in energy consumption, the daily need for power continues to rise and Summit Bibiyana Power Company Limited is fulfilling the needs with a very steady profit to benefit its goal.

3.4.2: Conclusion

Bangladesh being a progressive middle-income country with the aspiration to be an upper middle-income country by 2031, electricity is becoming one of the dire necessities and in this field SBPCL is becoming a major player. Summit Power Limited has set their goals to expand further by expanding power grids and establishing more power generation projects like Project Bibiyana under SBPCL which will comprise more than 3 GW clearly depicting the clear vision the company has. Not only are they thinking of the development of our country but also, they plan to expand into our neighboring countries such as India, Sri Lanka, Nepal, Malaysia, Vietnam etc. From environmental factors to the quality of the power plants, the company is up to the mark of the international standards of the power plants which is very important for the growth and reputation of the company. And they are continuing to improve the standards and safety of the power plant to grow and to deliver efficiently and profit from it. They are pushing their limits to get more exposure from national and international levels where they are tackling

challenges and optimizing in technical, commercial, financial operations and social governance standards. Interesting fact is that investors are more likely to invest in the power plants after the government laid hospital gestures to the international investors where they are free of corporate income tax for the first 15 years and powerplant equipment can be imported free of custom duties. It is attracting foreign investors and SBPCL is likely to get more helping hand from abroad being a generously profitable company. And since Bangladesh is thriving to become “Digital Bangladesh”, investors seek many opportunities to make profit from power generation and to speed up the development. The faster the development is the better for the stakeholders. So, in terms of getting foreign investment the company will be able to get assisted when needed and to expand accordingly. Studying the proving track records of revenue and profits it is strongly agreeable that the company is continuing to grow, and they can manage to pull off becoming the best power generation company of Bangladesh and one of the major distributors to other countries. To conclude, it can be said that Summit Power Limited with projects like Project Bibiyana is one of the rudders to the boat that is moving Bangladesh towards its goal to become a developed nation.

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Appendix

Cash flow after Tax (CFAT)

Year	EBITDA	Provision for Tax, TK.	Cash Expenses	Cash Flow after Tax (CFAT)
	1	2	3	5=(1-2)
06/30/15	909,301.63	-	81,687.26	909,301.63
06/30/16	19,028,854.39	146,090.58	59,774.70	18,882,763.81
06/30/17	29,724,951.41	286,315.68	-	29,438,635.74
06/30/18	32,829,465.10	508,594.43	164,377.00	32,320,870.66
06/30/19	32,805,544.54	418,718.20	160,845.00	32,386,826.33
06/30/20	33,906,119.00		26,209.11	33,906,119.00
06/30/21	34,920,628.00		26,209.11	34,920,628.00
06/30/22	27,865,227.18		26,209.11	27,865,227.18
06/30/23	35,234,463.24		26,209.11	35,234,463.24
06/30/24	33,677,918.13		26,209.11	33,677,918.13
06/30/25	32,552,202.24		26,209.11	32,552,202.24
06/30/26	35,387,794.61		26,209.11	35,387,794.61
06/30/27	21,480,625.61		26,209.11	21,480,625.61
06/30/28	34,692,800.01		26,209.11	34,692,800.01
06/30/29	36,146,141.06		26,209.11	36,146,141.06
06/30/30	26,163,008.80	8,547,933.02	26,209.11	17,615,075.78
06/30/31	35,975,158.43	8,547,933.02	26,209.11	27,427,225.42
06/30/32	36,145,743.60	8,818,157.67	26,209.11	27,327,585.92
06/30/33	30,524,220.84	7,062,262.87	26,209.11	23,461,957.97
06/30/34	37,399,454.29	9,756,843.91	-	27,642,610.38
06/30/35	39,546,714.87	10,716,352.15	-	28,830,362.73
06/30/36	38,366,799.36	10,529,984.30	-	27,836,815.06
06/30/37	15,892,237.43	5,295,103.60		10,597,133.83

Financial Ratios

