



Feasibility Report and **BUSINESS PLAN** of Balaji Industries Ltd

PROJECT COST
BDT 312.52 MILLION



INVESTMENT PROPOSAL

Total Loan Required	: BDT 167.92 mln
Long-Term Loan	: BDT 65.96 mln
Short-Term Loan	: BDT 101.97 mln
Non-Funded Facilities	
LC Facilities	: BDT 80.00 mln
Funded Facilities	
CC Hypo/OD	: BDT 21.97 mln
Debt-Equity Ratio	
Long-Term Finance	: 40.99 : 59.01
Short-Term Finance	: 70.00 : 30.00
Proposed Interest Rate	: 9.00%
Loan Tenure	: 6 years
Moratorium Period	: 12 months
Equal Monthly Instalments (EMI)	: BDT 1.05 mln
Equal Quarterly Instalments (EQI)	: BDT 3.91 mln

PROJECTED KEY FINANCIALS (Five Years Average)

Yearly Sales Target	: BDT 580.80 mln
Net Profit Target	: BDT 42.88 mln
Gross Profit (GP)	: 15.60%
Operating Profit (OP)	: 11.73%
Net Profit (NI)	: 7.28%

Key Decision Points

IRR	: 32.15%
ROI	: 10.18%
ROE	: 17.00%
Payback period	: 3.46 years
Discounted Payback Period	: 4.18 years
Debt Service Coverage Ratio	: 2.97 Times
Break Even (BEP)	: 30.57%
NPV	: BDT 279.32 mln



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Feasibility Report and Business Plan of Balaji Industries Ltd



1. Executive Summary





1.1 Review and Outlook of the Paper Sizing Emulsions Industry

Paper sizing emulsions are used in the internal processes of paper manufacturing. These chemicals increase the stability, productivity, performance, and cost efficiency in the manufacturing processes of paper. Paper sizing emulsions have wide variety of applications in various paper industries for manufacturing of different kinds of papers such as packing papers, magazines, laminations, envelopes, and tissue papers.

Increase in disposable income coupled with high standard of living is escalating the use of paper for packaging which in turn boosts the growth of Paper sizing emulsions material market. Increase in use of papers for printing and writing applications has also fueled the market. The global Paper sizing emulsions Market size is forecast to reach \$42 Billion by 2025, after growing at a CAGR of 3% during 2020-2025. Paper sizing emulsions are a group of chemicals that are used for manufacturing paper along with enhancing the properties of paper. Increase in use of paper for packaging applications is augmenting the growth of Paper sizing emulsions market share during the forecast period.

These chemicals alter the paper in many ways including its color, brightness, strength and resistance towards water. Moreover, increasing environmental concerns and usage of eco-friendly packaging materials is also driving the growth of Paper sizing emulsions market size.

The major types of Paper sizing emulsions include Sizing Agents, Bleaching Chemicals (Sodium Dithionite, Ozone, Chlorine Dioxide, Hydrogen Peroxide, Others), Pulping Chemicals (Caustic Soda, Sodium Sulfide, Sulfurous Acid, Anthraquinone), Functional Chemicals (Dry Strength Additives, Wet Strength Additives, Coating Binders, Others) and Others.

Asia-Pacific has dominated the Paper sizing emulsions market with a share of more than 35% in 2022 followed by North America and Europe. Easy access of raw materials and presence of paper and pulp industries is driving the growth of paper chemical market in APAC region.

According to research, paper use is steadily increasing year on year and exceeded to 400 million tons per year in 2023. More than half of this is consumed by China, U.S and Japan whereas Africa accounts for only 2% of global paper use.

Furthermore, rising population coupled with rapid industrialization is also boosting the growth of Paper sizing emulsions market in emerging economic nations like China, India and Bangladesh.

Increase in disposable income coupled with high standard of living is escalating the use of paper for packaging which in turn boosts the growth of Paper sizing emulsions material market. Increase in use of papers for printing and writing applications has also fueled the market.

Due to huge market potential and sizable market, Balaji Industries Ltd (BIL) has taken initiative to set up a Paper Sizing Emulsion Manufacturing Project Brahmanbaga, Jampur, Sonargaon, Narayanganj, Bangladesh with latest technology. As per market analysis, this project will be technically feasible, financially rewarding and economically & commercially viable.

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1.2 About Balaji Industries Ltd

Balaji Industries Ltd (BIL) was incorporated as a Private Limited Company on 06th September, 2020 bearing Incorporation No.: C-163108/2020. The Authorized Share Capital of the Company is BDT 10,000,000 (One Crore) divided into 100,000.00 (One Lakh) Ordinary Shares of BDT 100.00 (One Hundred) each.

BIL has been selling paper processing, Textile, Packaging and Padding and quilting chemicals manufacturer, Importer and suppliers in Bangladesh since the last few years. Balaji Industries Ltd has a sister concern which is named A. R. Trading.

BIL exclusively collaborated on technology and drew some AAA categories multinational companies.

BIL maintains the following very strictly:

- BIL imports Raw Materials from USA/Europe/India and AAA categories Chinese companies.
- Delivery time is 2 – 3 Hrs time for smooth supply chain and own transport for any factory in Narayanganj area.
- High qualified engineers and skilled production team are in the production site with rich R & D for maintaining best quality.
- Giving a strong Technical team for chemicals application support for clients.
- Competitive price compared to other suppliers.
- Currently supplying around Twenty (20) paper mills in Bangladesh.

For this project, BIL has taken approval from appropriate authorities of Bangladesh Government. Some legal information of BIL are as follows:

- Incorporation Certificate: C-163108/2020
- Trade License: 3605

1.3 List of Directors & Shareholding Structure of BIL

Name of Directors	Status	No. of Shares	% of Shares
Shuly Singha	Chairman	1,500	30.00%
Raghupati Sen	Managing Director	2,000	40.00%
Pashupati Sen	Director	750	15.00%
Sujan Singha	Director	750	15.00%
Total		5,000	100.00%

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1.4 About the Project

(i) Features of the Project and Its Objectives

Name of the Company	: Balaji Industries Ltd
Nature of the Project	: To manufacture different grade Paper Sizing Emulsion for paper manufacturing industries.
Corporate Office	: Brahmanbaga, Jampur, Sonargaon, Narayanganj, Bangladesh
Project Location	: Ismail Bhaban (5th Floor), 48/1-A, Purana Paltan, Dhaka-1000, Bangladesh
Legal Formation of the Project	: Private Limited
Life of The Project	: 30 years
Product Mix	: (Paper Sizing Emulsion Manufacturing Project)
Total Project Cost	: BDT 312.52 mln
	Fixed Cost : BDT 166.86 mln
	Variable Cost : BDT 145.67 mln
Total Investment Required	: BDT 167.92 mln
	Long-Term Loan : BDT 65.96 mln
	Short-Term Loan : BDT 101.97 mln
Debt-Equity Ratio	
	Long-Term Loan : 40.99 : 59.01
	Short-Term Loan : 70.00 : 30.00
Loan Repayment	
	Equal Quarterly Instalment : BDT 3.91 mln
	Equal Monthly Instalment : BDT 1.05 mln
Attainable Production Capacity	
	Daily : 50,000 kg
	Monthly : 1,250,000 kg
	Yearly : 15,000,000 kg
Average Sales Price/kg	: BDT 73.00
Basic Raw Materials Cost/kg	
	AKD Wax : BDT 215.00
	Defoamer : BDT 190.00
	Starch : BDT 60.00
	Fixing Agent : BDT 170.00
	Zirconium Chloride : BDT 300.00
	Optical Brightening Agent : BDT 150.00
	Retention Aid : BDT 220.00
	Anionic Surface Sizing : BDT 170.00
	Dry Strength Resin : BDT 80.00
	High Polymer/Emulsifier : BDT 160.00
	Formaldehyde : BDT 170.00
	Dispersant-N : BDT 110.00
	Stickies Control Agent : BDT 180.00
	Aluminium Sulphate : BDT 28.00
	Water : BDT -
Average Sales Revenue (5 Years)	: BDT 580.80 mln
Average Net Profit (5 Years)	: BDT 42.88 mln
Key Financial Ratios	
	Gross Income : 15.60%
	Operating Income : 11.73%
	Net Income : 7.28%
GDP Contribution	: BDT 68.43 mln
Objective of the project	: To provide high quality paper sizing emulsion to clients across the country

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(ii) Project Plan

Balaji Industries Ltd (BIL) is going to start a Paper Sizing Emulsion Manufacturing Project where different grades of Paper Sizing Emulsion for paper manufacturing industries will be manufactured. AKD surface sizing emulsion (liquid) is a product used on the paper surface to enhance surface strength, water resistance, paper stiffness and Printability.

Product Features:

1. It can effectively increase the surface strength and improve the printability of paper.
2. It can reduce the phenomenon of dropping fiber and powder.
3. It could be used to adjust the sizing degree quickly and improve the water resistance of the paper
4. It does not have negative effect on people's health in the process of shipping, storing and using.
5. It can reduce the pressure of water treatment, and reduce cost of production.
6. Well compatibility, it is compatible with CMC, PVA, starch and so on.
7. Curing speed is high.
8. Suitable for all kinds of surface sizing equipment.

Product Application

It is suitable for cultural paper, writing printing paper, craft paper, paperboard, fruit bag paper and wrapping paper and so on.

Product Essential details

Classification	: Paper Sizing Emulsion
Other Names	: AKD
Purity	: 15%-22%
Type	: Adsorbent
Adsorbent Variety	: Polymer AKD Neutral Sizing Agent
Usage	: Coating Auxiliary Agents, Paper Chemicals, Surfactants
PH	: 3.0±1
Solid content % ≥	: 15%-22%
Dynamic viscosity	: <50 mPa.s
Solubility	: Easy in Water
Appearance	: Milky White Liquid
Application	: Paper Chemicals/Paper Internal Sizing and Surface Sizing

The attainable production capacity will be 50,000 kg per day, 1,250,000 kg per month and 15,000,000 kg per year.

Feasibility Report and Business Plan of Balaji Industries Ltd



The detailed production matrix has been illustrated below:

Type of Products	Purity	Adsorbent Variety	Total Production Capacity/ Per day 10 hours /KG			
			Unit	Daily	Monthly	Yearly
Paper Sizing Emulsion	15%-22%	Polymer AKD Neutral Sizing Agent	KG	50,000	1,250,000	15,000,000
	Grand Total			50,000	1,250,000	15,000,000

The project will be located at Brahmanbaga, Jampur, Sonargaon, Narayanganj, Bangladesh where total land size of this project is 51.00 decimals where 29.00 decimals is own land and 22.00 decimals land is leased from the Government. In this project, 16,000 sft civil constructions will be constructed.

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1.5 Capacity Utilization Plan of the Project

BIL is planning to utilize the production capacity over the next ten (10) years as follows:

Capacity Utilization	
1st Year	40.00%
2nd Year	50.00%
3rd Year	55.00%
4th Year	60.00%
5th Year	65.00%
6th Year	70.00%
7th Year	75.00%
8th Year	80.00%
9th Year	85.00%
10th Year	90.00%

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1.6 Estimated Project Cost

For this project, the total cost has been estimated BDT 312.52 million including long-term & short-term investment. The summary of the project cost has illustrated below:

Balaji Industries Ltd (Paper Sizing Emulsion Manufacturing Project) Estimated Project Cost				
Fig in Tk. '000'				
SL #	Particulars	Cost		
		Import	Local	Total
01	Land (Total 29 Decimals owned land where per decimals cost has been estimated BDT 17,50,000.00. In addition, 22 decimals land is leased land from Govt on yearly rental basis.)	-	50,750	50,750
02	Land Development Cost		10,000	10,000
03	Project Shed and Building		36,800	36,800
04	Others Civils Construction(Boundary Wall, Security House and Guest House, Main Road and Internal Road, Sewerage and Drainage Line set up and Rain Water Harvesting Plant)		8,950	8,950
05	Machinery and Equipment(Imported)	5,500		5,500
06	Import Duty, Customs, VAT and Insurance(4.5%)		248	248
07	Machinery and Equipment(Local)		25,000	25,000
08	Sub station (275 KVA) with Electrical wiring and Goods		5,200	5,200
09	Diesel Generator(200 KVA)		1,800	1,800
10	Fire Fighting Equipment, Fire Door , Fire Alarm and Security Devices		2,500	2,500
11	Vehicle (One (01) 5-MT Pick Up Van)		4,200	4,200
12	Security Deposit and Advance for Utility		2,000	2,000
13	Office Decoration, Furniture-fixture & Office Equipment		2,500	2,500
14	Machinery erection & installation		2,500	2,500
15	Preliminary expenses & Consultancy fees	-	1,000	1,000
16	Contingency for Civil Construction- 5%		448	448
17	Contingency for Machinery -5%	275	1,250	1,525
TOTAL FIXED COST EXCEPT IDCP		5,775	155,145	160,920
15	Working Capital Requirement			145,666
16	IDCP (12 months Grace Period with 9% rate of Interest)			5,936
TOTAL PROJECT COST				312,522

Means of Finance

Sponsor's Equity	59.01%	94,963
Long Term Loan	40.99%	65,958
Interest During Construction Period(IDCP)		5,936
Working Capital , Equity	30.00%	43,700
Working Capital , Short Term Loan	70.00%	101,966
TOTAL		312,522

In this project, total fixed investment has been estimated BDT 166.86 million including IDCP which would be considered as long-term investment and total variable investment have been estimated BDT 145.67 million which would be considered as short-term investment/working capital.

This working capital includes funded facilities which is LC Facilities and CC Hypo/OD. The debt-equity ratio and fixed and variable costs of this project has been illustrated in the beside table.

Total Project Cost : BDT 312.52 mln

Fixed Cost : BDT 166.86 mln

Variable Cost : BDT 145.67 mln

Debt-Equity Ratio

For Long-Term Loan : 40.99 : 59.01

For Short-Term Loan: 70.00 : 30.00

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1.7 Long-Term Finance Requirement

Balaji Industries Ltd (Paper Sizing Emulsion Manufacturing Project) Debt-Equity Ratio

Fig In Tk. '000'

Sl #	Particulars	Total Project Cost	Contribution		Debt		Equity	
			Financial Institutions	Equity	Imported	Local	Imported	Local
01	Land (Total 29 Decimals owned land where per decimals cost has been estimated BDT 17,50,000.00. In addition, 22 decimals land is leased land from Govt on yearly rental basis.)	50,750	0%	100%	-	-	50,750	50,750
02	Land Development Cost	10,000	0%	100%	-	-	10,000	10,000
03	Project Shed and Building	36,800	70%	30%	25,760	25,760	11,040	11,040
04	Others Civils Construction(Boundary Wall, Security House and Guest House, Main Road and Internal Road, Sewerage and Drainage Line set up and Rain Water Harvesting Plant)	8,950	70%	30%	6,265	6,265	2,685	2,685
05	Machinery and Equipment(Imported)	5,500	95%	5%	5,225	275	-	275
06	Import Duty, Customs, VAT and Insurance(4.5%)	248	100%	0%	248	-	-	-
07	Machinery and Equipment(Local)	25,000	70%	30%	17,500	7,500	7,500	7,500
08	Sub station (275 KVA) with Electrical wiring and Goods	5,200	80%	20%	4,160	1,040	1,040	1,040
09	Diesel Generator(200 KVA)	1,800	80%	20%	1,440	360	360	360
10	Fire Fighting Equipment, Fire Door, Fire Alarm and Security Devices	2,500	80%	20%	2,000	500	500	500
11	Vehicle (One (01) 5-MT Pick Up Van)	4,200	80%	20%	3,360	840	840	840
12	Security Deposit and Advance for Utility	2,000	0%	100%	-	2,000	2,000	2,000
13	Office Decoration, Furniture-fixture & Office Equipment	2,500	0%	100%	-	2,500	2,500	2,500
14	Machinery erection & installation	2,500	0%	100%	-	2,500	2,500	2,500
15	Preliminary expenses & Consultancy fees	1,000	0%	100%	-	1,000	1,000	1,000
16	Contingency for Civil Construction- 5%	448	0%	100%	-	448	448	448
17	Contingency for Machinery-5%	1,525	0%	100%	-	1,525	1,525	1,525
	Total	160,920			5,225	60,733	94,688	94,688
								59.01%
						40.99%		

Long-Term Finance

In this project, BIL will finance BDT 94.96 (59.01% of Project Cost) million as capital investment which will be considered as sponsors equity & BIL is expecting investment from financial institutions amounted to BDT 65.96 mln which is 40.99% as long-term finance which has been illustrated in above table.

Short-Term Finance

For smooth operation of this project, total working capital requirement has been estimated BDT 145.67 million including funded and non-funded facilities for utilizing the production capacity 40% in the first year.

Out of total working capital requirement in first year, BIL is expecting BDT 101.97 mln as funded and non-funded facilities. The details have been illustrated in the following page no.-10

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1.8 Working Capital Requirement

Balaji Industries Ltd (Paper Sizing Emulsion Manufacturing Project) Assessment of Working Capital						
Fig. in Taka '000'						
Particulars	Tied up Period	End of 1st Year	End of 2nd Year	End of 3rd Year	End of 4th Year	End of 5th Year
Capacity Utilization		40%	50%	55%	60%	65%
Current Operating Assets						
Basic Chemicals and Auxiliaries						
Basic Raw Materials, Chemicals and Auxiliaries Cost	120 days / 4 months	139,826	174,782	192,261	209,739	227,217
Total Basic Chemicals and Auxiliaries and Packing Cost		139,826	174,782	192,261	209,739	227,217
Closing Stock/Inventory						
Finished Goods	15 days	18,156	23,043	25,320	27,586	29,854
Work in Process	7 days	8,157	9,103	10,014	10,924	11,834
Advance Salary and Wages	90 days/ 3 months	4,826	5,049	5,290	5,543	5,675
Accounts Receivables	30 days/ 1 month	16,256	26,943	32,895	39,177	46,001
Factory and Admin Overhead Expenses	90 days/ 3 months	5,183	13,050	14,551	15,794	17,036
Total Current Operating Assets		192,404	251,971	280,332	308,763	337,618
Current Operating Liabilities						
Accounts Payable	15 days on Raw Materials Cost	43,696	43,696	43,696	43,696	43,696
Accrued Expenses	30 days on production overhead and Admin Expenses	1,543	3,884	4,331	4,701	5,070
Other Accrued Liabilities	LS	1,500	1,800	2,160	2,592	3,110
Total Current Operating Liabilities		46,738	49,380	50,186	50,988	51,876
Net Working Capital		145,666	202,591	230,145	257,775	285,741
Working Capital Requirement as per year wise						
	%	1st Year	2nd Year	3rd Year	4th Year	5th Year
Short Term Loan from Banks	70.00%	101,966	141,814	161,102	180,442	200,019
Equity Contribution	30.00%	43,700	60,777	69,044	77,332	85,722
Total	100.00%	145,666	202,591	230,145	257,775	285,741

For this project, BIL has assessed the working capital requirement amounted to BDT 145.67 mln as funded and non-funded facilities by utilizing 40% average capacity in the first year in which BIL requires 101.97 mln as funded and non-funded facilities from banks/financial institutions.

The working capital facilities will include LC Facilities and CC Hypo/OD. The working capital matrix has been illustrated in the beside table.

Working Capital Requirement (Including Funded and Non-Funded)	
Grand Total	: BDT 101.97 mln
Non-Funded LC Facilities	: BDT 80.00 mln
Funded CC Hypo/OD	: BDT 21.97 mln

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1.9 Projected Financials

(i) Projected Income Statement

After implementation of this project, the net profit over the next five years would be as follows:

Balaji Industries Ltd					
(Paper Sizing Emulsion Manufacturing Project)					
Projected Income Statement					
Fig. in Taka '000'					
Particulars	1st Year	2nd Year	3rd Year	4th Year	5th Year
Sales	406,391	538,860	598,097	652,952	707,704
Cost of Goods Sold	344,970	455,966	504,131	549,457	594,818
Gross Income	61,421	82,895	93,966	103,495	112,886
Administrative & Marketing Expenses	17,612	20,926	22,663	24,323	25,563
Operating Income	43,809	61,968	71,303	79,172	87,323
Other Income / Expenses					
Return on Investment	-	-	-	-	-
Net Income Before Interest & Taxes	43,809	61,968	71,303	79,172	87,323
Financial Expenses	8,133	10,117	10,096	9,911	9,562
Net Income Before Taxes	35,676	51,852	61,207	69,261	77,762
Provision for VAT and Tax (27.5%)	9,811	14,259	16,832	19,047	21,384
Net Income after Tax	25,865	37,592	44,375	50,214	56,377
Appropriation					
Retained Earnings at beginning of the period	-	18,106	44,420	75,483	110,633
Net Income During The Period	25,865	37,592	44,375	50,214	56,377
Cash Dividend declared(20% each year)	5,173	7,518	8,875	10,043	11,275
Transfer to General Reserve(10% each year)	2,587	3,759	4,438	5,021	5,638
Retained Earnings at End of the period	18,106	44,420	75,483	110,633	150,097
Ratios :					
Gross Income to sales	15.11%	15.38%	15.71%	15.85%	15.95%
Operating Income to sales	10.78%	11.50%	11.92%	12.13%	12.34%
Net Income after Tax to sales	6.36%	6.98%	7.42%	7.69%	7.97%
Debt Service Coverage ratio	2.52	2.84	3.03	3.16	3.31

In this project, gross profit and Net profit outcome show the satisfactory & acceptable trends over the next five (05) years. All the above financial parameters of the operation are completely satisfactory for taking investment decisions by any bank/financial institution.

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(ii) Projected Cash Flow Statement

Balaji Industries Ltd (Paper Sizing Emulsion Manufacturing Project) Projected Cash Flow Statement						
Fig. In Taka '000'						
Particulars	0 Year	1st Year	2nd Year	3rd Year	4th Year	5th Year
A. Cash Flows from Operating Activities						
Net Income after Tax		25,865	37,592	44,375	50,214	56,377
Add : Non cash Expenses						
Depreciation & Amortization		10,414	10,414	10,414	10,414	10,414
Increase in Working Capital		(145,666)	(56,925)	(27,554)	(27,629)	(27,967)
Net Cash Flows from operating Activities	-	(109,386)	(8,919)	27,235	32,999	38,825
B. Cash Flow from Investing Activities						
Acquisition of Fixed assets	(166,856)	-	-	-	-	-
Investment in FDR	-	-	-	-	-	-
Net Cash Flows from Investing Activities	(166,856)	-	-	-	-	-
C. Cash Flows From Financing Activities						
Shareholders Equity	94,963					
Shareholders Equity-Working Capital		43,700	17,078	8,266	8,289	8,390
Long Term Loan received from Bank (Including IDCP)	71,894					
Short Term Loan (Working Capital)		101,966	39,848	19,288	19,340	19,577
Re-payment of Long Term Loan			(9,482)	(10,365)	(11,329)	(12,384)
Dividend paid		(5,173)	(7,518)	(8,875)	(10,043)	(11,275)
Net Cash Flows from Financing Activities	166,856	140,493	39,925	8,315	6,257	4,307
Increase / Decrease of Cash & Cash Equivalent during the period	-	31,106	31,006	35,550	39,256	43,132
Cash & Cash Equivalent at the beginning of the period	-	-	31,106	62,113	97,662	136,919
Cash & Cash Equivalent at the End of the period	-	31,106	62,113	97,662	136,919	180,051

BIL has found out that net cash position is showing positive shape over the next five years by considering all aspects of the project. The project will be able to build up an excellent cash reserve over the period.

(iii) Debt-Payment Obligation

The project will have sufficient liquidity to meet all its obligations from its operations. Monthly debt payment obligation can be easily met up after implementation of this project due to sufficient cash flow and sound net income position. The financial expenses and debt payment obligation has been illustrated below:

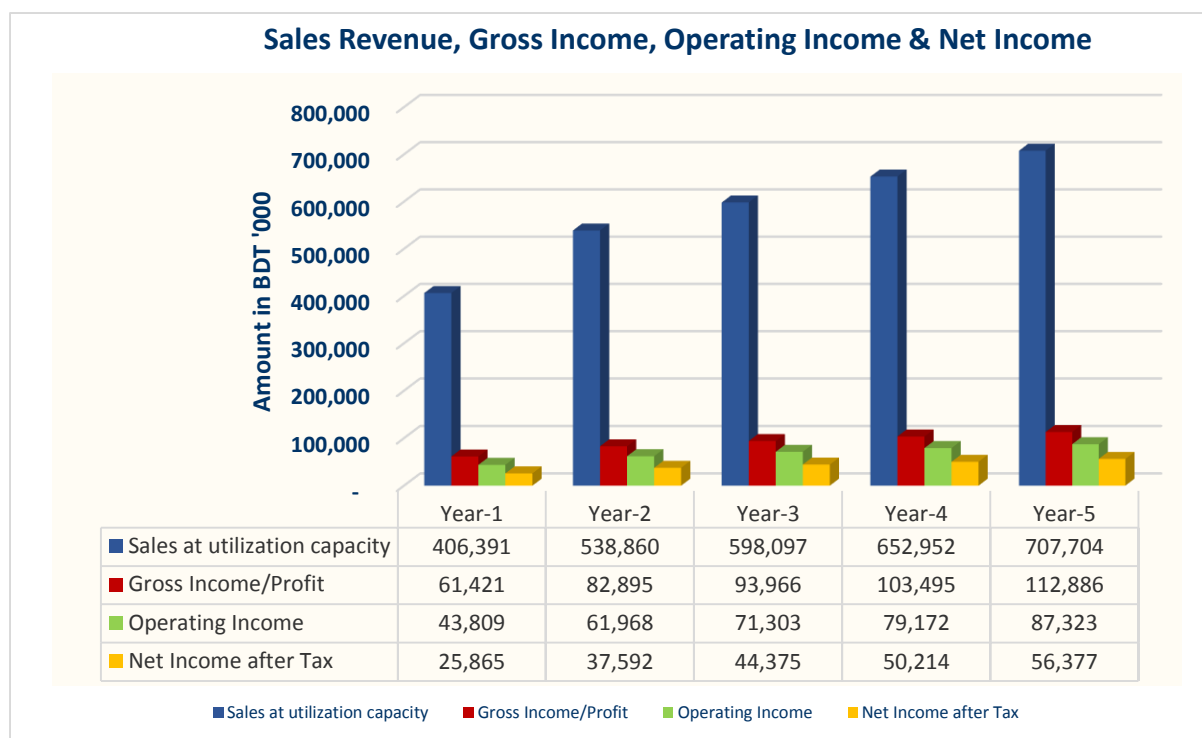
Particulars	1st Year	2nd Year	3rd Year	4th Year	5th Year
Total Debt Payment Obligation(Yearly)	17,615	20,482	21,426	22,295	23,099
Monthly Debt Obligation(Interest plus Principals)	1,468	1,707	1,785	1,858	1,925

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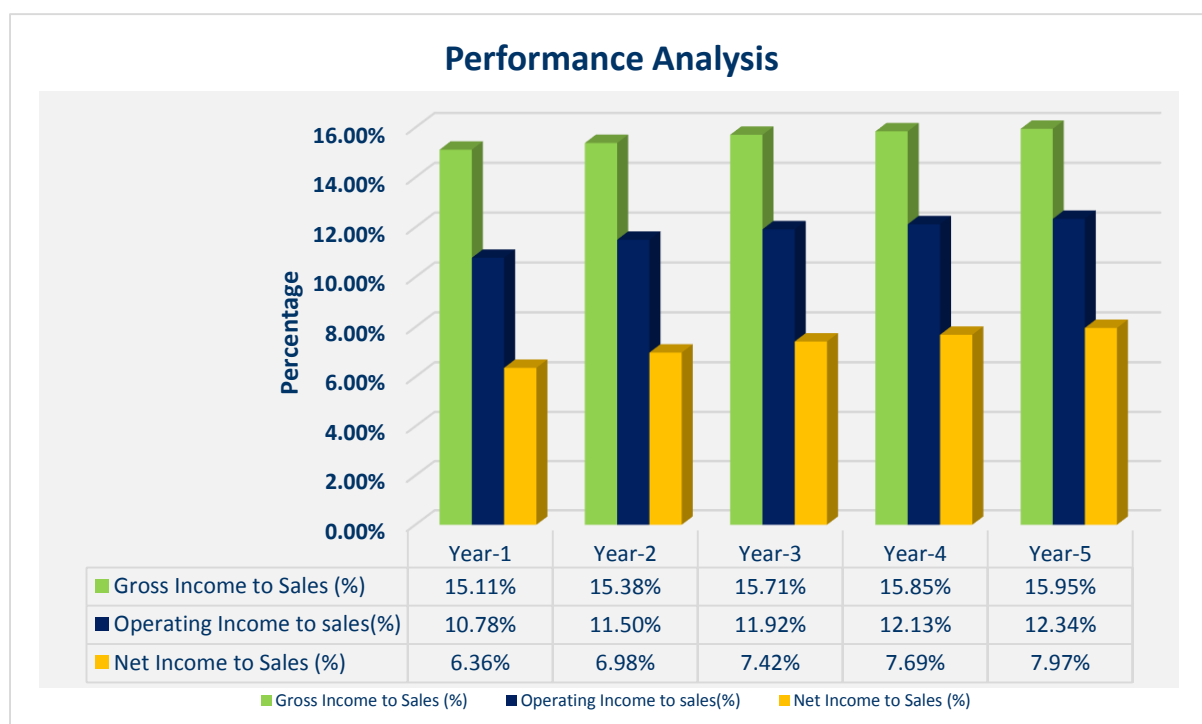


1.10 Projected Financial Performance of the Project

(i) Sales Revenue, Gross Income, Operating Income & Net Income



(ii) Performance Analysis



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(iii) Summary of Projected Financials

Projected Financial Information

Fig. in Taka '000'

Particulars	1st Year	2nd Year	3rd Year	4th Year	5th Year
Sales Revenue	406,391	538,860	598,097	652,952	707,704
Cost of Goods Sold	344,970	455,966	504,131	549,457	594,818
Gross Income	61,421	82,895	93,966	103,495	112,886
Operating Expenses	17,612	20,926	22,663	24,323	25,563
Operating Income	43,809	61,968	71,303	79,172	87,323
Net Income Before Tax	35,676	51,852	61,207	69,261	77,762
Net Income After Tax	25,865	37,592	44,375	50,214	56,377
Earnings Per Share (EPS)	259	376	444	502	564
Total Assets	379,952	460,111	513,607	570,880	632,453
Shareholders' Equity	159,354	206,506	250,272	298,732	352,224
No. of Ordinary Shares	100,000	100,000	100,000	100,000	100,000
Face Value of the Shares	100	100	100	100	100
Net Asset Value (NAV)	1,594	2,065	2,503	2,987	3,522

Projected Key Financials

Particulars	1st Year	2nd Year	3rd Year	4th Year	5th Year
Gross Income To Sales (%)	15.11%	15.38%	15.71%	15.85%	15.95%
Operating Income To Sales (%)	10.78%	11.50%	11.92%	12.13%	12.34%
Net Income To Sales (%)	6.36%	6.98%	7.42%	7.69%	7.97%
Debt Service Coverage Ratio (Times)	2.52	2.84	3.03	3.16	3.31
Return on investment (ROI)	8.95%	10.37%	10.61%	10.53%	10.43%
Return on Equity (ROE)	16.23%	18.20%	17.73%	16.81%	16.01%
Break Even % on Utilization capacity	39.57%	32.28%	29.09%	26.94%	24.97%
Break Even % on Attainable capacity	15.83%	16.14%	16.00%	16.17%	16.23%
Payback Period			3.46		
Discounted Payback Period			4.18		
Internal Rate of Return (IRR)			32.15%		
Net Present Value (NPV) (Fig in BDT '000)			279317.57		

Feasibility Report and Business Plan of Balaji Industries Ltd



(iv) Projected Key Financials (Five Years Average)

Key Financials (Five Years Average)	
Yearly Turnover BDT 580.80 mln Net Profit Target BDT 42.88 mln	Gross Profit (GP) : 15.60% Operating Profit (OP) : 11.73% Net Profit (NI) : 7.28% IRR : 32.15% ROI : 10.18% ROE : 17.00% Payback period : 3.46 years Discounted Payback Period : 4.18 years Debt Service Coverage Ratio : 2.97 Times Break Even (BEP) : 30.57% NPV : BDT 279.32 mln

(v) Sensitivity Analysis (Five Years Average)

Particulars	If Rate of Interest is 9% and Other things remain constant	Rate of Interest is 9% and		
		If 5% decrease of sales price	If 5% increase of Raw Materials Cost	If 5% decrease of sales price and 5% increase of Raw Materials Cost
Sales Revenue	580,801	551,761	580,801	551,761
Net Income (BDT '000)	42,885	21,831	27,115	6,061
Gross Profit to Sales	15.60%	11.16%	11.84%	7.20%
Operating Income to sales	11.73%	7.09%	7.97%	3.13%
Net Income to Sales	7.28%	3.85%	4.56%	0.98%
Debt Service Coverage Ratio (Times)	2.97	1.98	2.22	1.23
Internal Rate of Return (IRR)	32.15%	19.80%	23.21%	9.42%
Return on Investment (ROI)	10.18%	6.07%	7.09%	2.98%
Return on Equity (ROE)	17.00%	8.48%	10.58%	2.07%
Payback Period (PB)	3.46	5.13	4.57	8.13
Discounted Payback Period (DPB)	4.18	6.70	5.80	9.92
Break Even % (Utilization Capacity)	30.57%	47.42%	43.17%	87.18%
Net Present Value (NPV) (BDT in mln)	279	120.13	163.49	4.31

Feasibility Report and Business Plan of Balaji Industries Ltd



1.11 Investment Proposal for This Project to Banks/Financial Institutions

Balaji Industries Ltd is inviting financial institutions for investing this commercially viable project for implementation of this project with the below features:

Total Investment Requirement : BDT 167.92 mln

A. For Long-Term Financing	: BDT 65.96 mln
Project Shed and Building	: BDT 25.76 mln
Others Civils Construction	: BDT 6.27 mln
Import Duty, Customs, VAT and Insurance	: BDT 0.25 mln
Machinery and Equipment (Imported)	: BDT 5.23 mln
Machinery and Equipment (Local)	: BDT 17.50 mln
Substation with Electrical wiring & Goods	: BDT 4.16 mln
Diesel Generator	: BDT 1.44 mln
Fire Fighting Equipment, Fire Door, Fire Alarm and Security Devices	: BDT 2.00 mln
Vehicles	: BDT 3.36 mln
B. For Short-Term Loan/Working Capital	: BDT 101.97 mln
1. LC facilities (Sight/DP/UPAS)	: BDT 80.00 mln
i. Acceptance (ABP) [Inner of LC Sight/DP/UPAS]	: BDT 80.00 mln
ii. UPAS discounted through OBU, LTR [inner of L/C (Sight/DP/UPAS)	: BDT 80.00 mln
iii. LTR [inner of L/C(Sight/DP/UPAS)	: BDT 60 .00 ml
iv. Time Loan-1 (Duty/VAT and local procurement of raw materials) [inner of LTR]	: BDT 20.00 mln
2. CC Hypo/Overdraft/Demand Loan	: BDT 21.97 mln

The above finance will be for:

1. Tenure	: 6 years for long term loan
2. Short Term loan	: Revolving basis
3. Moratorium Period	: 12 months for long term loan
4. Proposed Rate of interest	: 9.00%
5. Equal Monthly Instalments (EMI)	: BDT 0.94 mln
6. Equal Quarterly Instalments (EQI)	: BDT 3.50 mln
7. Debt-Equity Ratio	
For Long Term	: 40.99 : 59.01
For short Term	: 70.00 : 30.00

Feasibility Report and Business Plan of Balaji Industries Ltd



1.12 Use of Fund

Long-Term Financing: Project Loan/Term Loan would be utilized for Project Shed and Building, Others Civils Construction, Machinery Imported & Local Machinery and Equipment, Import Duty, Customs, VAT and Insurance, Substation with Electrical wiring and Goods, Diesel Generator, Fire Fighting Equipment, Fire Door, Fire Alarm and Security Devices and Vehicles purposes.

Short-Term Financing: Short-Term Loan/Working Capital would be utilized for Raw Materials, salaries and wages payments and other operational & production expenses.

1.13 Benefit of the Society, Government & Investors

This project will directly contribute to the GDP BDT 68.43 mln. In addition, 57 jobs will be created from this project. Investors including financial institution will be benefited due to huge potentials of this project. As this project is showing satisfactory & acceptable trends of Gross profit and Net profit over the next five (05) years, investors will get outstanding outcome from this project.



Conclusion

The Business Plan of the project has been examined and analyzed from the view point of marketing, technical, financial and management aspects and found to be worthwhile, promising and desirable for investment. As per market study and analysis, there is huge business potential in the Paper Sizing Emulsion Industry which can easily consume the whole capacity of the project.

On the basis of financial analysis, it can be undoubtedly said that the project is financially viable, technically possible and demandable in present market scenario of the country as well as the world. The analyzed ratio shows satisfactory and acceptable results.

The project will have sufficient liquidity to meet all its obligations from its operations. The break-even analysis shows sound position. The IRR indicates comfortable rate of return. The payback period is 3.46 years, Discounted Payback period is 4.18 years and Internal Rate of Return is 32.15% which indicate a good financial performance in terms of early pay back and cost of borrowing perspective scenario. The project will contribute much to the national economy. After implementation of the project, it will generate employment of 57 people in different categories. All the above parameters of investment feasibility criteria indicate that it will be able to generate sufficient revenue from its operation to pay back its financial obligations and annual operational expenses.

The Paper Sizing Emulsion by nature is less prone to negative impacts of economic cycles. Due to huge potentials during the past few years, the sector will enjoy significant growth in the near term.


In the view of the above, it reveals that the project is technically feasible, financially rewarding and economically & commercially viable and may, therefore, be considered suitable for investment.





Feasibility Report and **BUSINESS PLAN** of Balaji Industries Ltd



PROJECT LOCATION

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