



Feasibility Report and BUSINESS PLAN of Nakshi Green Agro Limited

PROJECT COST
USD 29.70 MILLION



INVESTMENT PROPOSAL

Total Loan Required	: USD 21.27 mln
Long-Term Loan	: USD 17.72 mln
Short-Term Loan	: USD 3.55 mln
Funded Facilities	: USD 1.25 mln
Non-Funded Facilities	: USD 2.30 mln
Debt-Equity Ratio	
Long-Term Finance	: 76.36 : 23.64
Short-Term Finance	: 70.00 : 30.00
Proposed Interest Rate	: 4.00%
Loan Tenure	: 10 years
Moratorium Period	: 24 months
Equal Monthly Instalments (EMI)	: USD 0.19 mln
Equal Quarterly Instalments (EQI)	: USD 0.58 mln

PROJECTED KEY FINANCIALS (Five Years Average)

Yearly Sales Target	: USD 27.62 mln
Net Profit Target	: USD 6.62 mln
Gross Profit (GP)	: 39.03%
Operating Profit (OP)	: 35.88%
Net Profit (NI)	: 23.88%

Key Decision Points

IRR	: 34.70%
ROI	: 16.63%
ROE	: 32.55%
Payback period	: 2.95 years
Discounted Payback Period	: 3.18 years
Debt Service Coverage Ratio	: 3.89 Times
Break Even (BEP)	: 28.98%
NPV	: USD 11.57 mln





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**SouthAsia Research
& Corporate Advisory Ltd**

37, Bir Uttam C.R.Dutta Road
Nahar Plaza (Lift-9), Hatirpool
Shahbagh Thana
Dhaka-1000, Bangladesh

+88 01711051276

+88 01071763536

+88 01071147730

Whatsapp:

+8801711051276

+88 01071763536

+880 1711 051 276
md@srcabd.com

www.srcabd.com

Feasibility Report and Business Plan of Nakshi Green Agro Limited

If you have any query about this document, you may consult with Nakshi Green Agro Limited at +8801716977292, +8801779799436 or SouthAsia Research & Corporate Advisory Ltd at +8801711 051 276

Issue Date: October 25, 2023

Expiry Date: April 25, 2024

DISCLAIMER

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Feasibility Report and Business Plan of Nakshi Green Agro Limited


This Feasibility Report and Business Plan has been prepared on the basis of several assumptions which has been shown in Page No. 36 Before reading this document, review the assumptions.

AVAILABILITY OF THE REPORT

Nakshi Green Agro Limited &
SouthAsia Research & Corporate Advisory Ltd

Feasibility Report and Business Plan of Nakshi Green Agro Limited



Corporate Directory	
Name of the Company	: Nakshi Green Agro Limited
Nature of the Project	: Agro Product Manufacturing and Processing Project
Company Logo	: 
Legal Position	: Private Limited Company
Incorporation Certificate No.	: C-162285/2020
Trade License No.	: TRAD/DSCC/013178/2020; Issuing Date: 26.07.2023
Top Management	
Syeda Fahmina Akter	: Chairman
Md. Salauddin Mahmud Khan Uzzal	: Managing Director
Md. Salauddin Khalid Khan	: Director
Anowar Shamim	: Director
Md. Zakir Hussain	: Director
Email	: smkhanuzzal@yahoo.com nakshigreenagro@gmail.com
Mobile No	: +8801716977292 +8801779799436
Corporate Address	: House # 42/A (4th Floor), Road# 9/A, Dhanmondi, Dhaka-1209, Bangladesh
Project Location	: Meduari, Varadoba, Bhaluka, Mymensingh, Bangladesh

Feasibility Report and Business Plan of Nakshi Green Agro Limited



PROJECT SNAPSHOT

PROJECT INFORMATION

Name of the Company	: Nakshi Green Agro Limited
Project Location	: Meduari, Varadoba, Bhaluka, Mymensingh, Bangladesh
Nature of the Project	: Agro Product Manufacturing and Processing Project
Project Status	: Proposed
Corporate Address	: House # 42/A (4th Floor), Road# 9/A, Dhanmondi, Dhaka-1209, Bangladesh
Key Contact Person	: Md. Salauddin Mahmud Khan Uzzal Managing Director
Contact No	: +8801716977292 +8801779799436
Email	: smkhanuzzal@yahoo.com nakshigreenagro@gmail.com

BRIEF MANAGEMENT INFORMATION

Syeda Fahmina Akter	: Chairman
Md. Salauddin Mahmud Khan Uzzal	: Managing Director
Md. Salauddin Khalid Khan	: Director
Anowar Shamim	: Director
Md. Zakir Hussain	: Director

KEY FACTORS OF THE PROJECT

Attainable Production

Capacity/Day	
Corn Starch	: 60,000 kg
Liquid Glucose	: 50,000 kg
Dextrose	: 25,000 kg
Corn Germ	: 13,000 kg
Corn Gluten Meal (CGM)	: 11,000 kg
Corn Fiber	: 24,000 kg
Corn Steep Liquor (CSL)	: 7,000 kg

Total Project Cost	: USD 29.70 mln
Fixed Cost	: USD 24.63 mln
Variable Cost	: USD 5.07 mln

Total Investment Required	: USD 21.27 mln
Long-Term Loan	: USD 17.72 mln
Short-Term Loan	: USD 3.55 mln

Debt-Equity Ratio	
Long-Term Loan	: 76.36 : 23.64
Short-Term Loan	: 70.00 : 30.00

Loan Repayment

Equal Quarterly Instalment	: USD 0.58 mln
Equal Monthly Instalment	: USD 0.19 mln

Key Financials

(Based on 5 Year Average)

Yearly Sales Target	: USD 27.62 mln
Net Profit Target	: USD 6.62 mln
Gross Profit (GP)	: 39.03%
Operating Profit (OP)	: 35.88%
Net Profit (NI)	: 23.88%
IRR	: 34.70%
ROI	: 16.63%
ROE	: 32.55%
Payback period	: 2.95 years
Discounted Payback Period	: 3.18 years
Debt Service Coverage Ratio	: 3.89 Times
Break Even (BEP)	: 28.98%
NPV	: USD 11.57 mln

Feasibility Report and Business Plan of Nakshi Green Agro Limited



Invitation for investment

Nakshi Green Agro Limited is inviting financial institutions for investing this commercially viable project for implementation of this project with the below features:

Total Investment Requirement : USD 21.27 mln

A. For Long-Term Financing	: USD 17.72 mln
Project Shed and Building	: USD 2.03 mln
Others Civils Construction	: USD 0.06 mln
Imported Machinery & Equipment	: USD 13.99 mln
Import Duty, Customs, VAT and Insurance	: USD 0.70 mln
Local Machinery & Equipment	: USD 0.24 mln
Sub Station (3,500 KVA) with all Accessories	: USD 0.17 mln
Fire Fighting, Fire Door, Fire Alarm and others	: USD 0.03 mln
Security Devices, CC Camera, CC TV, and Compliance Equipment	: USD 0.02 mln
Vehicles	: USD 0.47 mln

B. For Short-Term Loan/Working Capital : USD 3.55 mln

Non-Funded	
LC Facilities	: USD 2.20 mln
Bank Guarantee	: USD 0.10 mln
Funded	
LTR Facilities	: USD 0.50 mln
CC Hypo/OD	: USD 0.75 mln

The above finance will be for:

1.Tenure	: 10 years for long term loan
2. Short Term loan	: Revolving basis
3.Moratorium Period	: 24 months for long term loan
4.Proposed Rate of interest	: 4.00%
5.Equal Monthly Instalments (EMI)	: USD 0.58 mln
6.Equal Quarterly Instalments (EQI)	: USD 0.19 mln
7.Debt-Equity Ratio	
For Long Term	: 76.36 : 23.64
For short Term	: 70.00 : 30.00

Feasibility Report and Business Plan of Nakshi Green Agro Limited



ACRONYMS

IMF	: International Monetary Fund
GATT	: Generalized Agreement on Tariffs and Taxes
DOE	: Department of Environment
EU	: European Union
GDP	: Gross Domestic Product
GOB	: Government of Bangladesh
ILO	: International Labor Organization
ITC	: International Trade Center
LDC	: Least Developed Countries
MOC	: Ministry of Commerce
MOE	: Ministry of Education
MOI	: Ministry of Industry
MSME	: Micro Small & Medium Enterprises
PPP	: Public Private Partnership
QC	: Quality Control
R&D	: Research & Development
SME	: Small & Medium Enterprise
SOP	: Standard Operating Procedure
SWOT	: Strength Weakness Opportunity Threat
NPV	: Net Present Value
IRR	: Internal Rate of Return
L/C	: Letter of Credit
EMI	: Equal Monthly Installment
EQI	: Equal Quarterly Instalment
PB	: Payback period
ROI	: Return on Investment
ROE	: Return on Equity
IDCP	: Interest during Construction Period
BEP	: Break Even Point
UPAS L/C	: Usance Payable at Sight (UPAS) Letter of Credit (L/C)
YOY	: Year Over Year
NGA	: Nakshi Green Agro Limited

Feasibility Report and Business Plan of Nakshi Green Agro Limited



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1. Executive Summary



Feasibility Report and Business Plan of Nakshi Green Agro Limited



1.1 Review and Outlook of the Products

About Corn Starch: Corn starch, maize starch, or cornflour is the starch derived from corn (maize) grain. The starch is obtained from the endosperm of the kernel. Corn starch is a common food ingredient, often used to thicken sauces or soups, and to make corn syrup and other sugars. Corn starch is versatile, easily modified, and finds many uses in industry such as adhesives, in paper products, as an anti-sticking agent, and textile manufacturing. It has medical uses as well, such as to supply glucose for people with glycogen storage disease.

About Liquid Glucose: Liquid Glucose is the syrup form of glucose which is a sugar and is one of the derivatives of corn starch or maize starch. Also known as glucose syrup or confectioner's syrup, this derivative is made from the hydrolysis of starch. Liquid glucose which consists of more than 90% glucose is used in industrial fermentation but it is important to know that the syrups used in confectionery may consist of different amounts of maltose, glucose, and higher oligosaccharides and may have about 10-43% of glucose content.

About Dextrose: Dextrose is a type of sugar that usually comes from corn or wheat. It is almost identical to glucose, which is the sugar found in the bloodstream. For that reason, it can be quickly used as a source of energy by the human body. Dextrose is often used in foods as an artificial sweetener or a preservative.

About Corn Germ: Corn germ, popularly known as maize germ is the germ which makes up for 6-8% of the total weight of the corn grain. It also consists of 50% of the total oil quantity present in corn. It plays the role of the primary product that is used to make corn oil and also forms an important ingredient of animal food or fodder. Basically, maize germ is a derivative or by-product of the process of oil extraction from maize germs which are obtained from maize processing.

About Corn Gluten Meal (CGM): Corn gluten meal (often simply called CGM) is a byproduct of corn (maize) processing that has historically been used as an animal feed (take note that the expression gluten here is inexact; there is no true gluten in corn, but simply corn proteins).

The expression "corn gluten" is colloquial jargon that describes corn proteins that are neither gliadin nor glutenin. Only wheat, barley, rye and oat contain true gluten which is formed by the interaction of gliadin and glutenin proteins).

CGM is used as an inexpensive protein source for pet foods. However, some dogs and cats may develop an allergy to corn after eating CGM for an extended amount of time. It is an especially good source of the amino acid cysteine, but must be balanced with other proteins for lysine. It is also used for livestock and poultry feeds.

Corn Steep Liquor (CSL): It is a viscous liquid mixture consisting entirely of water-soluble components of corn steeped in water. CSL is a kind of byproduct produced in the processing course of corn starch. It is widely used in liquid form in pig and ruminant feeds and as a binding or pelleting agent in other feeds.

Due to huge market potential and sizable market, Nakshi Green Agro Limited (NGA) has taken initiative to set up an Agro Product Manufacturing and Processing Project at Meduari, Varadoba, Bhaluka, Mymensingh, Bangladesh with latest technology. As per market analysis, this project will be technically feasible, financially rewarding and economically & commercially viable.

Feasibility Report and Business Plan of Nakshi Green Agro Limited



1.2 About Nakshi Green Agro Limited

Nakshi Green Agro Limited (NGA) was incorporated as a Private Limited Company on 12th August, 2020 bearing Incorporation No.: C-162285/2020. The Authorized Share Capital of the Company is USD 50,000,000.00 (Five Crore) divided into 500,000.00 (Five Lakhs) Ordinary Shares of BDT 100.00 (One Hundred) each.

NGA is going to set up an Automatic Agro Product Manufacturing and Processing Plant with an objective of producing export quality Corn Starch, Liquid Glucose, Dextrose, Corn Gluten Meal (CGM), Corn Germ, Corn Fiber, Corn Steep Liquor (CSL) to meet the demand of domestic & international market.

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

- Incorporation Certificate: C-162285/2020
- Trade License: TRAD/DSCC/013178/2020

1.3 List of Directors & Shareholding Structure of NGA

Name of Directors	Status	No. of Shares	% of Shares
Syeda Fahmina Akter	Chairman	30,000	30.00%
Md. Salauddin Mahmud Khan Uzzal	Managing Director	45,000	45.00%
Md. Salauddin Khalid Khan	Director	10,000	10.00%
Anowar Shamim	Director	10,000	10.00%
Md. Zakir Hussain	Director	5,000	5.00%
Total		100,000	100.00%

Feasibility Report and Business Plan of Nakshi Green Agro Limited



1.4 About the Project

(i) Features of the Project and Its Objectives

Name of the Company	: Nakshi Green Agro Limited
Nature of the Project	: To manufacture Corn Starch, Liquid Glucose, Dextrose, Corn Germ, Corn Gluten Meal (CGM), Corn Fiber and Corn Steep Liquor (CSL).
Corporate Office	: House # 42/A (4th Floor), Road# 9/A, Dhanmondi, Dhaka-1209, Bangladesh.
Project Location	: Meduari, Varadoba, Bhaluka, Mymensingh, Bangladesh.
Legal Formation of the Project	: Private Limited
Life of The Project	: 30 years
Product Mix	: Agro Product Manufacturing and Processing Plant
Total Project Cost	: USD 29.70 mln
	Fixed Cost : USD 24.63 mln
	Variable Cost : USD 5.07 mln
Total Investment Required	: USD 21.27 mln
	Long-Term Loan : USD 17.72 mln
	Short-Term Loan : USD 3.55 mln
Debt-Equity Ratio	
	Long-Term Loan : 76.36 : 23.64
	Short-Term Loan : 70.00 : 30.00
Loan Repayment	
	Equal Quarterly Instalment : USD 0.58 mln
	Equal Monthly Instalment : USD 0.19 mln
Attainable Production Capacity/Day	
	Corn Starch : 60,000 kg
	Liquid Glucose : 50,000 kg
	Dextrose : 25,000 kg
	Corn Germ : 13,000 kg
	Corn Gluten Meal (CGM) : 11,000 kg
	Corn Fiber : 24,000 kg
	Corn Steep Liquor (CSL) : 7,000 kg
Average Sales Price/kg	
	Corn Starch : USD 0.63
	Liquid Glucose : USD 0.78
	Dextrose : USD 0.98
	Corn Germ : USD 0.49
	Corn Gluten Meal (CGM) : USD 0.74
	Corn Fiber : USD 0.35
	Corn Steep Liquor (CSL) : USD 0.11
Basic Raw Materials Cost/kg	
	Different Varieties of Corn : USD 0.22
	Sulfur Dioxide (SO ₂) : USD 0.43
	Caustic Soda : USD 0.57
Average Sales Revenue (5 Years)	: USD 27.62 mln
Average Net Profit (5 Years)	: USD 6.62 mln
Key Financial Ratios	
	Gross Income : 39.03%
	Operating Income : 35.88%
	Net Income : 23.88%
GDP Contribution	: USD 11.57 mln

Feasibility Report and Business Plan of Nakshi Green Agro Limited



(ii) Project Plan

Nakshi Green Agro Limited (NGA) is going to start an Agro Product Manufacturing and Processing Project where Corn Starch, Liquid Glucose, Dextrose, Corn Germ, Corn Gluten Meal (CGM), Corn Fiber and Corn Steep Liquor (CSL) will be manufactured.

The attainable production capacity will be 190,000 kg per day, 4,750,000 kg per month and 57,000,000 per year. Product loss/wastage has been considered 5.00% for this project. The factory will be operated for twenty (20) hours per day.

The attainable production capacity and product matrix have been illustrated below:

Type of Products	Product Category	Production Mix (%)	Total Production Capacity/ Per day 20 hours /KG			
			Unit	Daily	Monthly	Yearly
Corn Starch	Main Product	30.00%	KG	60,000	1,500,000	18,000,000
Liquid Glucose	Main Product	25.00%	KG	50,000	1,250,000	15,000,000
Dextrose	Main Product	12.50%	KG	25,000	625,000	7,500,000
Corn Germ	By Product	6.50%	KG	13,000	325,000	3,900,000
Corn Gluten Meal (CGM)	By Product	5.50%	KG	11,000	275,000	3,300,000
Corn Fiber	By Product	12.00%	KG	24,000	600,000	7,200,000
Corn Steep Liquor (CSL)	By Product	3.50%	KG	7,000	175,000	2,100,000
	Grand Total	95%		190,000	4,750,000	57,000,000

The project will be located at Meduari, Varadoba, Bhaluka, Mymensingh, Bangladesh where total land size of this project is 339.00 decimals and 210,701 sft civil constructions will be constructed.

Feasibility Report and Business Plan of Nakshi Green Agro Limited



1.5 Capacity Utilization Plan of the Project

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

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

SAMPLE RE

Feasibility Report and Business Plan of Nakshi Green Agro Limited



1.6 Estimated Project Cost

For this project, the total cost has been estimated USD 29.70 million including long-term & short-term investment. The summary of the project cost has illustrated below:

Nakshi Green Agro Limited Agro Product Manufacturing and Processing Plant Estimated Project Cost Fig. in USD				
SL #	Particulars	Import	Cost Local	Total
01	Land and Land Development Cost	\$ -	\$ 1,031,739	\$ 1,031,739
02	Project Shed and Building		\$ 3,385,915	\$ 3,385,915
03	Others Civils Construction(Water reserver, Internal Road, Main Gate, Boundary wall and Security Room)		\$ 84,918	\$ 84,918
04	Machinery and Equipment(Imported)	\$ 15,544,400		\$ 15,544,400
05	Import Duty, Customs, VAT and Insurance(4.5%)		\$ 699,498	\$ 699,498
06	Machinery and Equipment(Local)		\$ 347,826	\$ 347,826
07	Sub Station(3500 KVA) with all Accessories		\$ 217,391	\$ 217,391
08	Fire Fighting, Fire Door , Fire Alarm and others		\$ 43,478	\$ 43,478
09	Security Devices, CC Camera, CC TV, and Compliance Equipment		\$ 30,435	\$ 30,435
10	Vehicle (Sixteen (15)- 15-MT Trucks Capacity)		\$ 584,348	\$ 584,348
11	Security Deposit and advance for Utility		\$ 43,478	\$ 43,478
12	Office Decoration, Furniture-fixture & Office Equipment		\$ 60,870	\$ 60,870
13	Machinery erection & installation		\$ 86,957	\$ 86,957
14	Preliminary expenses & Consultancy fees	\$ -	\$ 30,435	\$ 30,435
15	Contingency for Civil Construction- 5%		\$ 173,542	\$ 173,542
16	Contingency for Machinery -5%	\$ 777,220	\$ 70,087	\$ 847,307
TOTAL FIXED COST EXCEPT IDCP		\$16,321,620	\$ 6,890,916	\$ 23,212,536
17	Working Capital Requirement			\$ 5,069,035
18	IDCP (24 months Grace Period with 4% rate of interest)			\$ 1,417,956
TOTAL PROJECT COST				\$ 29,699,527

Means of Finance			Fig. in USD
	Sponsor's Equity	23.64%	\$ 5,488,086
	Long Term Loan	76.36%	\$ 17,724,450
	Interest During Construction Period(IDCP)		\$ 1,417,956
	Working Capital , Equity	30.00%	\$ 1,520,710
	Working Capital , Short Term Loan	70.00%	\$ 3,548,324
TOTAL			\$ 29,699,527

In this project, total fixed investment has been estimated USD 24.63 million including IDCP which would be considered as long-term investment and total variable investment have been estimated USD 5.07 million which would be considered as short-term investment/working capital. This working capital includes funded facilities which is LC Facilities, Bank Guarantee, LTR 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 : USD 29.70 mln

Fixed Cost : USD 24.63 mln
Variable Cost : USD 5.07 mln

Debt-Equity Ratio

For Long-Term Loan : 76.36 : 23.64
For Short-Term Loan: 70.00 : 30.00

Feasibility Report and Business Plan of Nakshi Green Agro Limited

1.7 Long-Term Finance Requirement

Nakshi Green Agro Limited Agro Product Manufacturing and Processing Plant Debt-Equity Ratio

Fig in USD

Sl #	Particulars	Total Project Cost	Contribution		Debt		Equity		
			Financial Institutions	Equity	Imported	Local	Total	Imported	Local
01	Land and Land Development Cost	\$ 1,031,739	0%	100%		\$ -	\$ -		\$ 1,031,739
02	Project Shed and Building	\$ 3,385,915	60%	40%		\$ 2,031,549	\$ 2,031,549		\$ 1,354,366
03	Others Civils Construction(Water reserver, Internal Road, Main Gate, Boundary wall and Security Room)	\$ 84,918	70%	30%		\$ 59,443	\$ 59,443		\$ 25,475
04	Machinery and Equipment(Imported)	\$ 15,544,400	90%	10%	\$ 13,989,960		\$ 13,989,960	\$ 1,554,440	\$ -
05	Import Duty, Customs, VAT and Insurance(4.5%)	\$ 699,498	100%	0%		\$ 699,498	\$ 699,498		\$ -
06	Machinery and Equipment(Local)	\$ 347,826	70%	30%		\$ 243,478	\$ 243,478		\$ 104,348
07	Sub Station(3500 KVA) with all Accessories	\$ 217,391	80%	20%		\$ 173,913	\$ 173,913		\$ 43,478
08	Fire Fighting, Fire Door , Fire Alarm and others	\$ 43,478	80%	20%		\$ 34,783	\$ 34,783		\$ 8,696
09	Security Devices, CC Camera, OC TV, and Compliance Equipment	\$ 30,435	80%	20%		\$ 24,348	\$ 24,348		\$ 6,087
10	Vehicle (Sixteen (15)- 15-MT Trucks Capacity)	\$ 584,348	80%	20%		\$ 467,478	\$ 467,478		\$ 116,870
11	Security Deposit and advance for Utility	\$ 43,478	0%	100%		\$ -	\$ -		\$ 43,478
12	Office Decoration, Furniture-fixture & Office Equipment	\$ 60,870	0%	100%		\$ -	\$ -		\$ 60,870
13	Machinery erection & installation	\$ 86,957	0%	100%		\$ -	\$ -		\$ 86,957
	Preliminary expenses & Consultancy fees	\$ 30,435	0%	100%		\$ -	\$ -		\$ 30,435
	Contingency for Civil Construction- 5%	\$ 173,542	0%	100%		\$ -	\$ -		\$ 173,542
	Contingency for Machinery-5%	\$ 847,307	0%	100%		\$ -	\$ -		\$ 847,307
	Total	\$ 23,212,536			\$13,989,960	\$ 3,734,490	\$ 17,724,450	\$ 1,554,440	\$ 3,933,646
	Debt -Equity Ratio (%)						76.36%		23.64%

Long-Term Finance

In this project, NGA will finance USD 5.49 (23.64% of Project Cost) million as capital investment which will be considered as sponsors equity & NGA is expecting investment from financial institutions amounted to USD 17.72 mln which is 76.36% 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 USD 5.07 million including funded and non-funded facilities for utilizing the production capacity 65% in the first year.

Out of total working capital requirement in first year, NGA is expecting USD 3.55 mln as funded and non-funded facilities. The details have been illustrated in the following page no.-9

Feasibility Report and Business Plan of Nakshi Green Agro Limited

1.8 Working Capital Requirement

Nakshi Green Agro Limited Agro Product Manufacturing and Processing Plant Assessment of Working Capital						
Fig. In USD						
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		65%	70%	75%	80%	85%
Current Operating Assets						
Basic Chemicals and Auxiliaries						
Basic Raw Materials, Chemicals and Auxiliaries Cost	4 months	\$ 2,936,280	\$ 3,162,147	\$ 3,388,015	\$ 3,613,883	\$ 3,839,750
Total Basic Chemicals and Auxiliaries and Packing Cost		\$ 2,936,280	\$ 3,162,147	\$ 3,388,015	\$ 3,613,883	\$ 3,839,750
Closing Stock/Inventory						
Finished Goods	15 days	\$ 738,816	\$ 802,520	\$ 854,647	\$ 903,510	\$ 952,565
Work in Process	7 days	\$ 205,540	\$ 197,634	\$ 211,751	\$ 225,868	\$ 239,984
Advance Salary and Wages	3 months	\$ 188,133	\$ 196,816	\$ 206,222	\$ 216,063	\$ 223,437
Accounts Receivables	1 month	\$ 1,223,666	\$ 1,519,270	\$ 1,747,151	\$ 1,988,546	\$ 2,245,497
Factory and Admin Overhead Expenses	3 months	\$ 826,819	\$ 2,421,661	\$ 2,637,781	\$ 2,799,160	\$ 2,960,534
Total Current Operating Assets		\$ 6,119,254	\$ 8,300,049	\$ 9,045,568	\$ 9,747,030	\$ 10,461,767
Current Operating Liabilities						
Accounts Payable	15 days on Raw Materials Cost	\$ 677,603	\$ 677,603	\$ 677,603	\$ 677,603	\$ 677,603
Accrued Expenses	30 days on production overhead and Admin Expenses	\$ 369,116	\$ 1,081,099	\$ 1,177,581	\$ 1,249,625	\$ 1,321,667
Other Accrued Liabilities	LS	\$ 3,500	\$ 3,500	\$ 3,500	\$ 3,500	\$ 3,500
Total Current Operating Liabilities		\$ 1,050,219	\$ 1,762,202	\$ 1,858,684	\$ 1,930,728	\$ 2,002,770
Net Working Capital		\$ 5,069,035	\$ 6,537,847	\$ 7,186,884	\$ 7,816,302	\$ 8,458,997
Working Capital Requirement as per year wise						
	%	1st Year	2nd Year	3rd Year	4th Year	5th Year
Short Term Loan from Banks	70.00%	\$ 3,548,324	\$ 4,576,493	\$ 5,030,819	\$ 5,471,411	\$ 5,921,298
Equity Contribution	30.00%	\$ 1,520,710	\$ 1,961,354	\$ 2,156,065	\$ 2,344,891	\$ 2,537,699
Total	100.00%	\$ 5,069,035	\$ 6,537,847	\$ 7,186,884	\$ 7,816,302	\$ 8,458,997

For this project, NGA has assessed the working capital requirement amounted to USD 5.07 mln as funded and non-funded facilities by utilizing 65% average capacity in the first year in which NGA requires 3.55 mln as funded and non-funded facilities from banks/financial institutions.

The working capital facilities will include LC Facilities, Bank Guarantee, LTR 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 : USD 3.55 mln

Non-Funded

LC Facilities : USD 2.20 mln
Bank Guarantee : USD 0.10 mln

Funded

LTR Facilities : USD 0.50 mln
CC Hypo/OD : USD 0.75 mln

Feasibility Report and Business Plan of Nakshi Green Agro Limited



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:

Nakshi Green Agro Limited Agro Product Manufacturing and Processing Plant Projected Income Statement					
Fig. In USD					
Particulars	1st Year	2nd Year	3rd Year	4th Year	5th Year
Sales	\$ 22,590,765	\$ 26,044,622	\$ 27,954,423	\$ 29,828,197	\$ 31,701,130
Cost of Goods Sold	\$ 14,037,505	\$ 15,986,705	\$ 17,040,811	\$ 18,021,337	\$ 19,002,242
Gross Income	\$ 8,553,259	\$ 10,057,917	\$ 10,913,612	\$ 11,806,860	\$ 12,698,889
Administrative & Marketing Expenses	\$ 711,840	\$ 820,648	\$ 880,818	\$ 939,854	\$ 998,852
Operating Income	\$ 7,841,419	\$ 9,237,269	\$ 10,032,794	\$ 10,867,006	\$ 11,700,036
Other Income / Expenses					
Return on Investment	\$ -	\$ -	\$ -	\$ -	\$ -
Net Income Before Interest & Taxes	\$ 7,841,419	\$ 9,237,269	\$ 10,032,794	\$ 10,867,006	\$ 11,700,036
Financial Expenses	\$ 842,661	\$ 851,557	\$ 811,484	\$ 767,123	\$ 720,182
Net Income Before Taxes	\$ 6,998,758	\$ 8,385,712	\$ 9,221,310	\$ 10,099,883	\$ 10,979,854
Provision for VAT and Tax (27.50%)	\$ 1,924,658	\$ 2,306,071	\$ 2,535,860	\$ 2,777,468	\$ 3,019,460
Net Income after Tax	\$ 5,074,100	\$ 6,079,641	\$ 6,685,450	\$ 7,322,415	\$ 7,960,394
Appropriation					
Retained Earnings at beginning of the period	\$ -	\$ 3,551,870	\$ 7,807,619	\$ 12,487,433	\$ 17,613,124
Net Income During The Period	\$ 5,074,100	\$ 6,079,641	\$ 6,685,450	\$ 7,322,415	\$ 7,960,394
Cash Dividend declared(20% each year)	\$ 1,014,820	\$ 1,215,928	\$ 1,337,090	\$ 1,464,483	\$ 1,592,079
Transfer to General Reserve(10% each year)	\$ 507,410	\$ 607,964	\$ 668,545	\$ 732,241	\$ 796,039
Retained Earnings at End of the period	\$ 3,551,870	\$ 7,807,619	\$ 12,487,433	\$ 17,613,124	\$ 23,185,400
Ratios :					
Gross Income to sales	37.86%	38.62%	39.04%	39.58%	40.06%
Operating Income to sales	34.71%	35.47%	35.89%	36.43%	36.91%
Net Income after Tax to sales	22.46%	23.34%	23.92%	24.55%	25.11%
Debt Service Coverage ratio	3.42	3.73	3.91	4.10	4.29

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.

Feasibility Report and Business Plan of Nakshi Green Agro Limited



(ii) Projected Cash Flow Statement

Nakshi Green Agro Limited Agro Product Manufacturing and Processing Plant Projected Cash Flow Statement						
Fig. in USD						
Particulars	0 Year	1st Year	2nd Year	3rd Year	4th Year	5th Year
A. Cash Flows from Operating Activities						
Net Income after Tax		\$ 5,074,100	\$ 6,079,641	\$ 6,685,450	\$ 7,322,415	\$ 7,960,394
Add : Non cash Expenses						
Depreciation & Amortization		\$ 2,411,800	\$ 2,411,800	\$ 2,411,800	\$ 2,411,800	\$ 2,411,800
Increase in Working Capital		\$ (5,069,035)	\$ (1,468,812)	\$ (649,037)	\$ (629,418)	\$ (642,695)
Net Cash Flows from operating Activities	\$ -	\$ 2,416,865	\$ 7,022,630	\$ 8,448,213	\$ 9,104,797	\$ 9,729,499
B. Cash Flow from Investing Activities						
Acquisition of Fixed assets	\$ (24,630,492)	\$ -	\$ -	\$ -	\$ -	\$ -
Investment in FDR	\$ -					
Net Cash Flows from Investing Activities	\$ (24,630,492)	\$ -	\$ -	\$ -	\$ -	\$ -
C. Cash Flows From Financing Activities						
Shareholders Equity	\$ 5,488,086					
Shareholders Equity-Working Capital		\$ 1,520,710	\$ 440,644	\$ 194,711	\$ 188,825	\$ 192,809
Long Term Loan received from Bank (Including IDCP)	\$ 19,142,405					
Short Term Loan (Working Capital)		\$ 3,548,324	\$ 1,028,168	\$ 454,326	\$ 440,593	\$ 449,887
Re-payment of Long Term Loan		\$ (1,589,929)	\$ (1,654,486)	\$ (1,721,665)	\$ (1,721,665)	\$ (1,791,571)
Dividend paid		\$ (1,014,820)	\$ (1,215,928)	\$ (1,337,090)	\$ (1,464,483)	\$ (1,592,079)
Net Cash Flows from Financing Activities	\$ 24,630,492	\$ 4,054,215	\$ (1,337,045)	\$ (2,342,539)	\$ (2,556,730)	\$ (2,740,955)
Increase / Decrease of Cash & Cash Equivalent during the period	\$ -	\$ 6,471,080	\$ 5,685,585	\$ 6,105,674	\$ 6,548,067	\$ 6,988,544
Cash & Cash Equivalent at the beginning of the period	\$ -	\$ -	\$ 6,471,080	\$ 12,156,664	\$ 18,262,338	\$ 24,810,405
Cash & Cash Equivalent at the End of the period	\$ -	\$ 6,471,080	\$ 12,156,664	\$ 18,262,338	\$ 24,810,405	\$ 31,798,949

NGA 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

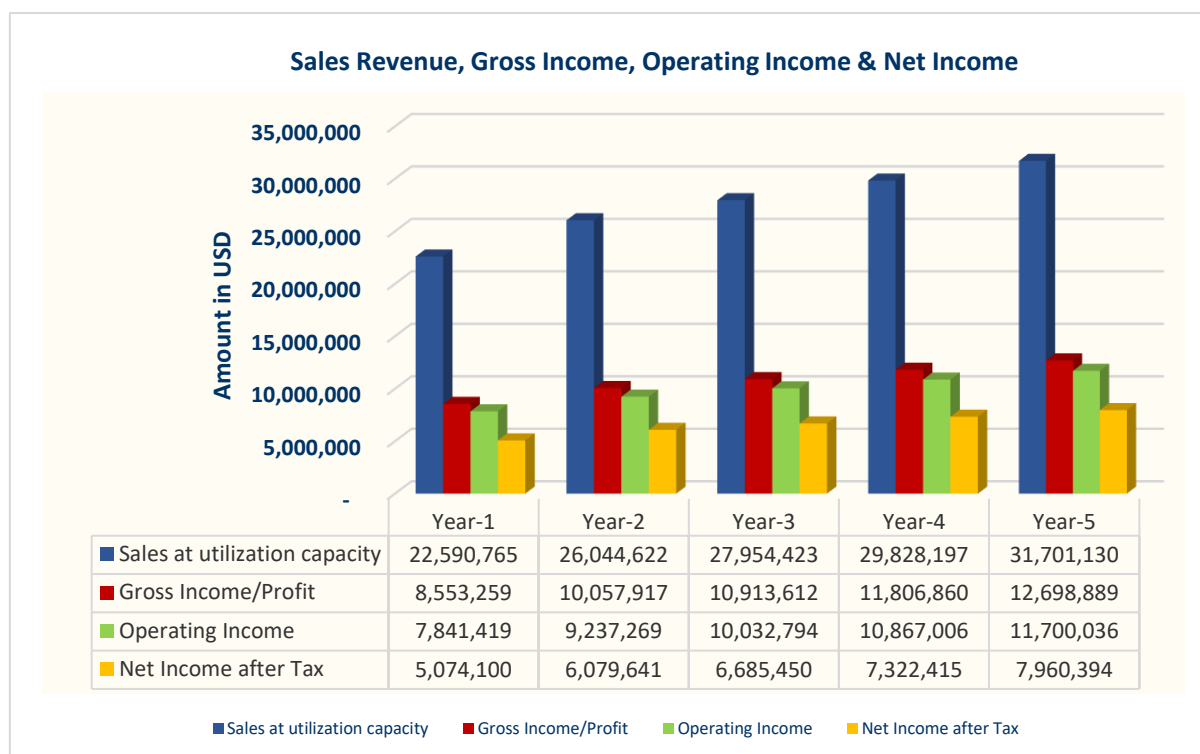
The project will have sufficient liquidity to meet all its obligations from its operations. Monthly debt payment obligation can be easily met up after implementation of this project due to sufficient cash flow and sound net income position. The financial expenses and debt payment obligation has been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

Particulars	1st Year	2nd Year	3rd Year	4th Year	5th Year
Total Debt Payment Obligation(Yearly)	2,432,590	2,506,043	2,533,149	2,558,695	2,584,498
Monthly Debt Obligation(Interest plus Principals)	202,716	208,837	211,096	213,225	215,375

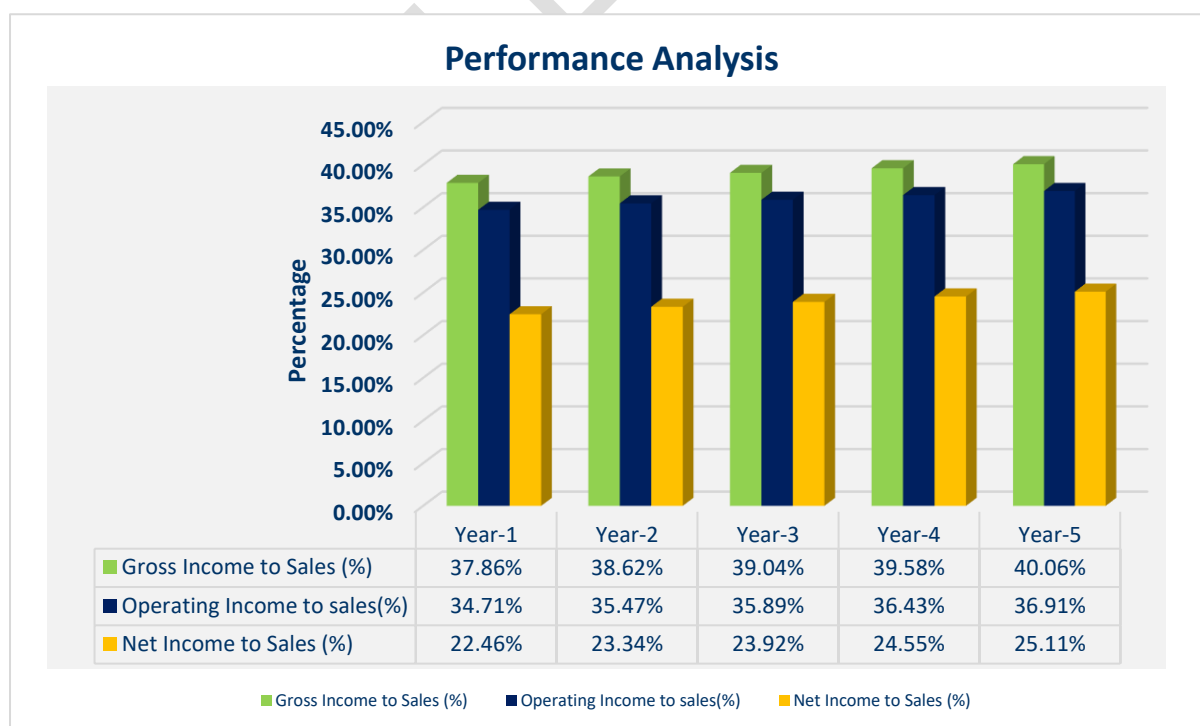
Feasibility Report and Business Plan of Nakshi Green Agro Limited

1.10 Projected Financial Performance of the Project

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



(ii) Performance Analysis



Feasibility Report and Business Plan of Nakshi Green Agro Limited



(iii) Summary of Projected Financials

Projected Financial Information

Fig. in USD

Particulars	1st Year	2nd Year	3rd Year	4th Year	5th Year
Sales Revenue	22,590,765	26,044,622	27,954,423	29,828,197	31,701,130
Cost of Goods Sold	14,037,505	15,986,705	17,040,811	18,021,337	19,002,242
Gross Income	8,553,259	10,057,917	10,913,612	11,806,860	12,698,889
Operating Expenses	711,840	820,648	880,818	939,854	998,852
Operating Income	7,841,419	9,237,269	10,032,794	10,867,006	11,700,036
Net Income Before Tax	6,998,758	8,385,712	9,221,310	10,099,883	10,979,854
Net Income After Tax	5,074,100	6,079,641	6,685,450	7,322,415	7,960,394
Earnings Per Share (EPS)	10,148	12,159	13,371	14,645	15,921
Total Assets	34,809,025	40,263,605	44,702,997	49,540,727	54,832,208
Shareholders' Equity	11,068,077	16,372,433	21,915,504	27,962,261	34,523,385
No. of Ordinary Shares	500,000	500,000	500,000	500,000	500,000
Face Value of the Shares	100	100	100	100	100
Net Asset Value (NAV)	22,136	32,745	43,831	55,925	69,047

Projected Key Financials

Particulars	1st Year	2nd Year	3rd Year	4th Year	5th Year
Gross Income To Sales (%)	37.86%	38.62%	39.04%	39.58%	40.06%
Operating Income To Sales (%)	34.71%	35.47%	35.89%	36.43%	36.91%
Net Income To Sales (%)	22.46%	23.34%	23.92%	24.55%	25.11%
Debt Service Coverage Ratio (Times)	3.42	3.73	3.91	4.10	4.29
Return on investment (ROI)	17.00%	17.21%	16.77%	16.33%	15.83%
Return on Equity (ROE)	45.84%	37.13%	30.51%	26.19%	23.06%
Break Even % on Utilization capacity	34.58%	30.32%	28.38%	26.60%	25.04%
Break Even % on Attainable capacity	22.48%	21.22%	21.29%	21.28%	21.28%
Payback Period			2.95		
Discounted Payback Period			3.18		
Internal Rate of Return (IRR)			34.70%		
Net Present Value (NPV) (Fig in USD)			55308499.47		

Feasibility Report and Business Plan of Nakshi Green Agro Limited



(iv) Projected Key Financials (Five Years Average)

Key Financials (Five Years Average)	
Yearly Turnover USD 27.62 mln Net Profit Target USD 6.62 mln	Gross Profit (GP) : 39.03% Operating Profit (OP) : 35.88% Net Profit (NI) : 23.88% IRR : 34.70% ROI : 16.63% ROE : 32.55% Payback period : 2.95 years Discounted Payback Period : 3.18 years Debt Service Coverage Ratio : 3.89 Times Break Even (BEP) : 28.98% NPV : USD 55.31 mln

(v) Sensitivity Analysis (Five Years Average)

Particulars	If Rate of Interest is 4% and Other things remain constant	Rate of Interest is 4% 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	\$ 27,623,827	\$26,242,636	\$ 27,623,827	\$ 26,242,636
Net Income	\$ 6,624,400	\$ 5,623,036	\$ 6,307,242	\$ 5,305,878
Gross Profit to Sales	39.03%	35.82%	37.43%	34.14%
Operating Income to sales	35.88%	32.51%	34.28%	30.82%
Net Income to Sales	23.88%	21.32%	22.72%	20.10%
Debt Service Coverage Ratio(Times)	3.89	3.50	3.77	3.37
Internal Rate of Return (IRR)	34.70%	30.57%	33.41%	29.25%
Return on Investment (ROI)	16.63%	14.38%	15.91%	13.66%
Return on Equity (ROE)	32.55%	27.55%	30.91%	25.92%
Payback Period (PB)	2.95	3.27	3.05	3.39
Discounted Payback Period (DPB)	3.18	3.55	3.29	3.69
Break Even % (Utilization Capacity)	28.98%	32.51%	30.20%	34.04%
Net Present Value (NPV) (USD mln)	55.31	46.66	52.73	44.08

Feasibility Report and Business Plan of Nakshi Green Agro Limited



1.11 Investment Proposal for This Project to Banks/Financial Institutions

Nakshi Green Agro Limited is inviting financial institutions for investing this commercially viable project for implementation of this project with the below features:

Total Investment Requirement : USD 21.27 mln

A. For Long-Term Financing	: USD 17.72 mln
Project Shed and Building	: USD 2.03 mln
Others Civils Construction	: USD 0.06 mln
Imported Machinery & Equipment	: USD 13.99 mln
Import Duty, Customs, VAT and Insurance	: USD 0.70 mln
Local Machinery & Equipment	: USD 0.24 mln
Sub Station (3,500 KVA) with all Accessories	: USD 0.17 mln
Fire Fighting, Fire Door, Fire Alarm and others	: USD 0.03 mln
Security Devices, CC Camera, CC TV, and Compliance Equipment	: USD 0.02 mln
Vehicles	: USD 0.47 mln

B. For Short-Term Loan/Working Capital : USD 3.55 mln

Non-Funded

LC Facilities	: USD 2.20 mln
Bank Guarantee	: USD 0.10 mln

Funded

LTR Facilities	: USD 0.50 mln
CC Hypo/OD	: USD 0.75 mln

The above finance will be for:

1.Tenure	: 10 years for long term loan
2. Short Term loan	: Revolving basis
3.Moratorium Period	: 24 months for long term loan
4.Proposed Rate of interest	: 4.00%
5.Equal Monthly Instalments (EMI)	: USD 0.58 mln
6.Equal Quarterly Instalments (EQI)	: USD 0.19 mln
7.Debt-Equity Ratio	
For Long Term	: 76.36 : 23.64
For short Term	: 70.00 : 30.00

Feasibility Report and Business Plan of Nakshi Green Agro Limited



1.12 Use of Fund

Long-Term Financing: Project Loan/Term Loan would be utilized for Project Shed and Building, Others Civils Construction (Water reservoir, Internal Road, Main Gate, Boundary wall and Security Room), Imported & Local Machinery and Equipment, Import Duty, Customs, VAT and Insurance, Sub Station (3,500 KVA) with all Accessories, Fire Fighting, Fire Door, Fire Alarm, Security Devices, CC Camera, CC TV, and Compliance Equipment and Vehicle (Sixteen (15)- 15-MT Trucks Capacity) 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 USD 11.57 mln. In addition, 166 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.

SAMPLE REPORT

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 Agro Product Manufacturing and Processing 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 2.95 years, Discounted Payback period is 3.18 years and Internal Rate of Return is 34.70% 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 166 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 Agro Product Manufacturing and Processing Industry 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 Nakshi Green Agro Limited



2. Declarations and Due Diligence Certificate

DECLARATION ABOUT THE RESPONSINGAITY OF THE DIRECTOR(S), INCLUDING THE MANAGING DIRECTOR OF THE COMPANY “**NAKSHI GREEN AGRO LIMITED**” IN RESPECT OF THIS FEASIBILITY REPORT & BUSINESS PLAN.

The Feasibility Report & Business Plan has been prepared, seen and approved by us, and we, individually and collectively, accept full responsibility for the authenticity and accuracy of the statements made, information given in the report, documents, projected financial statements, exhibits, annexes, papers submitted to the your financial institution in support thereof, and this report has been met and that there are no other information or documents the omission or which make any information of statements therein misleading for which the respective financial institutions may take any civil, criminal of administrative action against any of all of us as it may deem fit.

We also confirm that full and fair disclosure has been made in this report to enable the investors or financial institution to make a well-informed decision for investment.

Md. Salahuddin Mahmud Khan Ujjal

Managing Director

Nakshi Green Agro Limited

Mobile: +8801716977292

+8801779799436

Email: smkhanuzzal@yahoo.com

nakshigreenagro@gmail.com

Feasibility Report and Business Plan of Nakshi Green Agro Limited



3. The Sponsors, Management and Human Resource

3.1 About Nakshi Green Agro Limited (NGA)

Nakshi Green Agro Limited (NGA) was incorporated as a Private Limited Company on 12th August, 2020 bearing Incorporation No.: C-162285/2020. The Authorized Share Capital of the Company is USD 50,000,000.00 (Five Crore) divided into 500,000.00 (Five Lakhs) Ordinary Shares of BDT 100.00 (One Hundred) each.

NGA is going to set up an Automatic Agro Product Manufacturing and Processing Plant with an objective of producing export quality Corn Starch, Liquid Glucose, Dextrose, Corn Gluten Meal (CGM), Corn Germ, Corn Fiber, Corn Steep Liquor (CSL) to meet the demand of domestic & international market.

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

- Incorporation Certificate: C-162285/2020
- Trade License: TRAD/DSCC/013178/2020

3.2 List of Directors & Shareholding Structure of NGA

Name of Directors	Status	No. of Shares	% of Shares
Syeda Fahmina Akter	Chairman	30,000	30.00%
Md. Salauddin Mahmud Khan Uzzal	Managing Director	45,000	45.00%
Md. Salauddin Khalid Khan	Director	10,000	10.00%
Anowar Shamim	Director	10,000	10.00%
Md. Zakir Hussain	Director	5,000	5.00%
Total		100,000	100.00%

Feasibility Report and Business Plan of Nakshi Green Agro Limited



3.3 Sponsors, Promoters, Directors, Top Management and Their Background

Ms. Syeda Fahmina Akter, is the Chairman of Nakshi Green Agro Limited.

She completed his BSS from a reputed university of Bangladesh. She has a vast experience in the field of computer networking.

She also has over twenty (20) Years of Experience in Agro Product Manufacturing and Processing sector, which will help to contribute much to this project. She is also a good Social Worker and Organizer.

Every business needs certain individual for stability and smooth operation, whose presence inspires people and provides the guidance to reach their goal. She is one of those people who, like the captain of a ship, always help to maintain smooth business operation of the company. As a Chairman, she will participate in each and every business activities of the company. With her direct guidance, NGA will reach its goal in a very short span of time.

Md. Salauddin Mahmud Khan Ujjal, is the Managing Director of Nakshi Green Agro Limited. He completed his BSS and MSS, major in social science from Dhaka University.

He has vast experience in the Printing and Publication industry. He is also a good Social Worker and Organizer. He is also involved with various community activities which includes:

- General Secretary: Metropolitan Press Owner's Association Bangladesh.
- Joint Secretary: Printing Industries Association of Bangladesh.
- General Member: The Federation of Bangladesh Chambers of Commerce & Industry (FBCCI)
- General Member: Dhaka Boat Club.

Every business needs certain individual for stability and smooth operation, whose presence inspires people and provides the guidance to reach their goal. He is one of those people who, like the captain of a ship, always helps to maintain smooth business operation of the company. As a managing director, he will participate in each and every business of the company. With his direct guidance, NGA will reach its goal in a very short span of time.

Syeda Fahmina Akter	
Chairman, Nakshi Green Agro Ltd	
Father's Name	: Syed Faroque Nabi
Mother's Name	: Seyda Umma Kulsum
Present Address	: Village: Betdoba (North), P.S.: Kalihati, Dist.: Tangail, Bangladesh
Permanent Address	: Flat: 9/A, House: 28, 29, West Dhanmondi, Shankar, Dhaka, Bangladesh
Date of Birth	: 02/07/1976
e-TIN	: 282130492212
NID No.	: 19779324704228549
Marital Status	: Married
Religion	: Islam
Nationality	: Bangladeshi
Educational Qualification	: B.S.S.
Business Career	: Over 20 Years

Md. Salauddin Mahmud Khan Ujjal	
Managing Director, Nakshi Green Agro Ltd	
Father's Name	: Md. Shahadat Ali Khan
Mother's Name	: Kohinur Begum Hazera
Present Address	: Village: Betdoba (North), P.S.: Kalihati, Dist.: Tangail, Bangladesh
Permanent Address	: House: 28, 29, West Dhanmondi, Shankar, Dhaka, Bangladesh
Date of Birth	: 01/02/1971
e-TIN	: 581165497660
NID No.	: 19729324704228548
Marital Status	: Married
Religion	: Islam
Nationality	: Bangladeshi
Educational Qualification	: M.S.S
Business Career	: Over 25 Years

Feasibility Report and Business Plan of Nakshi Green Agro Limited



Mr. Salauddin Khalid Khan Harun, is the Director of Nakshi Green Agro Limited. He completed his Bachelor of Arts from a reputed university of Bangladesh.

After finishing his graduation, he served many renowned companies in home and abroad. He has over 20 Years Experience as an Assistant Manager in Al-Raji Company, Kingdom of Saudi Arabia (KSA) 2) and over 5 Years' Experience of Maintaining Real Estate & Developer Business.

He is also involved with various Social Works and is a good Social Worker as well as organizer. Every business needs certain individual for stability and smooth operation, whose presence inspires people and provides the guidance to reach their goal. He is one of those people who, like the captain of a ship, always helps to maintain smooth business operation of the company.

As a director, he participates in each and every business of the company. With his direct guidance, NGA will reach its goal in a very short span of time.

Salauddin Khalid Khan Harun	
Director, Nakshi Green Agro Ltd	
Spouse's Name	: Md. Sahadat Ali Khan
Mother's Name	: Kohinur Begum Hazera
Present Address	: Village: Betdoba (North), P.S.: Kalihati, Dist.: Tangail, Bangladesh
Permanent Address	: House: 82, West Dhanmondi, Shankar, Dhaka, Bangladesh
Date of Birth	: 01/04/1962
e-TIN	: 1401021173
Passport No.	: AE7597367
Marital Status	: Married
Religion	: Islam
Nationality	: Bangladesh
Educational Qualification	: B.A.
Business Career	: Over 30 Years

Mr. Anowar Shamim, is one of the Directors of Nakshi Green Agro Limited. He completed his B.Sc in Engineering (Mechanical) from a reputed institution.

He has vast experience in the Agro Product Manufacturing and Processing industry. He is also a good Social Worker and Organizer. He is also involved with various community activities.

Every business needs certain individual for stability and smooth operation, whose presence inspires people and provides the guidance to reach their goal. He is one of those people who, like the captain of a ship, always helps to maintain smooth business operation of the company. As a Director, he will participate in each and every business of the company. With his direct guidance, NGA will reach its goal in a very short span of time.

Anowar Shamim	
Director, Nakshi Green Agro Limited	
Father's Name	: Abul Kasam
Mother's Name	: Bilkis Begum
Present Address	: 622/21, mizan squire, kazipara, mirpur Dhaka-1216
Permanent Address	: Village: Charsuvi, Ward-5, Thana: Daulatkhan-8310, Zilla: Bhola
Date of Birth	: 10.12.1994
e-TIN	: 430285570406
NID No.	: 1502254004
Marital Status	: Unmarried
Religion	: Islam
Phone	: +8801881076407
E-mail	: shamimrahman70@gmail.com
Nationality	: Bangladeshi
Educational Qualification	: B.Sc in Engineering (Mechanical)

Feasibility Report and Business Plan of Nakshi Green Agro Limited



Md. Zakir Hussain, is the Director of Nakshi Green Agro Limited.

He completed his Bachelor of Arts (Hons) and M.A. (Masters) from a reputed university of Bangladesh.

After finishing his graduation, he served many renowned companies in home and abroad.

He is also involved with various Social Works and is a good Social Worker as well as organizer.

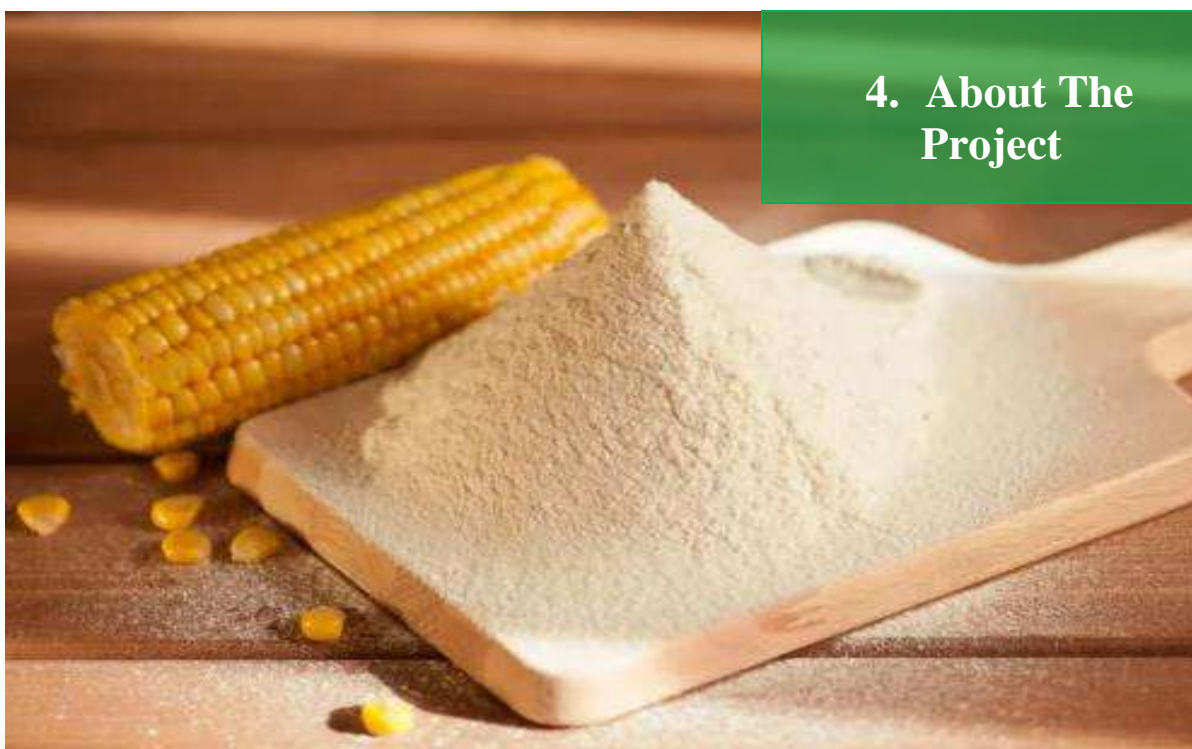
Every business needs certain individual for stability and smooth operation, whose presence inspires people and provides the guidance to reach their goal. He is one of those people who, like the captain of a ship, always helps to maintain smooth business operation of the company.

As a director, he will participate in each and every business of the company. With his direct guidance, NGA will reach its goal in a very short span of time.

Md. Zakir Hussain	
Director, Nakshi Green Agro Limited	
Father's Name	: Md. Abdul Mussawair
Mother's Name	: Late Jahanara Begum
Present Address	: Flat # 5/A, House # 1/3/A, Block # C, Lalmatia Housing Society, Lalmatia, Mohammadpur, Dhaka.
Permanent Address	: House # 13, Agrani R/A, Sayef Khan Road, West Subid Bazar, Sylhet-3100.
Date of Birth	: 30.05.1971
e-TIN	: 519589744917
NID No.	: 326 960 2185
Marital Status	: Married
Religion	: Sunne Muslim
Phone	: +8801711114720
E-mail	: mdzakir_hussain@yahoo.com
Nationality	: Bangladeshi
Educational Qualification	: B.A. (Hons) & M.A.

Feasibility Report and Business Plan of Nakshi Green Agro Limited

4. About The Project



4.1 Brief Description of Project & Product

Nakshi Green Agro Limited (NGA) is going to start an Agro Product Manufacturing and Processing Project where Corn Starch, Liquid Glucose, Dextrose, Corn Germ, Corn Gluten Meal (CGM), Corn Fiber and Corn Steep Liquor (CSL) will be manufactured.

The attainable production capacity will be 190,000 kg per day, 4,750,000 kg per month and 57,000,000 per year. Product loss/wastage has been considered 5.00% for this project. The factory will be operated for twenty (20) hours per day.

The attainable production capacity and product matrix have been illustrated below:

Type of Products	Product Category	Production Mix (%)	Total Production Capacity/ Per day 20 hours /KG			
			Unit	Daily	Monthly	Yearly
Corn Starch	Main Product	30.00%	KG	60,000	1,500,000	18,000,000
Liquid Glucose	Main Product	25.00%	KG	50,000	1,250,000	15,000,000
Dextrose	Main Product	12.50%	KG	25,000	625,000	7,500,000
Corn Germ	By Product	6.50%	KG	13,000	325,000	3,900,000
Corn Gluten Meal (CGM)	By Product	5.50%	KG	11,000	275,000	3,300,000
Corn Fiber	By Product	12.00%	KG	24,000	600,000	7,200,000
Corn Steep Liquor (CSL)	By Product	3.50%	KG	7,000	175,000	2,100,000
	Grand Total	95%		190,000	4,750,000	57,000,000

The project will be located at Meduari, Varadoba, Bhaluka, Mymensingh, Bangladesh where total land size of this project is 339.00 decimals and 210,701 sft civil constructions will be constructed.

Feasibility Report and Business Plan of Nakshi Green Agro Limited



4.2 Market Potentials of the Project

The Bangladesh government is now encouraging farmers to grow corn, because its strong reliability as a crop can improve financial security. Maize is currently grown on more than 101,300 hectares in the northern region, which produces one-third of the national supply,

According to government figures. With training, financial assistance and incentives, the government is encouraging farmers all over Bangladesh to grow corn in a bid to move away from thirstier crops and meet demand. The production of corn, also known as maize, rose 12.50 per cent year-on-year to 40.15 lakh tons in the fiscal year 2019-20.

The agriculture ministry has set a target to produce one Crore tons of the grain by 2025 through innovation and modern technical assistance. In 2021, Bangladesh exported \$37.3k in Corn, making it the 127th largest exporter of Corn in the world. At the same year, Corn was the 564th most exported product in Bangladesh. According to the Trade Data Monitor, global corn exports to Bangladesh rose 39.2 per cent over the first five months in the current marketing year compared to last year.

4.3 Location and Addresses

4.3.1 Project Location

The proposed project will be located at Meduari, Varadoba, Bhaluka, Mymensingh, Bangladesh.

4.3.2 Corporate Address

Name of the Company : **NAKSHI GREEN AGRO LIMITED**
Corporate Address : House # 42/A (4th Floor), Road# 9/A, Dhanmondi,
Dhaka-1209, Bangladesh
Contact Person : Md. Salahuddin Mahmud Khan Ujjal
Designation : Managing Director
Mobile : +8801716977292, +8801779799436
Email : smkhanuzzal@yahoo.com, nakshigreenagro@gmail.com

Feasibility Report and Business Plan of Nakshi Green Agro Limited



5. Land and Land Development, Machinery & Equipment, Power & Utilities

5.1 Land and Land Development

In this project there is total 339.00 decimals land which has been valued USD 1.03 mln where per decimal cost has been estimated USD 3,043.00. The details are as follows:

Nakshi Green Agro Limited Agro Product Manufacturing and Processing Plant Estimated Land and Land Development Cost					
S.N	Description	Purposes	Decimals	Estimated Value per decimal	Total Estimated Cost(Fig. in USD)
1	Land and Land Development	For Factory	339	\$ 3,043	\$ 1,031,739
	Total		339		\$ 1,031,739

5.2 Civil Constructions

In this project, civil constructions for project shed & building cost has been estimated USD 3.39 mln. Other civil constructions cost such as main gate, boundary wall, internal road etc cost has been estimated USD 0.08 mln. The details are as follows:

Nakshi Green Agro Limited Agro Product Manufacturing and Processing Plant Estimated Civil Cost					
S.N	Item No/ Description	Unit	Total Size	Per Square Feet Estimated Cost(USD)	Toal Estimated Cost(Fig. in USD)
1	Starch M. Workshop Multi-storied building (Civil)	SFT	20,631	\$ 14	\$ 296,010
2	Starch M. Workshop Multi-storied building (Steel)	SFT	55,000	\$ 13	\$ 741,304
3	Starch Finished Goods, by products and ware house multi-storied Civil	SFT	12,000	\$ 10	\$ 116,870
4	Starch Finished Goods, by products and ware house multi-storied Steel	SFT	24,000	\$ 12	\$ 292,174
5	Liquid Glucose Multi-storied building Civil	SFT	3,410	\$ 15	\$ 51,891
6	Liquid Glucose Multi-storied building Steel	SFT	8,230	\$ 12	\$ 98,488
7	Dextrose Multi-Storied building civil	SFT	3,230	\$ 9	\$ 27,525
8	Dextrose Multi-Storied building Steel	SFT	4,000	\$ 14	\$ 56,000
9	Construction Civil Cost of Generator & Sub-Station	SFT	3,200	\$ 17	\$ 55,652
10	Construction Civil Cost of Silo Civil	SFT	42,000	\$ 22	\$ 913,043
11	Water Reserve Tank	CFT	5,000	\$ 5	\$ 23,913
12	Construction Civil Cost of Office Building with officer dormitory	SFT	10,000	\$ 22	\$ 217,391
13	Construction Civil Cost of Dormitory Building worker	SFT	6,000	\$ 22	\$ 130,435
14	Cost of ETP Civil Construction	SFT	14,000	\$ 26	\$ 365,217
				\$ -	\$ -
				\$ -	\$ -
	Total				\$ 3,385,915

Nakshi Green Agro Limited Agro Product Manufacturing and Processing Plant Estimated Others Civil Cost					
S.N	Item No/ Description	Purposes	Size/Square Feet	Per Square Feet Estimated Cost	Toal Estimated Cost(Fig. in USD)
1	Security house and Main factory gate	Main Factory	LS	-	\$ 21,739
2	Boundary Wall	Main Factory	RFT	-	\$ 20,136
3	Internal Road, Drainage and Sewerage	Main Factory	LS	-	\$ 43,043
	Total		-		\$ 84,918

Feasibility Report and Business Plan of Nakshi Green Agro Limited



5.3 Machinery & Equipment

In this project, imported machineries and equipment cost has been estimated USD 15.54 mln and local machinery & equipment cost has been estimated USD 0.35 mln. The details machinery list are as follows:

Nakshi Green Agro Limited Agro Product Manufacturing and Processing Plant. Imported Machineries and Equipment								
SN.	Particulars	Purposes	Unit	Quantity	Unit Price	Dollar Conversion	Total Estimated Price(USD)	Origin
1	Corn Wet Mill 200TPD Starch Line	Starch Manufacturing	Set	1	\$ 6,700,000	115.00	\$ 6,700,000	China
2	Liquid Glucose Line 50TPD	Glucose Manufacturing	Set	1	\$ 2,300,000	115.00	\$ 2,300,000	China
3	Dextrose Mill 30TPD Line	Dextrose Manufacturing	Set	1	\$ 2,210,000	115.00	\$ 2,210,000	China
4	Grain Storage Steel Silo 10000MT X 4 Unit	Corn/ Maize Storage	Set	1	\$ 2,701,200	115.00	\$ 2,701,200	Turkey
5	12 Ton Capacity LPG Steam Boiler	Starch Plant	Set	1	\$ 495,000	115.00	\$ 495,000	U.K
6	2 Ton Capacity LPG Steam Boiler	Glucose Plant	Set	1	\$ 212,400	115.00	\$ 212,400	U.K
7	1250 KVA Diesel Generator	Electricity Backup	Set	1	\$ 300,800	115.00	\$ 300,800	U.K
8	Solar Panel(1250 KVA)	Electricity Backup	Set	1	\$ 325,000	115.00	\$ 325,000	U.K
9	Effluent Treatment Plant	For Water Discharge	Set	1	\$ 300,000	115.00	\$ 300,000	
Total Estimated Cost							\$ 15,544,400	

Nakshi Green Agro Limited Agro Product Manufacturing and Processing Plant. Local Machineries and Equipment							
SN.	Particulars	Purposes	Unit	Quantity	Unit Price(USD)	Total Estimated Price(USD)	Origin
1	S.S Tank	For Factory	Pcs	10	\$ 2,174	\$ 21,739	
2	Laboratory Equipments and Devices	For Lab	Set	2	\$ 43,478	\$ 86,957	
3	Electrical Control Board, Electrical Goods and Cables	For Factory	Lumsump			\$ 217,391	
4	Miscellaneous Items	For Factory	Lumsump			\$ 21,739	
Total Estimated Cost						\$ 347,826	

Feasibility Report and Business Plan of Nakshi Green Agro Limited



5.4 Power & Utilities Required

Nakshi Green Agro Limited			
Agro Product Manufacturing and Processing Plant.			
Requirement of Electricity, LPG Gas, Fuel, Lubricant and Others Utilities Cost			
Electricity Cost			
Maximum Load(KVA)	:	3,500	KVA
Maximum Load(kw)	:	2,800	kW
Daily consumption hours	:	19	hours
Yearly Working Days	:	300	Days
Monthly Working Days	:	25	Days
Power Rate(KW-H) in (USD)	:	\$ 0.09	USD/Per Unit
Daily Electricity Consumption	:	53,200	kW
Monthly Electricity Consumption	:	1,330,000	kW
Annual Electricity Consumption	:	15,960,000	kW
Daily Electricity Cost (USD)	:	\$ 4,549	
Monthly Electricity Cost (USD)	:	\$ 113,715	
Annual Electricity Cost (USD)	:	\$ 1,364,580	
GAS Boiler Cost			
Gas Boiler Capacity	:	14,000	KGS/H
Per hour gas consumption	:	700	kg/H
Hours Used	:	20	hours
Yearly Working Days	:	300	days
Monthly Working Days	:	25	days
GAS Cost (USD)	:	\$ 0.77	USD/kg
Daily Gas Consumption	:	14,000	kg
Monthly Gas Consumption	:	350,000	kg
Annual Gas Consumption	:	4,200,000	kg
Daily LPG Gas Cost (USD)	:	\$ 10,835	
Monthly LPG Gas Cost (USD)	:	\$ 270,870	
Yearly LPG Gas Cost (USD)	:	\$ 3,250,435	
Diesel Generator Cost			
Maximum Load	:	750	KVA
Load Factor used (Max)-80%	:	600	Kw
Hours Used/day	:	1	hours
Yearly Working Days	:	300	Days
Monthly Working Days	:	25	Days
Per hour fuel consumption	:	51.48	Ltr
Fuel cost/Ltr (USD)	:	\$ 0.99	USD/Per Liter
Daily fuel Consumption	:	51	Ltr
Monthly fuel Consumption	:	1,287	Ltr
Annual fuel Consumption	:	15,444	Ltr
Daily Diesel Cost (USD)	:	\$ 51	
Monthly Diesel Cost (USD)	:	\$ 1,327	
Yearly Diesel Cost (USD)	:	\$ 15,923	
Vehicle Diesel Cost for 16 Truck			
No. of Diesel Vehicles	:	16	
Daily Diesel Requirement/each	:	30	Ltr
Daily Total Diesel Requirement	:	480	Ltr
Monthly Total Diesel Requirement	:	12,480	Ltr
Yearly Total Diesel Requirement	:	3,744,000	Ltr
Per Litre diesel cost (USD)	:	1	USD/Per Litre
Daily Diesel Cost (USD)	:	\$ 476	
Monthly Diesel Cost (USD)	:	\$ 11,896	
Yearly Diesel Cost (USD)	:	\$ 142,748	
Others Utilities Lumsump Cost			
	Daily	Monthly	Yearly
Lubricant(Mobil,Grease and Break Oil)	\$ 9	\$ 252	\$ 3,026
Treated Water	\$ -	\$ -	\$ -
Waste Water Treatment	\$ 43	\$ 1,087	\$ 13,043
Total Cost	\$ 52	\$ 1,339	\$ 16,070
Total Estimated Utility Cost			
		Amount in USD	
Daily Utility Cost	:	\$ 15,962	
Monthly Utility Cost	:	\$ 399,146	
Yearly Utility Cost	:	\$ 4,647,007	

Feasibility Report and Business Plan of Nakshi Green Agro Limited



5.5 Miscellaneous

5.5.1 Sub Station

In this project, Sub Station (3,500 KVA) with all Accessories Cost has been estimated USD 0.22 mln.

5.5.2 Fire Fighting, Fire Door, Fire Alarm and others

In this project, Fire Fighting, Fire Door, Fire Alarm and others cost has been estimated USD 0.04 mln.

5.5.3 Security Devices, CC Camera, CC TV, and Compliance Equipment

In this project, Security Devices, CC Camera, CC TV, and Compliance Equipment cost has been estimated USD 0.03 mln.

5.5.4 Vehicles

In this project, Vehicle (Sixteen (15)- 15-MT Trucks Capacity) cost has been estimated USD 0.58 mln.

5.5.5 Security Deposit and Advance for Utility

In this project, Security Deposit and Advance for Utility cost has been estimated USD 0.04 mln.

5.5.6 Office Decoration, Furniture-fixture & Office Equipment

In this project, Office Decoration, Furniture-fixture & Office Equipment cost has been estimated USD 0.06 mln.

5.5.7 Preliminary expenses & Consultancy fees

In this project, Preliminary expenses & Consultancy fees have been estimated USD 0.03 mln

5.5.8 Contingency for Civil Constructions, Machinery & Equipment

In this project, 5.00% Contingency for Civil Constructions, Machinery & Equipment has been considered.

5.5.9 Stores & Spares

In this project, stores and spares has been assumed 1.00% in first year, 1.50% in second year and 2.00% in third year.

Feasibility Report and Business Plan of Nakshi Green Agro Limited



6. Risk Factors and Management's Perceptions about the Risks

There are risks associated with all investment decision. The investors (Banks/ Financial Institutions/ Private Equity) should be aware of those risks. These risks could result in loss of income or capital investment. Before making any investment decision the investors should carefully consider the following risks in addition to the information contained in the Feasibility Report & Business Plan for evaluating the said offer and whether to invest in the project or not.

Credit Risk: This is the risk of default on a debt that may arise because of default by the borrower to pay the loan. In operating any business there is always credit risk lies in the business. As there is always lending and borrowing between parties in the form of money and goods.

Management Perception: Credit Risk mainly lies with banks and Financial Institutions. Since NGA has good management team who are professional sound to handle this risk efficiently. However, a certain degree of credit risk lies because of this obligation. The management will be well aware of this and management tries to manage it efficiently through continuous supervision.

Liquidity Risk: The risk that a company may be unable to meet short term financial demands. This usually occurs due to the inactivity to convert its current assets to cash without a loss of capital or income. Liquidity is a common phenomenon of the business.

Management Perception: NGA will deal with its working capital in efficient way to maintain liquidity risk. Management will develop comprehensive marketing team who will work target wise for selling the apartments quickly.

Interest rate risk: Interest rate risk is associated with the fluctuations in market interest rates which cause a company's cost of debt to increase. A company having significant borrowed fund faces interest rate risks when the rate of interest fluctuates unfavorably due to volatility in money market. Changes in the Government's monetary policy also tend to increase the interest rates. High rate of interest may adversely affect the operating results and financial performance of companies having borrowed fund of significant volume. Increase in the interest rate burdens the company with additional financial charges and squeezes the profit of the company.

Management perception: The management of NGA will be aware of the volatility of the money market in Bangladesh. The Management of the Company believes that rising interest rates will not substantially affect the Company. The management of the company will emphasize on equity-based financing to reduce the dependency on borrowings. The management will strongly believe that fluctuation of interest rate would have a little impact upon the performance of NGA.

Industry Risks: Industry risk could have an adverse impact on the business, financial condition and results of operation.

Risk of volatility of raw materials' costs: The cost of raw materials is volatile. Sometimes price hikes due to scarcity of raw materials or artificial demand creation.

Management Perception: The management of Nakshi Green Agro Limited is aware of the continuing market situation of its raw materials cost. They believe that long term planning for raw materials management will reduce the above risk and the management will also develop truthful relations with the suppliers which will mitigate the risk of rising of material cost.

Feasibility Report and Business Plan of Nakshi Green Agro Limited



7. Market Study and Demand Projection

7.1 Overview of the Finished Products

The overview of the finished products of Nakshi Green Agro Limited are illustrated as follows:

Name of Product	Details
Corn Starch	Corn starch is important in the food industry as its viscosity, binding and taste of food. Corn starch natural characteristics make it a unique ingredient, providing functional properties to a wide product array. Used for bakery products, snacks, desserts, sauces, dressings, pastry, candy, noodles, soup, gravies, puddings, yogurt, custards, butter, dairy, breads, frozen foods, fruit drinks, syrup products, exclusive use in pharmaceuticals etc.
Technical Use	Adhesives: Carrier builder and raw paste, coated: superficial polishing or adhesive in multilayer cardboard, thickening, in adhesive paste and textile coating, lubricant, transportation circuits, coagulant, in fertilizer co-formation, gypsum plaque. Demand textile mill, paper mill, printing & packing industry, biodegradable bag etc.
Corn Gluten Meal (CGM)	Byproduct of the corn wet milling. Ingredient of high energy proteins – that consists on concentrated of insoluble proteins of the grain of corn. Supplies vitamins, minerals & energy in animal feed.
Corn Germ	Byproduct of the corn wet milling. Use corn oil and animal feed, corn oil has replaced a significant amount of saturated fat in numerous food products.
Fiber	Byproduct of the corn wet milling. Used in animal feed production.
Corn Steep Liquor	Byproduct of the corn wet milling. Used in animal feed production.
Liquid Glucose	Glucose syrup is obtained by cornstarch partial hydrolysis, comprising dextrose, maltose and polysaccharides. It is used for candy, pastry, ice creams, nougat or bubble gum production, as well as other branches in food industry etc.
Dextrose	It is used for pharmaceutical industry and beverage industry.

Feasibility Report and Business Plan of Nakshi Green Agro Limited



7.2 Overview of Corn Starch

Corn starch, maize starch, or cornflour is the starch derived from corn (maize) grain. The starch is obtained from the endosperm of the kernel. Corn starch is a common food ingredient, often used to thicken sauces or soups, and to make corn syrup and other sugars. Corn starch is versatile, easily modified, and finds many uses in industry such as adhesives, in paper products, as an anti-sticking agent, and textile manufacturing. It has medical uses as well, such as to supply glucose for people with glycogen storage disease.

Corn starch can be used as Thickener, Texturizer, Lubricant, Gelling agent etc. It helps in modelling and handling of paste operations. Corn starch is important in the food industry as its viscosity, binding and test of food. Corn starch natural characteristics make it a unique ingredient, providing functional properties to a wide product array. Used for bakery products, snacks, desserts, sauces, dressings, pastry, candy, noodles, soup, gravies, puddings, yogurt, custards, butter, dairy, breads, frozen foods, fruit drinks, syrups products, etc.

Low Humidity Native Starch is used as a food additive in products or processes where humidity is critical, like ready-mixed powder, dehydrated products or non-compression additive in granular solids. It keeps humidity balance, ensuring final product state and conservation.

Corn Starch Pharmaceutical Use: Pharmaceutical quality corn starch has a specific treatment that improves its microbiological quality, and makes it fit for cosmetic and pharmaceutical use.

Properties and uses

Pharmaceutical quality corn starch is used mainly as excipient, absorption agent, diluent and disintegrating agent in pills and tablets. When cooked formulations are used, it functions as a binding agent among components.

- Corn starch, Technical use:
- Properties and uses
- Adhesives: carrier builder and raw paste.
- Coated: superficial polishing or adhesive in multilayer cardboard.
- Thickening, in adhesive paste and textile coating.
- Lubricant, transportation circuits.
- Coagulant, in fertilizer co-formation.
- Gypsum plaque

Feasibility Report and Business Plan of Nakshi Green Agro Limited



7.3 Overview of Liquid Glucose

Liquid Glucose is the syrup form of glucose which is a sugar and is one of the derivatives of corn starch or maize starch. Also known as glucose syrup or confectioner's syrup, this derivative is made from the hydrolysis of starch. Liquid glucose which consists of more than 90% glucose is used in industrial fermentation but it is important to know that the syrups used in confectionery may consist of different amounts of maltose, glucose, and higher oligosaccharides and may have about 10-43% of glucose content.

The uses of liquid glucose are as follows:

Flavour enhancer: The first and major benefit of liquid glucose is that it acts as a flavour enhancer in candies and other kinds of foods.

Crystallizing: Another important application of the corn syrup is that it helps in controlling sucrose and dextrose crystallization in confections. It is primarily used in hard candies since candies that are made using sucrose alone are treated to crystallization and may be brittle.

Stabilizer: Liquid glucose also finds use as a stabilizer and can greatly enhance the shelf life of certain products. What it does is that it helps in reducing the freezing point and therefore reduces the manufacturer's freeze time. It also improves the freezer capacity.

Texture enhancer: Yet amongst the important liquid glucose uses is that it acts as a texture enhancer and may lend a smooth texture and body to products ice creams and other types of frozen desserts. Basically what glucose syrup does is that it aids in the elimination of graining.

Fermentation: Another important application of Indian liquid glucose is that it acts as an economical source of fermentable solids and is thus a popular product in the baking industry. Not only does it provide density control to bakery items but also lends sweetness. It is also responsible for adding a richer crumb colour.

Humectants: Liquid glucose increases the humectancy levels in some kinds of baked items. This further increases the shelf life of such products. Baked items which have icing produced with glucose syrup have a much better sheen as well as the appearance and thus lend a glaze on them.

Adjuncts: Corn syrup also has a lot of advantages as an adjunct. An adjunct basically is used to supplement malted barley in the process of brewing. Not only is liquid glucose totally soluble and reasonably priced but also extremely adaptable and easy to handle. It is an ideal liquid for high gravity brewing methods which helps in raising the overall brew house produce and efficiency.

Feasibility Report and Business Plan of Nakshi Green Agro Limited



7.4 Overview of Dextrose

Dextrose is a type of sugar that usually comes from corn or wheat. It is almost identical to glucose, which is the sugar found in the bloodstream. For that reason, it can be quickly used as a source of energy by the human body. Dextrose is often used in foods as an artificial sweetener or a preservative.

7.5 Overview of Corn Germ

Corn germ, popularly known as maize germ is the germ which makes up for 6-8% of the total weight of the corn grain. It also consists of 50% of the total oil quantity present in corn. It plays the role of the primary product that is used to make corn oil and also forms an important ingredient of animal food or fodder. If you wish to know the details of the constituents of this product, you can go through the following given information.

Corn germ consists of 14% saturated fatty acids and unsaturated fatty acids as well. The part of it which is the protein consists of 51% glutelin, 37% globulins, 5% of zein and 7% quantity of non-soluble oils. Maize germ also have in them present a large content of amino acids, phytin, beta sitostiron and Vitamin E.

Basically, maize germ is a derivative or by-product of the process of oil extraction from maize germs which are obtained from maize processing. Let's learn about the various uses and applications of corn germ.

The first and most important use of corn germ is that it forms a great ingredient for all the livestock species. For cows that are required to produce high yield milk, giving high protein and energy foods are necessary. The natural bypass oil content present in corn germ helps with the same.

What happens is that all kinds of poultry feeds must have high energy content and use of corn germ is a superb way of guaranteeing that the energy and oil levels for poultry feed are up to satisfactory levels.

What happens is that it quickly and easily absorbs several liquids such as tallow and molasses and therefore is a great carrier of liquid nutrients.

Corn germ is also used for feeding pets since apart from its high nutrient content; it has a beneficial effect on the coat of the animal when producing feeds for pets.

Another use of maize germ is for feeding pigs since corn germ consists of high unsaturated fatty acids and high vegetable oil. Another reason for the same is that it is an easy to digest and natural fiber which is convenient for the pigs to eat. Also, corn germ easily increases the energy content in the feeds of pigs.

In most of the cases, corn germ meal is mixed together with several other by-products to result in a final feed product. In the case of wet milling, the used or spent germs are mixed along with maize bran and maize steep liquor to result in corn gluten feed. Whereas on the other hand, in the case of the dry milling process, the used germs are mixed with broken kernels pericarp and inseparable fractions of germs to result in hominy feed.

Feasibility Report and Business Plan of Nakshi Green Agro Limited



7.6 Overview of Corn Gluten Meal (CGM)

Corn Gluten Meal (CGM) is a valuable byproduct of the normal corn milling process. It remains after the extraction of the starch and germ and the subsequent separation of the corn bran.

CGM is a protein-rich feed that is used as a source of protein, energy and pigments for livestock species including fish. Furthermore, it has a good proportion of undegradable protein that is essential for high producing ruminants. As with other feedstuffs, CGM must be properly supplemented with the necessary vitamins, minerals and amino acids.

Due to its high protein content, CGM is widely used as an alternative to other plant or animal-based proteins, such as Soybean Meal, Meat and Bone Meal and Fish Meal. CGM is also a valuable source of energy, due to its high gross energy (23.1 MJ/kg DM) coupled with high energy digestibility.

7.7 Overview of Corn Gluten Meal (CGM)

Corn steep liquor has been used as a feed additive for livestock, and as a bait attractant for carp. It is used in food production of yeasts, leavened dough products, and beer. It is a good additive for microbial growth media and hence plays a vital part in the production of penicillin, colirecombinant proteins, and other bacterial products such as enzymes, organic acids, cellulose, and biodegradable plastics. It has industrial applications in converting municipal waste compost for organic farming, biodegradation of crude oil, microbial induced carbonate precipitation for remediation of cracks in concrete. More recently, corn steep liquor has been used as a plant fertilizer.

Feasibility Report and Business Plan of Nakshi Green Agro Limited



REPORT

PROJECTED FINANCIAL ANALYSIS

Feasibility Report and Business Plan of Nakshi Green Agro Limited



8. Financial Analysis of the Project

8.1 Key Assumptions

Project Information	
Name of the Project	: Nakshi Green Agro Limited
Type of Project	: Agro Product Manufacturing and Processing Plant
Nature of the Project	: To manufacture Corn Starch, Liquid Glucose, Dextrose, Corn Germ, Corn Gluten Meal (CGM), Corn Fiber and Corn Steep Liquor (CSL).
Location of The Project	: Meduari, Varadoba, Bhaluka, Mymensingh, Bangladesh.
Corporate Head Office	: House # 42/A (4th Floor), Road# 9/A, Dhanmondi, Dhaka-1209, Bangladesh.
Legal Formation of the Project:	: Private Limited Company
Life of The Project	: 30 years
Project Land	: Total 339 Decimals for this project.
Contact Person	: Md. Salahuddin Mahmud Khan Ujjal , Managing Director : Mobile: +8801716977292, +8801779799436 : Email: smkhanuzzal@yahoo.com, nakshigreenagro@gmail.com
Product Composition	: Corn Starch, Liquid Glucose, Dextrose, Germ, CGM, Fiber, CSL
Market of the products	: Local and International market
Sources of Raw Materials	: Bangladesh
Sources of Energy	: REB, LPG GAS and Diesel Generator
Total Working Days	: 300
Production Assumptions	
Year wise Capacity Utilization	: 65% in 1st year, 70% in 2nd year, 75% in 3rd year, 80% in 4th year and 85% in 5th year
Attainable Production Capacity/Day	
Corn Starch	: 60,000 kg
Liquid Glucose	: 50,000 kg
Dextrose	: 25,000 kg
Corn Germ	: 13,000 kg
Corn Gluten Meal (CGM)	: 11,000 kg
Corn Fiber	: 24,000 kg
Corn Steep Liquor (CSL)	: 7,000 kg
Financial Assumptions	
Debt-Equity Ratios	
For Long Term/ Project Loan	: 76.36 : 23.64
For Short Term/ Working Capital Loan	: 70.00 : 30.00
Interest rate on long-term debt	: 4.00%
Interest rate on short-term debt	: 4.00%
Debt tenure (Years)-Long Term Loan	: 10
Moratorium Period (months)	: 24
Loan Repayment Mode	: Equal Quarterly Instalment Basis (EQI)
Discount rate (weighted Avg. cost of capital)	: 4.00%
Provision for Income Tax	: 27.50%
Revenue assumptions	
Average Sales Price/kg	
Corn Starch	: USD 0.63
Liquid Glucose	: USD 0.78
Dextrose	: USD 0.98
Corn Germ	: USD 0.49
Corn Gluten Meal (CGM)	: USD 0.74
Corn Fiber	: USD 0.35
Corn Steep Liquor (CSL)	: USD 0.11
Average Sales Revenue (5 Years)	: USD 27.62 mln
Average Net Profit (5 Years)	: USD 6.62 mln

Feasibility Report and Business Plan of Nakshi Green Agro Limited



Expense Assumptions	
Basic Raw Materials Cost/kg	
Different Varieties of Corn	: USD 0.22
Sulfur Dioxide (SO ₂)	: USD 0.43
Caustic Soda	: USD 0.57
Administrative overheads (% of sales)	
Sales, Marketing and Promotional Expenses	: 1.50%
Printing and Stationery Expenses	: 0.10%
Electricity Head Office and General	: 0.10%
Travelling and Conveyance	: 0.25%
Postage, Telegram and Telephone	: 0.15%
Entertainment	: 0.20%
Legal and audit fees	: 0.25%
Insurance(Fire)	: 0.50%
Miscellaneous Expenses	: 0.10%
Raw material price growth rate	: 5%
Salary Increment	: 5% per year
Finished Goods Stock	: 15 days
W.I.P Stock	: 7 days
Depreciation and Amotization charges	
Project Shed and Building	: 5.00%
Others Civils Construction	: 5.00%
Machinery and Equipment (Imported)	: 10.00%
Import Duty, Customs, VAT and Insurance	: 10.00%
Machinery and Equipment (Local)	: 10.00%
Sub Station (1250 KVA) with all Accessories	: 20.00%
Fire Fighting, Fire Door, Fire Alarm and others	: 20.00%
Security Devices, CC Camera, CC TV, and Compliance Equipment	: 20.00%
Vehicle	: 20.00%
Office Decoration, Furniture-fixture & Office Equipment	: 20.00%
Machinery erection & installation	: 10.00%
Contingency for Civil Construction	: 5.00%
Contingency for Machinery	: 10.00%
Other Factory Overhead	: 1.00% of sales Revenue
Other Assumptions	
Duty/Tax/Insurance & others	: 4.50% on imported Machinery and Equipement

Feasibility Report and Business Plan of Nakshi Green Agro Limited



8.2 Synopsis of Nakshi Green Agro Limited

Name of The Project:	: Nakshi Green Agro Limited
Corporate Office	: House # 42/A (4th Floor), Road# 9/A, Dhanmondi, Dhaka-1209, Bangladesh.
Status of The Project:	: Private Limited Company
Total Project Cost:	: USD 29,699,527
Life of The Project:	: 30 Years
Market of the products	: Domestic
No. of working days in a year	: 300 days
Employment Generation	: 166 persons
Sources of Utilities	: PDB/REB/DIESEL GENERATORS

Financial Summary					Fig in USD
Particulars	Year - 1	Year - 2	Year - 3	Year - 4	Year - 5
Sales at attainable capacity	37,458,261	37,458,261	37,458,261	37,458,261	37,458,261
Capacity Utilization	65%	70%	75%	80%	85%
Sales at utilization capacity	22,590,765	26,044,622	27,954,423	29,828,197	31,701,130
Gross Income/Profit	8,553,259	10,057,917	10,913,612	11,806,860	12,698,889
Operating Income	7,841,419	9,237,269	10,032,794	10,867,006	11,700,036
Net Income after Tax	5,074,100	6,079,641	6,685,450	7,322,415	7,960,394
Gross Income to Sales (%)	37.86%	38.62%	39.04%	39.58%	40.06%
Operating Income to Sales (%)	34.71%	35.47%	35.89%	36.43%	36.91%
Net Income to Sales (%)	22.46%	23.34%	23.92%	24.55%	25.11%
Return on Investment - ROI (%)	17.00%	17.21%	16.77%	16.33%	15.83%
Return on Equity - ROE (%)	45.84%	37.13%	30.51%	26.19%	23.06%
BEP on utilization capacity (%)	34.58%	30.32%	28.38%	26.60%	25.04%
BEP on attainable capacity (%)	22.48%	21.22%	21.29%	21.28%	21.28%
Break Even Sales (Tk.)	7,812,067	7,896,289	7,934,072	7,934,071	7,936,919
Pay Back Period (Years)	2.95				
Discounted Pay Back Period (Years)	3.18				
Debt Equity Ratio	76.36 : 23.64				
Project Loan Period	10 Years including 24 months moratorium period				
Interest Rate of Project Loan	4.00 % for Project loan & 4.00 % for Working Capital				
Mode of Loan Re-payment	Equal Quarterly Instalment (EQI)				
Internal Rate of return (IRR) - %	34.70%				
Debt Service Coverage Ratio (Times)	3.42	3.73	3.91	4.10	4.29
GDP Contribution based on 3rd year	11,566,866				
NB: Summary shows only 5 years information.					

Feasibility Report and Business Plan of Nakshi Green Agro Limited



8.3 Estimated Project Cost

Nakshi Green Agro Limited Agro Product Manufacturing and Processing Plant Estimated Project Cost Fig. in USD				
SL #	Particulars	Import	Cost Local	Total
01	Land and Land Development Cost	\$ -	\$ 1,031,739	\$ 1,031,739
02	Project Shed and Building		\$ 3,385,915	\$ 3,385,915
03	Others Civils Construction(Water reserver, Internal Road, Main Gate, Boundary wall and Security Room)		\$ 84,918	\$ 84,918
04	Machinery and Equipment(Imported)	\$ 15,544,400		\$ 15,544,400
05	Import Duty, Customs, VAT and Insurance(4.5%)		\$ 699,498	\$ 699,498
06	Machinery and Equipment(Local)		\$ 347,826	\$ 347,826
07	Sub Station(3500 KVA) with all Accessories		\$ 217,391	\$ 217,391
08	Fire Fighting, Fire Door , Fire Alarm and others		\$ 43,478	\$ 43,478
09	Security Devices, CC Camera, CC TV, and Compliance Equipment		\$ 30,435	\$ 30,435
10	Vehicle (Sixteen (15)- 15-MT Trucks Ccapacity)		\$ 584,348	\$ 584,348
11	Security Deposit and advance for Utility		\$ 43,478	\$ 43,478
12	Office Decoration, Furniture-fixture & Office Equipment		\$ 60,870	\$ 60,870
13	Machinery erection & installation		\$ 86,957	\$ 86,957
14	Preliminary expenses & Consultancy fees	\$ -	\$ 30,435	\$ 30,435
15	Contingency for Civil Construction- 5%		\$ 173,542	\$ 173,542
16	Contingency for Machinery -5%	\$ 777,220	\$ 70,087	\$ 847,307
TOTAL FIXED COST EXCEPT IDCP		\$16,321,620	\$ 6,890,916	\$ 23,212,536
17	Working Capital Requirement			\$ 5,069,035
18	IDCP (24 months Grace Period with 4% rate of interest)			\$ 1,417,956
TOTAL PROJECT COST				\$ 29,699,527

Means of Finance			Fig. in USD
	Sponsor's Equity	23.64%	\$ 5,488,086
	Long Term Loan	76.36%	\$ 17,724,450
	Interest During Construction Period(IDCP)		\$ 1,417,956
	Working Capital , Equity	30.00%	\$ 1,520,710
	Working Capital , Short Term Loan	70.00%	\$ 3,548,324
TOTAL			\$ 29,699,527

Feasibility Report and Business Plan of Nakshi Green Agro Limited

8.4 Debt-Equity Ratio Analysis- Long Term Finance

Nakshi Green Agro Limited Agro Product Manufacturing and Processing Plant Debt-Equity Ratio											
Sl #	Particulars	Total Project Cost	Contribution		Debt			Equity			Fig In USD
			Financial Institutions	Equity	Imported	Local	Total	Imported	Local	Total	
01	Land and Land Development Cost	\$ 1,031,739	0%	100%		\$ -	\$ -		\$ 1,031,739	\$ 1,031,739	
02	Project Shed and Building	\$ 3,385,915	60%	40%		\$ 2,031,549	\$ 2,031,549		\$ 1,354,366	\$ 1,354,366	
03	Others Civils Construction(Water reserver, Internal Road, Main Gate, Boundary wall and Security Room)	\$ 84,918	70%	30%		\$ 59,443	\$ 59,443		\$ 25,475	\$ 25,475	
04	Machinery and Equipment(Imported)	\$ 15,544,400	90%	10%	\$ 13,989,960		\$ 13,989,960	\$ 1,554,440	\$ -	\$ 1,554,440	
05	Import Duty, Customs, VAT and Insurance(4.5%)	\$ 699,498	100%	0%		\$ 699,498	\$ 699,498		\$ -	\$ -	
06	Machinery and Equipment(Local)	\$ 347,826	70%	30%		\$ 243,478	\$ 243,478		\$ 104,348	\$ 104,348	
07	Sub Station(3500 KVA) with all Accessories	\$ 217,391	80%	20%		\$ 173,913	\$ 173,913		\$ 43,478	\$ 43,478	
08	Fire Fighting, Fire Door , Fire Alarm and others	\$ 43,478	80%	20%		\$ 34,783	\$ 34,783		\$ 8,696	\$ 8,696	
09	Security Devices, CC Camera, CC TV, and Compliance Equipment	\$ 30,435	80%	20%		\$ 24,348	\$ 24,348		\$ 6,087	\$ 6,087	
10	Vehicle (Sixteen (15)- 15-MT Trucks Opacity)	\$ 584,348	80%	20%		\$ 467,478	\$ 467,478		\$ 116,870	\$ 116,870	
11	Security Deposit and advance for Utility	\$ 43,478	0%	100%		\$ -	\$ -		\$ 43,478	\$ 43,478	
12	Office Decoration, Furniture-fixture & Office Equipment	\$ 60,870	0%	100%		\$ -	\$ -		\$ 60,870	\$ 60,870	
13	Machinery erection & installation	\$ 86,957	0%	100%		\$ -	\$ -		\$ 86,957	\$ 86,957	
	Preliminary expenses & Consultancy fees	\$ 30,435	0%	100%		\$ -	\$ -		\$ 30,435	\$ 30,435	
	Contingency for Civil Construction- 5%	\$ 173,542	0%	100%		\$ -	\$ -		\$ 173,542	\$ 173,542	
	Contingency for Machinery -5%	\$ 847,307	0%	100%		\$ -	\$ -		\$ 847,307	\$ 847,307	
	Total	\$ 23,212,536			\$13,989,960	\$ 3,734,490	\$ 17,724,450	\$ 1,554,440	\$ 3,933,646	\$ 5,488,086	
	Debt -Equity Ratio (%)						76.36%			23.64%	

Feasibility Report and Business Plan of Nakshi Green Agro Limited



8.5 Projected Balance Sheet

Nakshi Green Agro Limited Agro Product Manufacturing and Processing Plant Projected Balance Sheet						
Fig. In USD						
Particulars	0 Year	1st Year	2nd Year	3rd Year	4th Year	5th Year
Fixed Assets						
Fixed Assets (net)	\$ 23,182,101	\$ 21,059,979	\$ 18,937,858	\$ 16,815,736	\$ 14,693,614	\$ 12,571,492
Preliminary & Pre-Operating Expenses	\$ 30,435	\$ 24,348	\$ 18,261	\$ 12,174	\$ 6,087	\$ -
Interest During Construction Period (IDCP)	\$ 1,417,956	\$ 1,134,365	\$ 850,774	\$ 567,182	\$ 283,591	\$ -
Investment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub Total	\$ 24,630,492	\$ 22,218,692	\$ 19,806,892	\$ 17,395,092	\$ 14,983,292	\$ 12,571,492
Current Assets						
Cash & Bank Balance	\$ -	\$ 6,471,080	\$ 12,156,664	\$ 18,262,338	\$ 24,810,405	\$ 31,798,949
Closing Stock/Inventory						
Raw Materials Cost		\$ 2,936,280	\$ 3,162,147	\$ 3,388,015	\$ 3,613,883	\$ 3,839,750
Packaging Cost		\$ -	\$ -	\$ -	\$ -	\$ -
Other Materials Cost		\$ -	\$ -	\$ -	\$ -	\$ -
Finished Goods		\$ 738,816	\$ 802,520	\$ 854,647	\$ 903,510	\$ 952,565
Work in Process		\$ 205,540	\$ 197,634	\$ 211,751	\$ 225,868	\$ 239,984
Advance Salary and Wages		\$ 188,133	\$ 196,816	\$ 206,222	\$ 216,063	\$ 223,437
Accounts Receivables		\$ 1,223,666	\$ 1,519,270	\$ 1,747,151	\$ 1,988,546	\$ 2,245,497
Advance Factory and Admin Overhead Expenses		\$ 826,819	\$ 2,421,661	\$ 2,637,781	\$ 2,799,160	\$ 2,960,534
Sub Total	\$ -	\$ 12,590,333	\$ 20,456,713	\$ 27,307,905	\$ 34,557,435	\$ 42,260,716
Total Assets	\$ 24,630,492	\$ 34,809,025	\$ 40,263,605	\$ 44,702,997	\$ 49,540,727	\$ 54,832,208
Liability & Owner's Equity						
Current Liabilities						
Short Term Loan (Working Capital Loan)		\$ 3,548,324	\$ 4,576,493	\$ 5,030,819	\$ 5,471,411	\$ 5,921,298
Accounts Payable		\$ 677,603	\$ 677,603	\$ 677,603	\$ 677,603	\$ 677,603
Accrued Expenses		\$ 369,116	\$ 1,081,099	\$ 1,177,581	\$ 1,249,625	\$ 1,321,667
Other Accrued Liabilities		\$ 3,500	\$ 3,500	\$ 3,500	\$ 3,500	\$ 3,500
Total Current Liabilities	\$ -	\$ 4,598,543	\$ 6,338,695	\$ 6,889,502	\$ 7,402,139	\$ 7,924,068
Long Term Liabilities						
Long Term Loan (Including IDCP)	\$ 19,142,405	\$ 19,142,405	\$ 17,552,477	\$ 15,897,991	\$ 14,176,326	\$ 12,384,755
Total Liabilities	\$ 19,142,405	\$ 23,740,949	\$ 23,891,172	\$ 22,787,493	\$ 21,578,465	\$ 20,308,823
Owners Equity						
Share Capital	\$ 5,488,086	\$ 5,488,086	\$ 5,488,086	\$ 5,488,086	\$ 5,488,086	\$ 5,488,086
Share Capital-Working Capital		\$ 1,520,710	\$ 1,961,354	\$ 2,156,065	\$ 2,344,891	\$ 2,537,699
General Reserve		\$ 507,410	\$ 1,115,374	\$ 1,783,919	\$ 2,516,161	\$ 3,312,200
Retained Earnings	\$ -	\$ 3,551,870	\$ 7,807,619	\$ 12,487,433	\$ 17,613,124	\$ 23,185,400
Total Owner's Equity	\$ 5,488,086	\$ 11,068,077	\$ 16,372,433	\$ 21,915,504	\$ 27,962,261	\$ 34,523,385
Total Liability & Owner's Equity	\$ 24,630,492	\$ 34,809,025	\$ 40,263,605	\$ 44,702,997	\$ 49,540,727	\$ 54,832,208

Feasibility Report and Business Plan of Nakshi Green Agro Limited



8.6 Projected Income Statement

Nakshi Green Agro Limited Agro Product Manufacturing and Processing Plant Projected Income Statement					
Fig. in USD					
Particulars	1st Year	2nd Year	3rd Year	4th Year	5th Year
Sales	\$ 22,590,765	\$ 26,044,622	\$ 27,954,423	\$ 29,828,197	\$ 31,701,130
Cost of Goods Sold	\$ 14,037,505	\$ 15,986,705	\$ 17,040,811	\$ 18,021,337	\$ 19,002,242
Gross Income	\$ 8,553,259	\$ 10,057,917	\$ 10,913,612	\$ 11,806,860	\$ 12,698,889
Administrative & Marketing Expenses	\$ 711,840	\$ 820,648	\$ 880,818	\$ 939,854	\$ 998,852
Operating Income	\$ 7,841,419	\$ 9,237,269	\$ 10,032,794	\$ 10,867,006	\$ 11,700,036
Other Income / Expenses					
Return on Investment	\$ -	\$ -	\$ -	\$ -	\$ -
Net Income Before Interest & Taxes	\$ 7,841,419	\$ 9,237,269	\$ 10,032,794	\$ 10,867,006	\$ 11,700,036
Financial Expenses	\$ 842,661	\$ 851,557	\$ 811,484	\$ 767,123	\$ 720,182
Net Income Before Taxes	\$ 6,998,758	\$ 8,385,712	\$ 9,221,310	\$ 10,099,883	\$ 10,979,854
Provision for VAT and Tax (27.50%)	\$ 1,924,658	\$ 2,306,071	\$ 2,535,860	\$ 2,777,468	\$ 3,019,460
Net Income after Tax	\$ 5,074,100	\$ 6,079,641	\$ 6,685,450	\$ 7,322,415	\$ 7,960,394
Appropriation					
Retained Earnings at beginning of the period	\$ -	\$ 3,551,870	\$ 7,807,619	\$ 12,487,433	\$ 17,613,124
Net Income During The Period	\$ 5,074,100	\$ 6,079,641	\$ 6,685,450	\$ 7,322,415	\$ 7,960,394
Cash Dividend declared(20% each year)	\$ 1,014,820	\$ 1,215,928	\$ 1,337,090	\$ 1,464,483	\$ 1,592,079
Transfer to General Reserve(10% each year)	\$ 507,410	\$ 607,964	\$ 668,545	\$ 732,241	\$ 796,039
Retained Earnings at End of the period	\$ 3,551,870	\$ 7,807,619	\$ 12,487,433	\$ 17,613,124	\$ 23,185,400
Ratios :					
Gross Income to sales	37.86%	38.62%	39.04%	39.58%	40.06%
Operating Income to sales	34.71%	35.47%	35.89%	36.43%	36.91%
Net Income after Tax to sales	22.46%	23.34%	23.92%	24.55%	25.11%
Debt Service Coverage ratio	3.42	3.73	3.91	4.10	4.29

Feasibility Report and Business Plan of Nakshi Green Agro Limited



8.7 Sensitivity Analysis

(a) Sensitivity Analysis based on 5.00% decrease of sales price

Nakshi Green Agro Limited Agro Product Manufacturing and Processing Plant Projected Income Statement <i>(Sensitivity Analysis based on 5% decrease of sales price)</i>					
Fig. in USD					
Particulars	1st Year	2nd Year	3rd Year	4th Year	5th Year
Sales	\$ 21,461,227	\$ 24,742,391	\$ 26,556,702	\$ 28,336,787	\$ 30,116,074
Cost of Goods Sold	\$ 14,037,505	\$ 15,986,705	\$ 17,040,811	\$ 18,021,337	\$ 19,002,242
Gross Income	\$ 7,423,721	\$ 8,755,686	\$ 9,515,891	\$ 10,315,450	\$ 11,113,832
Administrative & Marketing Expenses	\$ 711,840	\$ 820,648	\$ 880,818	\$ 939,854	\$ 998,852
Operating Income	\$ 6,711,881	\$ 7,935,038	\$ 8,635,073	\$ 9,375,596	\$ 10,114,980
Other Income / Expenses					
Return on Investment	\$ -	\$ -	\$ -	\$ -	\$ -
Net Income Before Interest & Taxes	\$ 6,711,881	\$ 7,935,038	\$ 8,635,073	\$ 9,375,596	\$ 10,114,980
Financial Expenses	\$ 842,661	\$ 851,557	\$ 811,484	\$ 767,123	\$ 720,182
Net Income Before Taxes	\$ 5,869,220	\$ 7,083,481	\$ 7,823,588	\$ 8,608,473	\$ 9,394,798
Provision for VAT and Tax (27.50%)	\$ 1,614,035	\$ 1,947,957	\$ 2,151,487	\$ 2,367,330	\$ 2,583,569
Net Income after Tax	\$ 4,255,184	\$ 5,135,524	\$ 5,672,102	\$ 6,241,143	\$ 6,811,228
Appropriation					
Retained Earnings at beginning of the period	\$ -	\$ 2,978,629	\$ 6,573,496	\$ 10,543,967	\$ 14,912,767
Net Income During The Period	\$ 4,255,184	\$ 5,135,524	\$ 5,672,102	\$ 6,241,143	\$ 6,811,228
Cash Dividend declared(20% each year)	\$ 851,037	\$ 1,027,105	\$ 1,134,420	\$ 1,248,229	\$ 1,362,246
Transfer to General Reserve(10% each year)	\$ 425,518	\$ 513,552	\$ 567,210	\$ 624,114	\$ 681,123
Retained Earnings at End of the period	\$ 2,978,629	\$ 6,573,496	\$ 10,543,967	\$ 14,912,767	\$ 19,680,627
Ratios :					
Gross Income to sales	34.59%	35.39%	35.83%	36.40%	36.90%
Operating Income to sales	31.27%	32.07%	32.52%	33.09%	33.59%
Net Income after Tax to sales	19.83%	20.76%	21.36%	22.02%	22.62%
Debt Service Coverage ratio	3.09	3.35	3.51	3.68	3.85

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(b) Sensitivity Analysis based on 5.00% increase of Basic Raw Materials Cost

Nakshi Green Agro Limited Agro Product Manufacturing and Processing Plant Projected Income Statement <i>Sensitivity Analysis based on 5% increase of Basic Raw Materials Cost</i>					
Fig. In USD					
Particulars	1st Year	2nd Year	3rd Year	4th Year	5th Year
Sales	\$ 22,590,765	\$ 26,044,622	\$ 27,954,423	\$ 29,828,197	\$ 31,701,130
Cost of Goods Sold	\$ 14,446,162	\$ 16,410,879	\$ 17,490,211	\$ 18,474,155	\$ 19,454,489
Gross Income	\$ 8,144,603	\$ 9,633,743	\$ 10,464,213	\$ 11,354,042	\$ 12,246,642
Administrative & Marketing Expenses	\$ 711,840	\$ 820,648	\$ 880,818	\$ 939,854	\$ 998,852
Operating Income	\$ 7,432,762	\$ 8,813,095	\$ 9,583,395	\$ 10,414,188	\$ 11,247,789
Other Income / Expenses					
Return on Investment	\$ -	\$ -	\$ -	\$ -	\$ -
Net Income Before Interest & Taxes	\$ 7,432,762	\$ 8,813,095	\$ 9,583,395	\$ 10,414,188	\$ 11,247,789
Financial Expenses	\$ 842,661	\$ 851,557	\$ 811,484	\$ 767,123	\$ 720,182
Net Income Before Taxes	\$ 6,590,101	\$ 7,961,538	\$ 8,771,910	\$ 9,647,065	\$ 10,527,607
Provision for VAT and Tax (27.50%)	\$ 1,812,278	\$ 2,189,423	\$ 2,412,275	\$ 2,652,943	\$ 2,895,092
Net Income after Tax	\$ 4,777,823	\$ 5,772,115	\$ 6,359,635	\$ 6,994,122	\$ 7,632,515
Appropriation					
Retained Earnings at beginning of the period	\$ -	\$ 3,344,476	\$ 7,384,957	\$ 11,836,701	\$ 16,732,587
Net Income During The Period	\$ 4,777,823	\$ 5,772,115	\$ 6,359,635	\$ 6,994,122	\$ 7,632,515
Cash Dividend declared(20% each year)	\$ 955,565	\$ 1,154,423	\$ 1,271,927	\$ 1,398,824	\$ 1,526,503
Transfer to General Reserve(10% each year)	\$ 477,782	\$ 577,211	\$ 635,964	\$ 699,412	\$ 763,252
Retained Earnings at End of the period	\$ 3,344,476	\$ 7,384,957	\$ 11,836,701	\$ 16,732,587	\$ 22,075,347
Ratios :					
Gross Income to sales	36.05%	36.99%	37.43%	38.06%	38.63%
Operating Income to sales	32.90%	33.84%	34.28%	34.91%	35.48%
Net Income after Tax to sales	21.15%	22.16%	22.75%	23.45%	24.08%
Debt Service Coverage ratio	3.30	3.61	3.78	3.98	4.17

Feasibility Report and Business Plan of Nakshi Green Agro Limited



(c) Sensitivity Analysis based on 5.00% decrease of sales price 5.00% increase of Raw Materials Cost

Nakshi Green Agro Limited Agro Product Manufacturing and Processing Plant Projected Income Statement <i>Sensitivity Analysis based on 5% decrease of sales price 5% increase of Basic Raw Materials Cost</i>					
Fig. in USD					
Particulars	1st Year	2nd Year	3rd Year	4th Year	5th Year
Sales	\$ 21,461,227	\$ 24,742,391	\$ 26,556,702	\$ 28,336,787	\$ 30,116,074
Cost of Goods Sold	\$ 14,446,162	\$ 16,410,879	\$ 17,490,211	\$ 18,474,155	\$ 19,454,489
Gross Income	\$ 7,015,065	\$ 8,331,511	\$ 9,066,492	\$ 9,862,632	\$ 10,661,585
Administrative & Marketing Expenses	\$ 711,840	\$ 820,648	\$ 880,818	\$ 939,854	\$ 998,852
Operating Income	\$ 6,303,224	\$ 7,510,864	\$ 8,185,674	\$ 8,922,778	\$ 9,662,733
Other Income / Expenses					
Return on Investment	\$ -	\$ -	\$ -	\$ -	\$ -
Net Income Before Interest & Taxes	\$ 6,303,224	\$ 7,510,864	\$ 8,185,674	\$ 8,922,778	\$ 9,662,733
Financial Expenses	\$ 842,661	\$ 851,557	\$ 811,484	\$ 767,123	\$ 720,182
Net Income Before Taxes	\$ 5,460,563	\$ 6,659,307	\$ 7,374,189	\$ 8,155,655	\$ 8,942,551
Provision for VAT and Tax (27.50%)	\$ 1,501,655	\$ 1,831,309	\$ 2,027,902	\$ 2,242,805	\$ 2,459,201
Net Income after Tax	\$ 3,958,908	\$ 4,827,997	\$ 5,346,287	\$ 5,912,850	\$ 6,483,349
Appropriation					
Retained Earnings at beginning of the period	\$ -	\$ 2,771,236	\$ 6,150,834	\$ 9,893,235	\$ 14,032,230
Net Income During The Period	\$ 3,958,908	\$ 4,827,997	\$ 5,346,287	\$ 5,912,850	\$ 6,483,349
Cash Dividend declared(20% each year)	\$ 791,782	\$ 965,599	\$ 1,069,257	\$ 1,182,570	\$ 1,296,670
Transfer to General Reserve(10% each year)	\$ 395,891	\$ 482,800	\$ 534,629	\$ 591,285	\$ 648,335
Retained Earnings at End of the period	\$ 2,771,236	\$ 6,150,834	\$ 9,893,235	\$ 14,032,230	\$ 18,570,574
Ratios :					
Gross Income to sales	32.69%	33.67%	34.14%	34.81%	35.40%
Operating Income to sales	29.37%	30.36%	30.82%	31.49%	32.08%
Net Income after Tax to sales	18.45%	19.51%	20.13%	20.87%	21.53%
Debt Service Coverage ratio	2.97	3.23	3.38	3.55	3.72

Feasibility Report and Business Plan of Nakshi Green Agro Limited



8.8 Projected Cost of Goods Sold

Nakshi Green Agro Limited Agro Product Manufacturing and Processing Plant Projected Cost of Goods Sold					
Fig. in USD					
Particulars	1st Year	2nd Year	3rd Year	4th Year	5th Year
Capacity Utilization	65%	70%	75%	80%	85%
Basic Raw Materials, Chemicals and Auxiliaries Cost	\$ 8,808,839	\$ 9,486,442	\$ 10,164,045	\$ 10,841,648	\$ 11,519,251
Salaries & Wages	\$ 338,735	\$ 381,628	\$ 428,429	\$ 478,799	\$ 533,001
GAS, Electricity, Water, Fuel & Lubricant	\$ 3,020,555	\$ 3,252,905	\$ 3,485,255	\$ 3,717,606	\$ 3,949,956
Repair, Maintenance & Stores	\$ 181,712	\$ 272,568	\$ 363,424	\$ 363,424	\$ 363,424
Load , Unloading, Handling and Carrying Charge	\$ 132,133	\$ 142,297	\$ 152,461	\$ 162,625	\$ 172,789
Other Production Overhead	\$ 88,088	\$ 94,864	\$ 101,640	\$ 108,416	\$ 115,193
Depreciation & Amortization	\$ 2,411,800	\$ 2,411,800	\$ 2,411,800	\$ 2,411,800	\$ 2,411,800
Total Production Cost	\$ 14,981,861	\$ 16,042,504	\$ 17,107,055	\$ 18,084,317	\$ 19,065,413
Add: Opening Stock of W.I.P (7 days)	\$ -	\$ 205,540	\$ 197,634	\$ 211,751	\$ 225,868
Total Manufacturing Cost	\$ 14,981,861	\$ 16,248,043	\$ 17,304,689	\$ 18,296,068	\$ 19,291,281
Less: Closing Stock of W.I.P (7 days)	\$ 205,540	\$ 197,634	\$ 211,751	\$ 225,868	\$ 239,984
Total Cost of Goods Manufactured	\$ 14,776,322	\$ 16,050,409	\$ 17,092,938	\$ 18,070,201	\$ 19,051,297
Add: Opening Stock of Finished Goods (15 days)	\$ -	\$ 738,816	\$ 802,520	\$ 854,647	\$ 903,510
Goods available for sale	\$ 14,776,322	\$ 16,789,225	\$ 17,895,458	\$ 18,924,847	\$ 19,954,807
Less: Closing Stock of Finished Goods (15 days)	\$ 738,816	\$ 802,520	\$ 854,647	\$ 903,510	\$ 952,565
Cost of Goods Sold	\$ 14,037,505	\$ 15,986,705	\$ 17,040,811	\$ 18,021,337	\$ 19,002,242

Feasibility Report and Business Plan of Nakshi Green Agro Limited



8.9 Projected Cash Flow Statement

Nakshi Green Agro Limited Agro Product Manufacturing and Processing Plant Projected Cash Flow Statement						
Fig. In USD						
Particulars	0 Year	1st Year	2nd Year	3rd Year	4th Year	5th Year
A. Cash Flows from Operating Activities						
Net Income after Tax		\$ 5,074,100	\$ 6,079,641	\$ 6,685,450	\$ 7,322,415	\$ 7,960,394
Add : Non cash Expenses						
Depreciation & Amortization		\$ 2,411,800	\$ 2,411,800	\$ 2,411,800	\$ 2,411,800	\$ 2,411,800
Increase in Working Capital		\$ (5,069,035)	\$ (1,468,812)	\$ (649,037)	\$ (629,418)	\$ (642,695)
Net Cash Flows from operating Activities	\$ -	\$ 2,416,865	\$ 7,022,630	\$ 8,448,213	\$ 9,104,797	\$ 9,729,499
B. Cash Flow from Investing Activities						
Acquisition of Fixed assets	\$ (24,630,492)	\$ -	\$ -	\$ -	\$ -	\$ -
Investment in FDR	\$ -					
Net Cash Flows from Investing Activities	\$ (24,630,492)	\$ -	\$ -	\$ -	\$ -	\$ -
C. Cash Flows From Financing Activities						
Shareholders Equity	\$ 5,488,086					
Shareholders Equity-Working Capital		\$ 1,520,710	\$ 440,644	\$ 194,711	\$ 188,825	\$ 192,809
Long Term Loan received from Bank (Including IDCP)	\$ 19,142,405					
Short Term Loan (Working Capital)		\$ 3,548,324	\$ 1,028,168	\$ 454,326	\$ 440,593	\$ 449,887
Re-payment of Long Term Loan			\$ (1,589,929)	\$ (1,654,486)	\$ (1,721,665)	\$ (1,791,571)
Dividend paid		\$ (1,014,820)	\$ (1,215,928)	\$ (1,337,090)	\$ (1,464,483)	\$ (1,592,079)
Net Cash Flows from Financing Activities	\$ 24,630,492	\$ 4,054,215	\$ (1,337,045)	\$ (2,342,539)	\$ (2,556,730)	\$ (2,740,955)
Increase / Decrease of Cash & Cash Equivalent during the period	\$ -	\$ 6,471,080	\$ 5,685,585	\$ 6,105,674	\$ 6,548,067	\$ 6,988,544
Cash & Cash Equivalent at the beginning of the period	\$ -	\$ -	\$ 6,471,080	\$ 12,156,664	\$ 18,262,338	\$ 24,810,405
Cash & Cash Equivalent at the End of the period	\$ -	\$ 6,471,080	\$ 12,156,664	\$ 18,262,338	\$ 24,810,405	\$ 31,798,949

Feasibility Report and Business Plan of Nakshi Green Agro Limited



8.10 Assessment of Working Capital

Nakshi Green Agro Limited Agro Product Manufacturing and Processing Plant Assessment of Working Capital						
Fig. In USD						
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		65%	70%	75%	80%	85%
Current Operating Assets						
Basic Chemicals and Auxiliaries						
Basic Raw Materials, Chemicals and Auxiliaries Cost	4 months	\$ 2,936,280	\$ 3,162,147	\$ 3,388,015	\$ 3,613,883	\$ 3,839,750
Total Basic Chemicals and Auxiliaries and Packing Cost		\$ 2,936,280	\$ 3,162,147	\$ 3,388,015	\$ 3,613,883	\$ 3,839,750
Closing Stock/Inventory						
Finished Goods	15 days	\$ 738,816	\$ 802,520	\$ 854,647	\$ 903,510	\$ 952,565
Work in Process	7 days	\$ 205,540	\$ 197,634	\$ 211,751	\$ 225,868	\$ 239,984
Advance Salary and Wages	3 months	\$ 188,133	\$ 196,816	\$ 206,222	\$ 216,063	\$ 223,437
Accounts Receivables	1 month	\$ 1,223,666	\$ 1,519,270	\$ 1,747,151	\$ 1,988,546	\$ 2,245,497
Factory and Admin Overhead Expenses	3 months	\$ 826,819	\$ 2,421,661	\$ 2,637,781	\$ 2,799,160	\$ 2,960,534
Total Current Operating Assets		\$ 6,119,254	\$ 8,300,049	\$ 9,045,568	\$ 9,747,030	\$ 10,461,767
Current Operating Liabilities						
Accounts Payable	15 days on Raw Materials Cost	\$ 677,603	\$ 677,603	\$ 677,603	\$ 677,603	\$ 677,603
Accrued Expenses	30 days on production overhead and Admin Expenses	\$ 369,116	\$ 1,081,099	\$ 1,177,581	\$ 1,249,625	\$ 1,321,667
Other Accrued Liabilities	LS	\$ 3,500	\$ 3,500	\$ 3,500	\$ 3,500	\$ 3,500
Total Current Operating Liabilities		\$ 1,050,219	\$ 1,762,202	\$ 1,858,684	\$ 1,930,728	\$ 2,002,770
Net Working Capital		\$ 5,069,035	\$ 6,537,847	\$ 7,186,884	\$ 7,816,302	\$ 8,458,997
Working Capital Requirement as per year wise						
	%	1st Year	2nd Year	3rd Year	4th Year	5th Year
Short Term Loan from Banks	70.00%	\$ 3,548,324	\$ 4,576,493	\$ 5,030,819	\$ 5,471,411	\$ 5,921,298
Equity Contribution	30.00%	\$ 1,520,710	\$ 1,961,354	\$ 2,156,065	\$ 2,344,891	\$ 2,537,699
Total	100.00%	\$ 5,069,035	\$ 6,537,847	\$ 7,186,884	\$ 7,816,302	\$ 8,458,997

For this project, NGA has assessed the working capital requirement amounted to USD 5.07 mln as funded and non-funded facilities by utilizing 65% average capacity in the first year in which NGA requires 3.55 mln as funded and non-funded facilities from banks/financial institutions.

The working capital facilities will include LC Facilities, Bank Guarantee, LTR 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 : USD 3.55 mln

Non-Funded

LC Facilities : USD 2.20 mln
Bank Guarantee : USD 0.10 mln

Funded

LTR Facilities : USD 0.50 mln
CC Hypo/OD : USD 0.75 mln

Feasibility Report and Business Plan of Nakshi Green Agro Limited



8.10.1 Breakdown of Working Capital

Breakdown of Working Capital

Working Capital Facilities are expecting from banks/financial Institutions as follows(Funded and Non Funded)

Working Capital Facilities	1st Year	2nd Year	3rd Year	4th Year	5th Year
Non-Funded Facilities					
LC Facilities	2,200,000	2,310,000	2,425,500	2,546,775	2,674,114
Bank Guarantee	100,000	100,000	100,000	100,000	100,000
Total No Funded Facilities	2,300,000	2,410,000	2,525,500	2,646,775	2,774,114
Funded Facilities					
LATR Facility	500,000	525,000	551,250	578,813	607,753
FDBP/LDBP	-	-	-	-	-
PC limit	-	-	-	-	-
CC Hypo/OD/Time Loan/RSTL	748,324	1,641,493	1,954,069	2,245,824	2,539,431
Total Funded Facilities	1,248,324	2,166,493	2,505,319	2,824,636	3,147,184
Total Facilities	3,548,324	4,576,493	5,030,819	5,471,411	5,921,298

8.10.2 Financial Expenses for Working Capital

Financial Expenses	1st Year	2nd Year	3rd Year	4th Year	5th Year
Long Term/ Project Finance					
For Long Term Loan(Existing)					
For Long Term Loan(New)	742,045	677,488	610,309	540,402	467,657
Short Term/ Working Capital					
For Short Term Loan(Existing)					
For Short Term Loan(New)	100,616	174,069	201,175	226,721	252,525
Yearly Financial Expenses	842,661	851,557	811,484	767,123	720,182
Monthly Financial Expenses	70,222	70,963	67,624	63,927	60,015

Feasibility Report and Business Plan of Nakshi Green Agro Limited



8.11 Human Resources, Administrative, Selling and Marketing Expenses

8.11.1 Manpower Requirement and their Base Salary

Nakshi Green Agro Limited					
Agro Product Manufacturing and Processing Plant					
Manpower Requirement and Base Salary & Wages					
Factory and Production					
	Designation	Salary/month	Salary/Anum	No.	Total Salary/Anum
01	General Manager-Factory In Charge	\$ 1,739	\$ 20,870	1	\$ 20,870
02	Factory Supervisor/Shift In chagre (Tech.)	\$ 1,043	\$ 12,522	3	\$ 37,565
03	Chief Chemist	\$ 1,304	\$ 15,652	1	\$ 15,652
04	Deputy / Asst. Chemist	\$ 522	\$ 6,261	2	\$ 12,522
05	Manager Production	\$ 870	\$ 10,435	2	\$ 20,870
06	Asst. Manager Production	\$ 348	\$ 4,174	2	\$ 8,348
07	Quality Assurance-In Charge	\$ 870	\$ 10,435	2	\$ 20,870
08	Sr./Jr. Executive QC	\$ 348	\$ 4,174	2	\$ 8,348
09	Laboratory In Charge	\$ 870	\$ 10,435	1	\$ 10,435
10	Laboratory Technician	\$ 391	\$ 4,696	3	\$ 14,087
11	Sr. Engineer-(Elect/Mech./Civ.)	\$ 870	\$ 10,435	6	\$ 62,609
12	Sr./Jr. Technician	\$ 348	\$ 4,174	6	\$ 25,043
13	Sr./Jr. Mechanic/Electrician	\$ 348	\$ 4,174	4	\$ 16,696
14	Sulphur Di-Oxide Operator	\$ 217	\$ 2,609	4	\$ 10,435
15	Granding/Germ Wash Operator	\$ 217	\$ 2,609	4	\$ 10,435
16	Starch Wash Operator	\$ 217	\$ 2,609	4	\$ 10,435
17	Gluten Dryer Operator	\$ 217	\$ 2,609	4	\$ 10,435
18	Boiler Operator	\$ 217	\$ 2,609	3	\$ 7,826
19	By Product Operator	\$ 217	\$ 2,609	6	\$ 15,652
20	Packing Operator	\$ 217	\$ 2,609	6	\$ 15,652
21	Machine Operator (Sub Station)	\$ 261	\$ 3,130	3	\$ 9,391
22	Machine Operator (Silo)	\$ 261	\$ 3,130	3	\$ 9,391
23	Fire Fighter	\$ 217	\$ 2,609	2	\$ 5,217
24	Fork Lift Operator	\$ 217	\$ 2,609	3	\$ 7,826
25	Finish Good Worker	\$ 174	\$ 2,087	10	\$ 20,870
26	Executive Accounts-Factory	\$ 348	\$ 4,174	3	\$ 12,522
27	Executive Purchase-Factory	\$ 348	\$ 4,174	1	\$ 4,174
28	Time Keeper	\$ 157	\$ 1,878	2	\$ 3,757
29	Security Guard	\$ 104	\$ 1,252	10	\$ 12,522
30	Peon	\$ 87	\$ 1,043	2	\$ 2,087
31	Cleaner	\$ 70	\$ 835	2	\$ 1,670
	Sub-Total			107	\$ 444,209
Maintenance & Utility :					
	Designation	Salary/month	Salary/Anum	No.	Total Salary/Anum
01	Maintenance Incharge	\$ 435	\$ 5,217	1	\$ 5,217
02	Fitter/Mechanics	\$ 261	\$ 3,130	2	\$ 6,261
03	Electrician	\$ 130	\$ 1,565	2	\$ 3,130
04	Generator Operator	\$ 122	\$ 1,461	2	\$ 2,922
	Sub-Total			7	\$ 17,530

Feasibility Report and Business Plan of Nakshi Green Agro Limited



Stores :

	Designation	Salary/month	Salary/Anum	No.	Total Salary/Anum
01	Manager	\$ 434.78	\$ 5,217.39	1	\$ 5,217
02	Inventory Officer	\$ 217.39	\$ 2,608.70	1	\$ 2,609
03	Store Keeper	\$ 130.43	\$ 1,565.22	2	\$ 3,130
05	Labour	\$ 69.57	\$ 834.78	10	\$ 8,348
	Sub-Total	-	-	14	\$ 19,304

Head office, Accounts, Commercial & Marketing

	Designation	Salary / month	Salary / Anum	No.	Total Salary/Anum
01	Director Remuneration	\$ 870	\$ 10,435	5	\$ 52,174
01	Manging Director	\$ 2,174	\$ 26,087	1	\$ 26,087
02	CFO	\$ 1,739	\$ 20,870	1	\$ 20,870
03	Accounts Officer	\$ 348	\$ 4,174	4	\$ 16,696
04	Sales and Marketing Manager	\$ 1,304	\$ 15,652	1	\$ 15,652
05	Sales and Marketing -Executive	\$ 348	\$ 4,174	10	\$ 41,739
06	Manager-Commercial	\$ 435	\$ 5,217	1	\$ 5,217
07	Commercial Officer	\$ 261	\$ 3,130	3	\$ 9,391
08	Manager-HR & Admin	\$ 435	\$ 5,217	1	\$ 5,217
09	Executive Officer -HR & Admin	\$ 261	\$ 3,130	3	\$ 9,391
10	Driver	\$ 139	\$ 1,670	5	\$ 8,348
11	Peon	\$ 87	\$ 1,043	2	\$ 2,087
12	Cleaner	\$ 61	\$ 730	1	\$ 730
	Sub-Total			38	\$ 213,600

	Total Manpower Requirement		No. of Employees	Total Yearly Salary
		Production Oriented Employees	128	\$ 481,043
		Head office-Admin, Sales and Marketing	38	\$ 213,600
		Grand Total	166	\$ 694,643
		Per Employee Salary /Month		\$ 349

Feasibility Report and Business Plan of Nakshi Green Agro Limited



Nakshi Green Agro Limited Agro Product Manufacturing and Processing Plant Salary and Wages						
Fig. in USD						
Particulars	1st Year	2nd Year	3rd Year	4th Year	5th Year	
Salary and Wages						
Factory Salary and Wages	\$ 481,043	\$ 481,043	\$ 505,096	\$ 529,148	\$ 554,403	
Head office: Accounts, Sales & Marketing	\$ 213,600	\$ 213,600	\$ 224,280	\$ 234,960	\$ 246,174	
Salary Increment(5% each year)						
Factory Salary and Wages		\$ 24,052	\$ 24,052	\$ 25,255	\$ 26,457	
Head office: Accounts, Sales & Marketing		\$ 10,680	\$ 10,680	\$ 11,214		
Bonus per year						
Factory Salary and Wages	\$ 40,087	\$ 40,087	\$ 42,091	\$ 44,096	\$ 46,200	
Head office: Accounts, Sales & Marketing	\$ 17,800	\$ 17,800	\$ 18,690	\$ 19,580	\$ 20,515	
Total Salary and wages						
Factory Salary and Wages	\$ 521,130	\$ 545,183	\$ 571,239	\$ 598,498	\$ 627,060	
Head office: Accounts, Sales & Marketing	\$ 231,400	\$ 242,080	\$ 253,650	\$ 265,754	\$ 266,689	
Total Salary and Wages	\$ 752,530	\$ 787,263	\$ 824,889	\$ 864,252	\$ 893,749	
Average Monthly Salary and wages						
Factory Salary and Wages	\$ 43,428	\$ 45,432	\$ 47,603	\$ 49,875	\$ 52,255	
Head office: Accounts, Sales & Marketing	\$ 19,283	\$ 20,173	\$ 21,138	\$ 22,146	\$ 22,224	
Total Salary and Wages	\$ 62,711	\$ 65,605	\$ 68,741	\$ 72,021	\$ 74,479	

Feasibility Report and Business Plan of Nakshi Green Agro Limited



8.11.2 Administrative, Selling and Marketing Expenses

Nakshi Green Agro Limited Agro Product Manufacturing and Processing Plant Administration, Selling and Marketing Expenses							
Fig.in USD							
S.N	Particulars	% on Revenue	1st Year	2nd Year	3rd Year	4th Year	5th Year
1	Salary-Admin, Sales and Marketing		231	242	254	266	267
2	Sales, Marketing and Promotional Expenses	1.50%	338,861	390,669	419,316	447,423	475,517
3	Printing and Stationery Expenses	0.10%	22,591	26,045	27,954	29,828	31,701
4	Electricity Head Office and General	0.10%	22,591	26,045	27,954	29,828	31,701
5	Travelling and Conveyance	0.25%	56,477	65,112	69,886	74,570	79,253
6	Postage, Telegram and Telephone	0.15%	33,886	39,067	41,932	44,742	47,552
7	Entertainment	0.20%	45,182	52,089	55,909	59,656	63,402
8	Legal and audit fees	0.25%	56,477	65,112	69,886	74,570	79,253
9	Insurance(Fire)	0.50%	112,954	130,223	139,772	149,141	158,506
10	Miscellaneous Expenses	0.10%	22,591	26,045	27,954	29,828	31,701
			711,840	820,648	880,818	939,854	998,852
		3.15%	3.15%	3.15%	3.15%	3.15%	3.15%

SAMPLE REF

Nakshi Green Agro Limited
Agro Product Manufacturing and Processing Plant
Annual Production and Sales Calculation at attainable Capacity

Feasibility Report and Business Plan of Nakshi Green Agro Limited



8.13 Projected Raw Materials Consumption and Costing at Attainable Capacity

Nakshi Green Agro Limited Agro Product Manufacturing and Processing Plant Projected Basic Raw Materials and Costing at Attainable Capacity

Basic Raw Materials	Total Production Capacity / Per day 20 hours			Basic Raw Materials, Chemical and Auxiliaries Cost/kg			Basic Raw Materials, Chemicals and Auxiliaries Cost(USD)		
	Unit	Daily	Monthly	Yearly	Unit	USD	Daily	Monthly	Yearly
Different Varieties of Corn	KG	200,000	5,000,000	60,000,000	KG	\$ 0.22	\$ 43,478	\$ 1,086,957	\$ 13,043,478
Sulfur Dioxide (SO2)	KG	325	8,125	97,500	KG	\$ 0.43	\$ 141	\$ 3,533	\$ 42,391
Caustic Soda	KG	800	20,000	240,000	KG	\$ 0.57	\$ 452	\$ 11,304	\$ 135,652
Total	KG	201,125	5,028,125	60,337,500		\$ -	\$ -		
				Yearly Basic Raw Materials, Chemicals and Auxiliaries Cost					
							\$ 44,072	\$ 1,101,793	\$ 13,221,522
					Packaging Cost(2.5%)				
							\$ 44,072	\$ 1,101,793	\$ 13,221,522
				Yearly Basic Raw Materials, Chemicals and Auxiliaries and Packaging Cost					
							\$ 1,102	\$ 27,545	\$ 330,538
							\$ 45,174	\$ 1,129,338	\$ 13,552,060

Assumptions:

Nature of the Project	:	To manufacture Corn Starch, Liquid Glucose, Dextrose, Corn Germ, Corn Gluten Meal (CGM), Corn Fiber and Corn Steep Liquor (CSL).
Total Working Days	:	300
Monthly Working Days	:	25
Daily Working Hours	:	20
Attainable Production Capacity/day	:	200 M.Ton
Basic Raw Materials Used/per day		
Different Varieties of Corn	:	200,000 KG
Sulfur Dioxide (SO2)	:	325 KG
Caustic Soda	:	800 KG
Basic Raw Materials Cost/kg		
Different Varieties of Corn	:	\$ 0.22
Sulfur Dioxide (SO2)	:	\$ 0.43
Caustic Soda	:	\$ 0.57

Feasibility Report and Business Plan of Nakshi Green Agro Limited



8.14 Projected Sales Revenue Calculation

Nakshi Green Agro Limited Agro Product Manufacturing and Processing Plant Projected Sales Calculation					
Fig. in USD					
Particulars	1st Year	2nd Year	3rd Year	4th Year	5th Year
Sales at attainable Capacity	\$ 37,458,261	\$ 37,458,261	\$ 37,458,261	\$ 37,458,261	\$ 37,458,261
Capacity Utilization	65%	70%	75%	80%	85%
Sales at Capacity Utilization	\$ 24,347,870	\$ 26,220,783	\$ 28,093,696	\$ 29,966,609	\$ 31,839,522
Add: Opening Stock of W.I.P (7 days)	\$ -	\$ 568,117	\$ 625,074	\$ 670,105	\$ 714,857
Total	\$ 24,347,870	\$ 26,788,900	\$ 28,718,770	\$30,636,713	\$32,554,378
Less: Closing Stock of W.I.P (7 days)	\$ 568,117	\$ 625,074	\$ 670,105	\$ 714,857	\$ 759,602
Total	\$ 23,779,753	\$ 26,163,825	\$ 28,048,665	\$29,921,857	\$31,794,776
Add: Opening Stock of Finished Goods (15 days)	\$ -	\$ 1,188,988	\$ 1,308,191	\$ 1,402,433	\$ 1,496,093
Available for sale	\$ 23,779,753	\$ 27,352,813	\$ 29,356,857	\$31,324,290	\$33,290,869
Less: Closing Stock of Finished Goods (15 days)	\$ 1,188,988	\$ 1,308,191	\$ 1,402,433	\$ 1,496,093	\$ 1,589,739
Net Sales	\$ 22,590,765	\$ 26,044,622	\$ 27,954,423	\$29,828,197	\$31,701,130

Feasibility Report and Business Plan of Nakshi Green Agro Limited



8.15 Fixed Asset and Depreciation Schedule

Nakshi Green Agro Limited Agro Product Manufacturing and Processing Plant Fixed Assets and Depreciation Schedule				
Fig. in USD				
SL	Particulars	Value	Rate of depreciation p.a	Depreciation Amount Taka
01	Land and Land Development Cost	\$ 1,031,739	0.00%	\$ -
02	Project Shed and Building	\$ 3,385,915	5.00%	\$ 169,295.73
03	Others Civils Construction(Water reserver, Internal Road, Main Gate, Boundary wall and Security Room)	\$ 84,918	5.00%	\$ 4,245.91
04	Machinery and Equipment(Imported)	\$ 15,544,400	10.00%	\$ 1,554,440.00
05	Import Duty, Customs, VAT and Insurance(4.5%)	\$ 699,498	10.00%	\$ 69,949.80
06	Machinery and Equipment(Local)	\$ 347,826	10.00%	\$ 34,782.61
07	Sub Station(3500 KVA) with all Accessories	\$ 217,391	20.00%	\$ 43,478.26
08	Fire Fighting, Fire Door , Fire Alarm and others	\$ 43,478	20.00%	\$ 8,695.65
09	Security Devices, CC Camera, CC TV, and Compliance Equipment	\$ 30,435	20.00%	\$ 6,086.96
10	Vehicle (Sixteen (15)- 15-MT Trucks Ccapacity)	\$ 584,348	20.00%	\$ 116,869.57
11	Security Deposit and advance for Utility	\$ 43,478	0.00%	\$ -
12	Office Decoration, Furniture-fixture & Office Equipment	\$ 60,870	20.00%	\$ 12,173.91
13	Machinery erection & installation	\$ 86,957	10.00%	\$ 8,695.65
14	Contingency for Civil Construction- 5%	\$ 173,542	5.00%	\$ 8,677.08
15	Contingency for Machinery -5%	\$ 847,307	10.00%	\$ 84,730.70
Sub Total		\$ 23,182,101		\$ 2,122,121.83
16	Preliminary expenses	\$ 30,435	20%	\$ 6,086.96
19	IDCP	\$ 1,417,956	20%	\$ 283,591.19
Sub Total		\$ 1,448,391		\$ 289,678.15
Grand Total		\$ 24,630,492		\$ 2,411,799.98

	Depreciation	Residual Value
Year - 1	2,411,800	22,218,692
Year - 2	2,411,800	19,806,892
Year - 3	2,411,800	17,395,092
Year - 4	2,411,800	14,983,292
Year - 5	2,411,800	12,571,492
Year - 6	1,996,557	10,574,935
Year - 7	1,996,557	8,578,379
Year - 8	1,996,557	6,581,822
Year - 9	1,996,557	4,585,266
Year - 10	1,996,557	2,588,709

Feasibility Report and Business Plan of Nakshi Green Agro Limited



8.16 Break Even Calculation

Nakshi Green Agro Limited Agro Product Manufacturing and Processing Plant Break - Even Calculation					
Fig. in USD					
Particulars	1st Year	2nd Year	3rd Year	4th Year	5th Year
Capacity Utilization	65%	70%	75%	80%	85%
Sales	\$ 22,590,765	\$ 26,044,622	\$ 27,954,423	\$ 29,828,197	\$ 31,701,130
Variable Cost					
Basic Raw Materials, Chemicals and Auxiliaries Cost	\$ 8,808,839	\$ 9,486,442	\$ 10,164,045	\$ 10,841,648	\$ 11,519,251
Electricity, Water, Fuel & Lubricant	\$ 3,020,555	\$ 3,252,905	\$ 3,485,255	\$ 3,717,606	\$ 3,949,956
Repair, Maintenance & Stores	\$ 181,712	\$ 272,568	\$ 363,424	\$ 363,424	\$ 363,424
Load , unloading, Handling and Carrying Charge	\$ 132,133	\$ 142,297	\$ 152,461	\$ 162,625	\$ 172,789
Other Production Overhead	\$ 88,088	\$ 94,864	\$ 101,640	\$ 108,416	\$ 115,193
Administrative Expenses	\$ 711,840	\$ 820,648	\$ 880,818	\$ 939,854	\$ 998,852
Total Variable Cost	\$ 12,943,167	\$ 14,069,723	\$ 15,147,643	\$ 16,133,573	\$ 17,119,464
W.I.P Adjustment	\$ (205,540)	\$ 7,905	\$ (14,117)	\$ (14,117)	\$ (14,117)
Finished Goods Adjustment (Excluded Depreciation)	\$ (537,588)	\$ (55,395)	\$ (45,327)	\$ (42,490)	\$ (42,656)
Net Variable Cost	\$ 12,200,039	\$ 14,022,234	\$ 15,088,199	\$ 16,076,966	\$ 17,062,691
Contribution Margin	\$ 10,390,726	\$ 12,022,388	\$ 12,866,224	\$ 13,751,231	\$ 14,638,439
Fixed Cost					
Depreciation & Amortization	\$ 2,411,800	\$ 2,411,800	\$ 2,411,800	\$ 2,411,800	\$ 2,411,800
Financial Expenses	\$ 842,661	\$ 851,557	\$ 811,484	\$ 767,123	\$ 720,182
Salaries & Wages	\$ 338,735	\$ 381,628	\$ 428,429	\$ 478,799	\$ 533,001
Total Fixed Cost	\$ 3,593,196	\$ 3,644,985	\$ 3,651,714	\$ 3,657,722	\$ 3,664,983
Break-Even % (on utilization Capacity)	34.58%	30.32%	28.38%	26.60%	25.04%
Break-Even % (on Attainable Capacity)	22.48%	21.22%	21.29%	21.28%	21.28%
Yearly Break Even Sales in Taka '000'	\$ 7,812,067	\$ 7,896,289	\$ 7,934,072	\$ 7,934,071	\$ 7,936,919
Monthly Break Even Sales in Taka '000'	\$ 651,006	\$ 658,024	\$ 661,173	\$ 661,173	\$ 661,410
Daily Break Even Sales in Taka '000'	\$ 26,040	\$ 26,321	\$ 26,447	\$ 26,447	\$ 26,456

Feasibility Report and Business Plan of Nakshi Green Agro Limited



8.17 Key Ratios Analysis

Nakshi Green Agro Limited Agro Product Manufacturing and Processing Plant Key Ratios Analysis					
	1st Year	2nd Year	3rd Year	4th Year	5th Year
Balance Sheet					
Cash	6,471,080	12,156,664	18,262,338	24,810,405	31,798,949
Accounts receivable	1,223,666	1,519,270	1,747,151	1,988,546	2,245,497
Total current assets	12,590,333	20,456,713	27,307,905	34,557,435	42,260,716
Total long-term assets	22,218,692	19,806,892	17,395,092	14,983,292	12,571,492
Total current liabilities	4,598,543	6,338,695	6,889,502	7,402,139	7,924,068
Total long-term liabilities	23,740,949	23,891,172	22,787,493	21,578,465	20,308,823
Total shareholders' equity	11,068,077	16,372,433	21,915,504	27,962,261	34,523,385
Income Statement					
Total sales	22,590,765	26,044,622	27,954,423	29,828,197	31,701,130
Gross profit	8,553,259	10,057,917	10,913,612	11,806,860	12,698,889
Total operating expenses	7,841,419	9,237,269	10,032,794	10,867,006	11,700,036
Income (loss) before taxes	6,998,758	8,385,712	9,221,310	10,099,883	10,979,854
Net income (loss)	5,074,100	6,079,641	6,685,450	7,322,415	7,960,394
KEY RATIOS					
Profitability Ratios					
Gross profit margin	37.86%	38.62%	39.04%	39.58%	40.06%
Operating Profit	34.71%	35.47%	35.89%	36.43%	36.91%
Net Income	22.46%	23.34%	23.92%	24.55%	25.11%
Return on Investment	17.00%	17.21%	16.77%	16.33%	15.83%
Return on Equity	45.84%	37.13%	30.51%	26.19%	23.06%
Asset turnover ratio	0.65	0.65	0.63	0.60	0.58
Leverage and Liquidity Ratios					
Current ratio	2.74	3.23	3.96	4.67	5.33
Quick or acid test ratio	2.47	2.16	2.90	3.62	4.30
Leverage ratio	314%	246%	204%	177%	159%
Long-term debt ratio	0.68	0.59	0.51	0.44	0.37
Debt to equity ratio	2.56	1.85	1.35	1.04	0.82
Debt Service Coverage Ratio	3.42	3.73	3.91	4.10	4.29

Feasibility Report and Business Plan of Nakshi Green Agro Limited



8.18 Return on Investment (ROI) & Return on Equity (ROE) Calculation

Nakshi Green Agro Limited Agro Product Manufacturing and Processing Plant Return on Investment (ROI) & Return on Equity (ROE) Calculation Fig. in USD					
Particulars	1st Year	2nd Year	3rd Year	4th Year	5th Year
Net Income after Tax	\$ 5,074,100	\$ 6,079,641	\$ 6,685,450	\$ 7,322,415	\$ 7,960,394
Add: Financial Expenses	\$ 842,661	\$ 851,557	\$ 811,484	\$ 767,123	\$ 720,182
Total Income for ROI	\$ 5,916,761	\$ 6,931,198	\$ 7,496,934	\$ 8,089,538	\$ 8,680,576
Total Investment	\$ 34,809,025	\$ 40,263,605	\$ 44,702,997	\$ 49,540,727	\$ 54,832,208
Total Equity	\$ 11,068,077	\$ 16,372,433	\$ 21,915,504	\$ 27,962,261	\$ 34,523,385
Return on Investment (ROI)	17.00%	17.21%	16.77%	16.33%	15.83%
Return on Equity (ROE)	45.84%	37.13%	30.51%	26.19%	23.06%

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Feasibility Report and Business Plan of Nakshi Green Agro Limited



8.19 PB, IRR and NPV Calculation

Nakshi Green Agro Limited Agro Product Manufacturing and Processing Plant Payback Period(PB), Internal Rate of Return(IRR) and Net Present Value(NPV) Calculation					
Fig. in USD					
Year	Cash Flows	Recovery of Initial outlay		Payback Year	Remarks
		Needed	Balance		
0	\$ (24,630,492)				
1	\$ 7,485,900	\$ 24,630,492	\$ 17,144,592	1.00	
2	\$ 8,491,441	\$ 17,144,592	\$ 8,653,151	1.00	
3	\$ 9,097,249	\$ 8,653,151	\$ (444,099)	1.00	
4	\$ 9,734,215	\$ (444,099)	\$ (10,178,313)	-0.05	
5	\$ 10,372,194	\$ (10,178,313)			
6	\$ 10,337,736	\$ -			
7	\$ 10,400,085	\$ -			
8	\$ 10,447,528	\$ -			
9	\$ 10,496,779	\$ -			
10	\$ 13,136,668	\$ -			With Salvage Value
Total Payback Period(PB)				2.95	

This expansion project promises to return back its total initial investment within very short time, the detailed calculations of which is as follows. The project payback period is 2.95 years.

DISCOUNTED PAYBACK PERIOD (DPB), INTERNAL RATE OF RETURN (IRR) & NET PRESENT VALUE (NPV)

Fig. in USD					
Year	Cash Flows	PV of Tk 1.00 @ 4%	PV of Cash Flows	Cumulative PV of Cash Flow	Discounted Payback Period
0	\$ (24,630,492)	1.0000	\$ (24,630,492)	\$ (24,630,492)	
1	\$ 7,485,900	0.9615	\$ 7,197,980	\$ (17,432,512)	1.00
2	\$ 8,491,441	0.9246	\$ 7,850,815	\$ (9,581,697)	1.00
3	\$ 9,097,249	0.8890	\$ 8,087,422	\$ (1,494,275)	1.00
4	\$ 9,734,215	0.8548	\$ 8,320,848	\$ 6,826,573	0.18
5	\$ 10,372,194	0.8219	\$ 8,525,188		
6	\$ 10,337,736	0.7903	\$ 8,170,063		
7	\$ 10,400,085	0.7599	\$ 7,903,210		
8	\$ 10,447,528	0.7307	\$ 7,633,906		
9	\$ 10,496,779	0.7026	\$ 7,374,897		
10	\$ 13,136,668	0.6756	\$ 8,874,662		
Net Present Value			\$ 55,308,499		3.18
Internal Rate of Return (IRR)			34.70%		

Discounted Payback period is 3.18 years

Net Present Value(NPV)

The future cash inflow and outflow of the project has been considered with the time value of money. The project will have a positive attractive net present value of USD 55.31 million.

Internal Rate of Return (IRR)

The internal rate of return has been computed following the discounted cash flow method. The project promises an Internal Rate of Return (IRR) of 34.70%.

Feasibility Report and Business Plan of Nakshi Green Agro Limited



8.20 Schedule of Loan-Repayment

8.20.1 Equal Quarterly Instalment Basis

Fig. in USD

Nakshi Green Agro Limited Agro Product Manufacturing and Processing Plant Schedule of Loan-Repayment(Quarterly Basis)					
Loan Amount - Original		17,724,450			
IDCP		1,417,956			
Total Loan Including IDCP		19,142,405			
Term (Including 24 Months Moratorium Period)		10.00 Years			
Mode of Repayment :		Equal Quarterly Installments (EQI)			
Period :		40.00 Quarters			
Rate of Interest :		4.00% p.a.			
EQI :		582,993			
Years	No. Of Installments	Amount	Interest	EQI	Balance
Year - 1 742,045	1	19,142,405	191,424	582,993	18,750,836
	2	18,750,836	187,508	582,993	18,355,351
	3	18,355,351	183,554	582,993	17,955,911
	4	17,955,911	179,559	582,993	17,552,477
	5	17,552,477	175,525	582,993	17,145,008
Year - 2 677,488	6	17,145,008	171,450	582,993	16,733,465
	7	16,733,465	167,335	582,993	16,317,806
	8	16,317,806	163,178	582,993	15,897,991
	9	15,897,991	158,980	582,993	15,473,977
	10	15,473,977	154,740	582,993	15,045,724
Year - 3 610,309	11	15,045,724	150,457	582,993	14,613,188
	12	14,613,188	146,132	582,993	14,176,326
	13	14,176,326	141,763	582,993	13,735,096
	14	13,735,096	137,351	582,993	13,289,453
	15	13,289,453	132,895	582,993	12,839,355
Year - 4 540,402	16	12,839,355	128,394	582,993	12,384,755
	17	12,384,755	123,848	582,993	11,925,609
	18	11,925,609	119,256	582,993	11,461,872
	19	11,461,872	114,619	582,993	10,993,497
	20	10,993,497	109,935	582,993	10,520,438
Year - 5 467,657	21	10,520,438	105,204	582,993	10,042,649
	22	10,042,649	100,426	582,993	9,560,082
	23	9,560,082	95,601	582,993	9,072,690
	24	9,072,690	90,727	582,993	8,580,423
	25	8,580,423	85,804	582,993	8,083,234
Year - 6 391,959	26	8,083,234	80,832	582,993	7,581,073
	27	7,581,073	75,811	582,993	7,073,890
	28	7,073,890	70,739	582,993	6,561,636
	29	6,561,636	65,616	582,993	6,044,259
	30	6,044,259	60,443	582,993	5,521,708
Year - 7 313,186	31	5,521,708	55,217	582,993	4,993,932
	32	4,993,932	49,939	582,993	4,460,878
	33	4,460,878	44,609	582,993	3,922,493
	34	3,922,493	39,225	582,993	3,378,725
	35	3,378,725	33,787	582,993	2,829,518
Year - 8 231,215	36	2,829,518	28,295	582,993	2,274,820
	37	2,274,820	22,748	582,993	1,714,575
	38	1,714,575	17,146	582,993	1,148,727
	39	1,148,727	11,487	582,993	577,221
	40	577,221	5,772	582,993	0
4,177,331		4,177,331		23,319,736	

Feasibility Report and Business Plan of Nakshi Green Agro Limited



8.20.2 Equal Monthly Instalment Basis

Nakshi Green Agro Limited

Agro Product Manufacturing and Processing Plant
Schedule of Loan-Repayment(Monthly Basis)

Fig. in USD

Loan Particulars	
Long Term Loan Amount	19,142,405
Loan Amount	17,724,450
IDCP	1,417,956
Moratorium Period(Months)	12
Annual Interest Rate	4.00%
Loan Period in Years	10
Number of Payments Per Year	12
Start Date of Loan	1/1/2024
Optional Extra Payments	-

Loan Summary	
Scheduled Payment	193,808
Scheduled Number of Payments	120
Actual Number of Payments	120
Total Early Payments	-
Total Interest	4,114,500
Total Payment	23,256,906

Pmt No.	Payment Date	Beginning Balance	Scheduled Payment	Extra Payment	Total Payment	Principal	Interest	Ending Balance	Cumulative Interest
1	2/1/2024	19,142,405	193,808	-	193,808	130,000	63,808	19,012,406	63,808
2	3/1/2024	19,012,406	193,808	-	193,808	130,433	63,375	18,881,973	127,183
3	4/1/2024	18,881,973	193,808	-	193,808	130,868	62,940	18,751,105	190,123
4	5/1/2024	18,751,105	193,808	-	193,808	131,304	62,504	18,619,802	252,626
5	6/1/2024	18,619,802	193,808	-	193,808	131,742	62,066	18,488,060	314,692
6	7/1/2024	18,488,060	193,808	-	193,808	132,181	61,627	18,355,879	376,319
7	8/1/2024	18,355,879	193,808	-	193,808	132,621	61,186	18,223,258	437,505
8	9/1/2024	18,223,258	193,808	-	193,808	133,063	60,744	18,090,195	498,250
9	10/1/2024	18,090,195	193,808	-	193,808	133,507	60,301	17,956,688	558,550
10	11/1/2024	17,956,688	193,808	-	193,808	133,952	59,856	17,822,736	618,406
11	12/1/2024	17,822,736	193,808	-	193,808	134,398	59,409	17,688,337	677,815
12	1/1/2025	17,688,337	193,808	-	193,808	134,846	58,961	17,553,491	736,776
13	2/1/2025	17,553,491	193,808	-	193,808	135,296	58,512	17,418,195	795,288
14	3/1/2025	17,418,195	193,808	-	193,808	135,747	58,061	17,282,448	853,348
15	4/1/2025	17,282,448	193,808	-	193,808	136,199	57,608	17,146,249	910,957
16	5/1/2025	17,146,249	193,808	-	193,808	136,653	57,154	17,009,595	968,111
17	6/1/2025	17,009,595	193,808	-	193,808	137,109	56,699	16,872,487	1,024,809
18	7/1/2025	16,872,487	193,808	-	193,808	137,566	56,242	16,734,921	1,081,051
19	8/1/2025	16,734,921	193,808	-	193,808	138,024	55,783	16,596,896	1,136,834
20	9/1/2025	16,596,896	193,808	-	193,808	138,485	55,323	16,458,412	1,192,157
21	10/1/2025	16,458,412	193,808	-	193,808	138,946	54,861	16,319,465	1,247,018
22	11/1/2025	16,319,465	193,808	-	193,808	139,409	54,398	16,180,056	1,301,417
23	12/1/2025	16,180,056	193,808	-	193,808	139,874	53,934	16,040,182	1,355,350
24	1/1/2026	16,040,182	193,808	-	193,808	140,340	53,467	15,899,842	1,408,817
25	2/1/2026	15,899,842	193,808	-	193,808	140,808	52,999	15,759,034	1,461,817
26	3/1/2026	15,759,034	193,808	-	193,808	141,277	52,530	15,617,756	1,514,347
27	4/1/2026	15,617,756	193,808	-	193,808	141,748	52,059	15,476,008	1,566,406
28	5/1/2026	15,476,008	193,808	-	193,808	142,221	51,587	15,333,787	1,617,993
29	6/1/2026	15,333,787	193,808	-	193,808	142,695	51,113	15,191,092	1,669,106
30	7/1/2026	15,191,092	193,808	-	193,808	143,171	50,637	15,047,922	1,719,743
31	8/1/2026	15,047,922	193,808	-	193,808	143,648	50,160	14,904,274	1,769,902
32	9/1/2026	14,904,274	193,808	-	193,808	144,127	49,681	14,760,147	1,819,583
33	10/1/2026	14,760,147	193,808	-	193,808	144,607	49,200	14,615,540	1,868,784
34	11/1/2026	14,615,540	193,808	-	193,808	145,089	48,718	14,470,451	1,917,502
35	12/1/2026	14,470,451	193,808	-	193,808	145,573	48,235	14,324,878	1,965,737
36	1/1/2027	14,324,878	193,808	-	193,808	146,058	47,750	14,178,820	2,013,487
37	2/1/2027	14,178,820	193,808	-	193,808	146,545	47,263	14,032,275	2,060,749
38	3/1/2027	14,032,275	193,808	-	193,808	147,033	46,774	13,885,242	2,107,524
39	4/1/2027	13,885,242	193,808	-	193,808	147,523	46,284	13,737,719	2,153,808
40	5/1/2027	13,737,719	193,808	-	193,808	148,015	45,792	13,589,704	2,199,600
41	6/1/2027	13,589,704	193,808	-	193,808	148,509	45,299	13,441,195	2,244,899
42	7/1/2027	13,441,195	193,808	-	193,808	149,004	44,804	13,292,192	2,289,703
43	8/1/2027	13,292,192	193,808	-	193,808	149,500	44,307	13,142,691	2,334,010
44	9/1/2027	13,142,691	193,808	-	193,808	149,999	43,809	12,992,693	2,377,819
45	10/1/2027	12,992,693	193,808	-	193,808	150,499	43,309	12,842,194	2,421,128

Feasibility Report and Business Plan of Nakshi Green Agro Limited



46	11/1/2027	12,842,194	193,808	-	193,808	151,000	42,807	12,691,194	2,463,936
47	12/1/2027	12,691,194	193,808	-	193,808	151,504	42,304	12,539,690	2,506,240
48	1/1/2028	12,539,690	193,808	-	193,808	152,009	41,799	12,387,682	2,548,039
49	2/1/2028	12,387,682	193,808	-	193,808	152,515	41,292	12,235,166	2,589,331
50	3/1/2028	12,235,166	193,808	-	193,808	153,024	40,784	12,082,143	2,630,115
51	4/1/2028	12,082,143	193,808	-	193,808	153,534	40,274	11,928,609	2,670,389
52	5/1/2028	11,928,609	193,808	-	193,808	154,046	39,762	11,774,564	2,710,151
53	6/1/2028	11,774,564	193,808	-	193,808	154,559	39,249	11,620,005	2,749,399
54	7/1/2028	11,620,005	193,808	-	193,808	155,074	38,733	11,464,930	2,788,133
55	8/1/2028	11,464,930	193,808	-	193,808	155,591	38,216	11,309,339	2,826,349
56	9/1/2028	11,309,339	193,808	-	193,808	156,110	37,698	11,153,229	2,864,047
57	10/1/2028	11,153,229	193,808	-	193,808	156,630	37,177	10,996,599	2,901,224
58	11/1/2028	10,996,599	193,808	-	193,808	157,152	36,655	10,839,447	2,937,879
59	12/1/2028	10,839,447	193,808	-	193,808	157,676	36,131	10,681,771	2,974,011
60	1/1/2029	10,681,771	193,808	-	193,808	158,202	35,606	10,523,569	3,009,617
61	2/1/2029	10,523,569	193,808	-	193,808	158,729	35,079	10,364,840	3,044,695
62	3/1/2029	10,364,840	193,808	-	193,808	159,258	34,549	10,205,582	3,079,245
63	4/1/2029	10,205,582	193,808	-	193,808	159,789	34,019	10,045,793	3,113,264
64	5/1/2029	10,045,793	193,808	-	193,808	160,322	33,486	9,885,472	3,146,750
65	6/1/2029	9,885,472	193,808	-	193,808	160,856	32,952	9,724,616	3,179,701
66	7/1/2029	9,724,616	193,808	-	193,808	161,392	32,415	9,563,224	3,212,116
67	8/1/2029	9,563,224	193,808	-	193,808	161,930	31,877	9,401,294	3,243,994
68	9/1/2029	9,401,294	193,808	-	193,808	162,470	31,338	9,238,824	3,275,332
69	10/1/2029	9,238,824	193,808	-	193,808	163,011	30,796	9,075,812	3,306,128
70	11/1/2029	9,075,812	193,808	-	193,808	163,555	30,253	8,912,257	3,336,380
71	12/1/2029	8,912,257	193,808	-	193,808	164,100	29,708	8,748,157	3,366,088
72	1/1/2030	8,748,157	193,808	-	193,808	164,647	29,161	8,583,510	3,395,248
73	2/1/2030	8,583,510	193,808	-	193,808	165,196	28,612	8,418,314	3,423,860
74	3/1/2030	8,418,314	193,808	-	193,808	165,747	28,061	8,252,568	3,451,921
75	4/1/2030	8,252,568	193,808	-	193,808	166,299	27,509	8,086,269	3,479,430
76	5/1/2030	8,086,269	193,808	-	193,808	166,853	26,954	7,919,416	3,506,384
77	6/1/2030	7,919,416	193,808	-	193,808	167,409	26,398	7,752,006	3,532,782
78	7/1/2030	7,752,006	193,808	-	193,808	167,968	25,840	7,584,039	3,558,622
79	8/1/2030	7,584,039	193,808	-	193,808	168,527	25,280	7,415,511	3,583,902
80	9/1/2030	7,415,511	193,808	-	193,808	169,089	24,718	7,246,422	3,608,620
81	10/1/2030	7,246,422	193,808	-	193,808	169,653	24,155	7,076,769	3,632,775
82	11/1/2030	7,076,769	193,808	-	193,808	170,218	23,589	6,906,551	3,656,364
83	12/1/2030	6,906,551	193,808	-	193,808	170,786	23,022	6,735,765	3,679,386
84	1/1/2031	6,735,765	193,808	-	193,808	171,355	22,453	6,564,410	3,701,839
85	2/1/2031	6,564,410	193,808	-	193,808	171,926	21,881	6,392,484	3,723,720
86	3/1/2031	6,392,484	193,808	-	193,808	172,499	21,308	6,219,985	3,745,028
87	4/1/2031	6,219,985	193,808	-	193,808	173,074	20,733	6,046,911	3,765,762
88	5/1/2031	6,046,911	193,808	-	193,808	173,651	20,156	5,873,259	3,785,918
89	6/1/2031	5,873,259	193,808	-	193,808	174,230	19,578	5,699,029	3,805,496
90	7/1/2031	5,699,029	193,808	-	193,808	174,811	18,997	5,524,219	3,824,492
91	8/1/2031	5,524,219	193,808	-	193,808	175,393	18,414	5,348,825	3,842,906
92	9/1/2031	5,348,825	193,808	-	193,808	175,978	17,829	5,172,847	3,860,736
93	10/1/2031	5,172,847	193,808	-	193,808	176,565	17,243	4,996,282	3,877,979
94	11/1/2031	4,996,282	193,808	-	193,808	177,153	16,654	4,819,129	3,894,633
95	12/1/2031	4,819,129	193,808	-	193,808	177,744	16,064	4,641,385	3,910,697
96	1/1/2032	4,641,385	193,808	-	193,808	178,336	15,471	4,463,049	3,926,168
97	2/1/2032	4,463,049	193,808	-	193,808	178,931	14,877	4,284,118	3,941,045
98	3/1/2032	4,284,118	193,808	-	193,808	179,527	14,280	4,104,591	3,955,325
99	4/1/2032	4,104,591	193,808	-	193,808	180,126	13,682	3,924,465	3,969,007
100	5/1/2032	3,924,465	193,808	-	193,808	180,726	13,082	3,743,739	3,982,089
101	6/1/2032	3,743,739	193,808	-	193,808	181,328	12,479	3,562,411	3,994,568
102	7/1/2032	3,562,411	193,808	-	193,808	181,933	11,875	3,380,478	4,006,443
103	8/1/2032	3,380,478	193,808	-	193,808	182,539	11,268	3,197,939	4,017,711
104	9/1/2032	3,197,939	193,808	-	193,808	183,148	10,660	3,014,791	4,028,371
105	10/1/2032	3,014,791	193,808	-	193,808	183,758	10,049	2,831,033	4,038,420
106	11/1/2032	2,831,033	193,808	-	193,808	184,371	9,437	2,646,662	4,047,857
107	12/1/2032	2,646,662	193,808	-	193,808	184,985	8,822	2,461,677	4,056,679
108	1/1/2033	2,461,677	193,808	-	193,808	185,602	8,206	2,276,075	4,064,885
109	2/1/2033	2,276,075	193,808	-	193,808	186,221	7,587	2,089,854	4,072,471
110	3/1/2033	2,089,854	193,808	-	193,808	186,841	6,966	1,903,013	4,079,438
111	4/1/2033	1,903,013	193,808	-	193,808	187,464	6,343	1,715,549	4,085,781
112	5/1/2033	1,715,549	193,808	-	193,808	188,089	5,718	1,527,460	4,091,500
113	6/1/2033	1,527,460	193,808	-	193,808	188,716	5,092	1,338,744	4,096,591
114	7/1/2033	1,338,744	193,808	-	193,808	189,345	4,462	1,149,398	4,101,054
115	8/1/2033	1,149,398	193,808	-	193,808	189,976	3,831	959,422	4,104,885
116	9/1/2033	959,422	193,808	-	193,808	190,609	3,198	768,813	4,108,083
117	10/1/2033	768,813	193,808	-	193,808	191,245	2,563	577,568	4,110,646
118	11/1/2033	577,568	193,808	-	193,808	191,882	1,925	385,686	4,112,571
119	12/1/2033	385,686	193,808	-	193,808	192,522	1,286	193,164	4,113,856
120	1/1/2034	193,164	193,808	-	193,164	192,520	644	-	4,114,500

Feasibility Report and Business Plan of Nakshi Green Agro Limited

9. Economic Aspect

9.1. Employment Opportunity:

The project will require a total number of 166 persons of various categories. Cost per employment to be generated works out to USD 349.00 per month.

9.2. Contribution to GDP

Nakshi Green Agro Limited Agro Product Manufacturing and Processing Plant Contribution To GDP		
Fig. in USD		
On Completion, the project will add USD 11.57 million to the Gross Domestic Product (GDP) of the country per annum as detailed below :-		
A. Revenue Receipts (3rd Year)	\$	27,954,423
B. Less: Inter Firm Transaction		
Basic Raw Materials, Chemicals and Auxiliaries cost	\$10,164,045	
Salaries & Wages	\$ 428,429	
Electricity, Water, Fuel & Lubricant	\$ 3,485,255	
Repair, Maintenance & Stores	\$ 363,424	
Load , unloading, Handling and Carrying Charge	\$ 152,461	
Other Production Overhead	\$ 101,640	
Administrative & Marketing Expenses	\$ 880,818	
Financial Expenses	\$ 811,484	
	\$	16,387,557
Contribution To GDP	\$	11,566,866



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**SouthAsia Research
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37, Bir Uttam C.R.Dutta Road
Nahar Plaza (Lift-9), Hatirpool
Shahbagh Thana
Dhaka-1000, Bangladesh

+88 01711051276

+88 01071763536

+88 01071147730

Whatsapp:

+8801711051276

+88 01071763536

+880 1711 051 276
md@srcabd.com

www.srcabd.com



Feasibility Report and **BUSINESS PLAN** of Nakshi Green Agro Limited



PROJECT LOCATION



Meduari, Varadoba, Bhaluka
Mymensingh, Bangladesh



+8801716977292
+8801779799436



smkhanuzzal@yahoo.com
nakshigreenagro@gmail.com