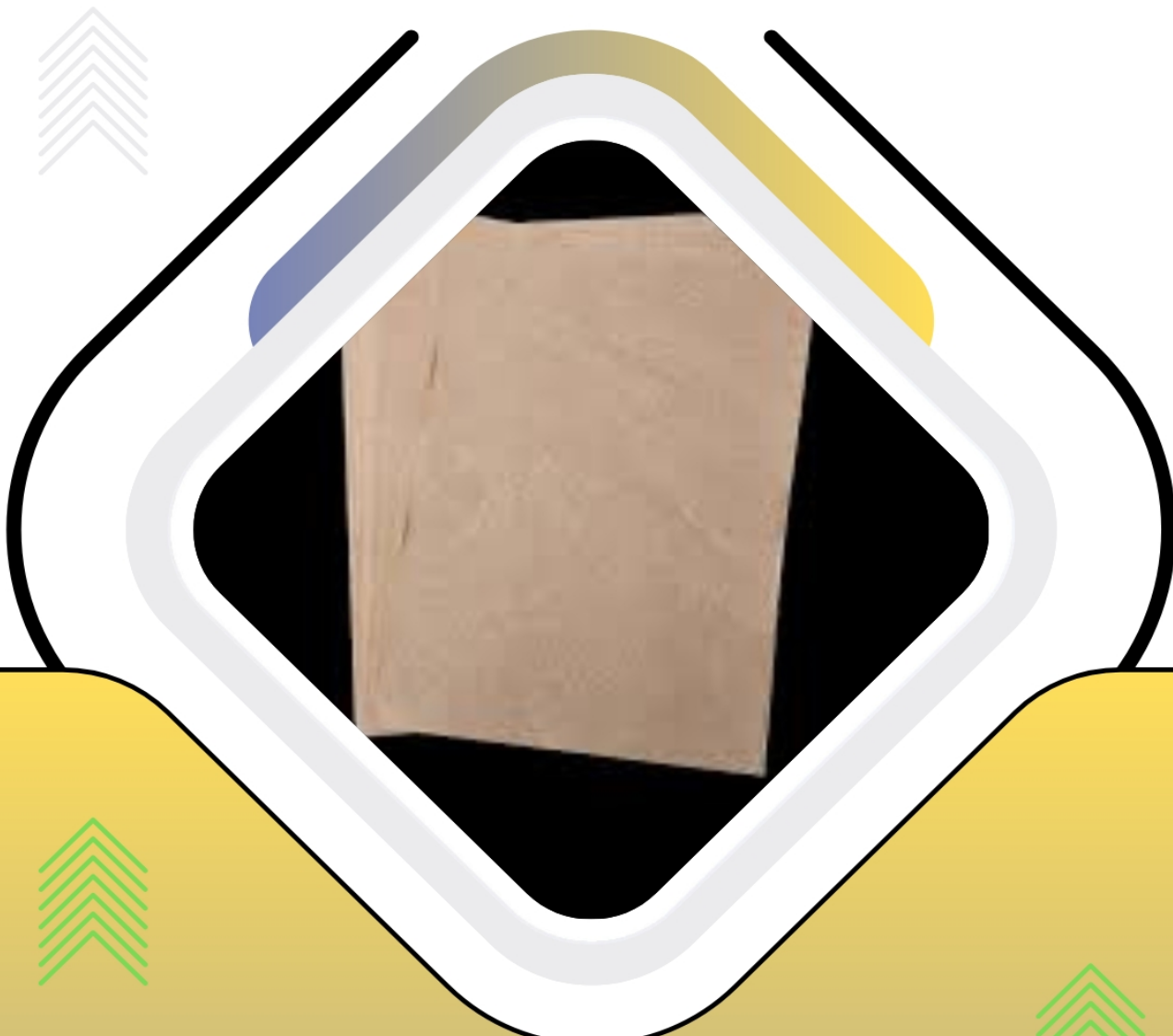




MODEL PROJECT REPORT



PROJECT REPORT ON BANANA PAPER

SWAVALAMBI BHARAT ABHIYAN

PROJECT AT GLANCE

1 Name of Proprietor/Director	XXXXXXXXXX
2 Firm Name	XXXXXXXXXX
3 Registered Address	XXXXXXXXXX
4 Nature of Activity	XXXXXXXXXX
5 Category of Applicant	XXXXXXXXXX
6 Location of Unit	XXXXXXXXXX
7 Cost of Project	16.47 Rs. In Lakhs
8 Means of Finance	
i) Own Contribution	1.65 Rs. In Lakhs
ii) Term Loan	11.93 Rs. In Lakhs
iii) Working Capital	2.90 Rs. In Lakhs
9 Debt Service Coverage Ratio	2.97
10 Break Even Point	33%
11 Power Requiremnet	30 KW
12 Employment	8 Persons
13 Major Raw Materials	Stem part of banana tree,oily solvent

14 Details of Cost of Project & Means of Finance

Cost of Project	Amount in Lacs
Particulars	Amount
Land and building	Owned/Leased
Plant & Machinery	12.00
Furniture & Fixture	0.75
Other Misc Assets	0.50
Working Capital Requirement	3.22
Total	16.47
Means of Finance	
Particulars	Amount
Own Contribution	1.65
Term Loan	11.93
Working capital Loan	2.90
Total	16.47

BANANA PAPER MANUFACTURING UNIT

1. INTRODUCTION



Banana, fruit of the genus *Musa*, of the family Musaceae, one of the most important fruit crops of the world. The banana is grown in the tropics, and, though it is most widely consumed in this region, it is valued worldwide for its flavour, nutritional value, and availability throughout the year. Cavendish, or dessert, bananas are most commonly eaten fresh, though they may be fried or mashed and chilled in pies or puddings. Banana may also be used to flavour muffins, cakes, or breads. Banana plants thrive naturally

on deep, loose, well-drained soils in humid tropical climates, and they are grown successfully under irrigation in such semiarid regions as southern Jamaica. Suckers and divisions of the rhizome are used as planting material; the first crop ripens within 10 to 15 months, and thereafter fruit production is more or less continuous. Banana paper is a type of paper created from banana plant bark or banana peel fibres. Banana paper has a lower density, higher stiffness, higher disposability, higher renewability, and higher tensile strength compared to traditional paper. These qualities are due to the cellular composition of banana fibre, which consists of cellulose, hemi cellulose, and lignin.

2. PRODUCT DESCRIPTION

2.1 PRODUCT USES

- Banana Paper helps prevent excessive pollution of the eco-system's rivers and forests.
- Banana paper is used in lights, artwork, sketching and can be turned into beautiful journals and Note books well.
- The Banana paper is used screen print and ink jet friendly and available from 30 to 380 GSM.

2.2 MANUFACTURING PROCESS

This process can be broken down into the following steps:

- Raw material procurement
- Production Process

Raw Material Procurement: Procurement is the connection process of purchasing and arranging in bound movement of all items, supplies, materials, parts, finished inventory and general support services from the suppliers into manufacturing process or assembly plants or warehouses.

Production Process

Steps involved in the manufacturing of Banana Paper:

- ✓ **Collecting of Banana stem:** The collection of banana stem take place before proceed to cutting operation.
- ✓ **Cutting of materials:** The banana stem is collecting and cutting down in a small part so that proper semi liquid product can be made.
- ✓ **Pulping of stem:** The process carried to remove fibre present in the process before going to remove moisture from it.
- ✓ **Beating process for paper:** The removal of water from semi liquid product done by pressing of the residue to remove water content.
- ✓ **Screening of residue:** The semi liquid product can be placed over this plate and solidification take place.
- ✓ **Removal of residual moisture:** The residual moisture can be removed by putting plate in a vertical position so that water totally removed.
- ✓ **Packaging of paper:** Banana paper are proceeded for packaging process according to standards customer requirement.

3. PROJECT COMPONENTS

3.1 Land /Civil Work

The land required for this manufacturing unit will be approx. around 800-1000 square feet. Land Purchase and Building Civil Work Cost have not been considered as part of

the cost of project. It is expected that the premises will be on rental and approximate rentals assumed of the same will be Rs. 15,000 per month.

- Workshop Area- This area includes the setup and foundation space for all equipment's, work floor area, etc. Total workshop area is approx. 450 Sqft.
- Inventory Area- This area includes the storage space for all the raw materials and finished goods. Total inventory area is approx. 300 Sqft.
- Office Area – This space includes staff working region, their accommodation space. Total workshop area is approx. 150 Sqft. This may be considered above the ground floor.
- Parking Space, Electric Mounting Space, and Others. This could be approx. 100 Sqft.

Land and building requirement may vary depending on the size of project

3.2 Plant & Machinery

Machines-

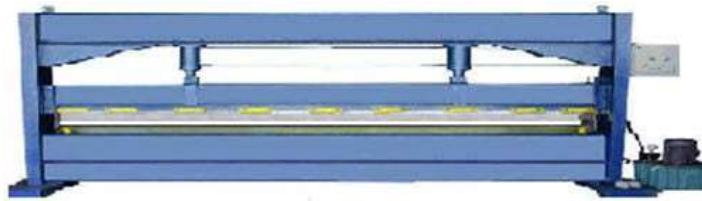
Stem Cutter: The stem cutter is used to cut the large portion of Banana stem into small parts.



- ✓ **Pulp bater:** The pulp machine is used to convert the solid input product of banana tree into the semi liquid removing fibre from it.



- ✓ **Hydraulic Press:** The hydraulic press is used to remove moisture from the pulp during the process.



- ✓ **Screen Plate:** The screen plate is used to solidify the semi liquid product of the banana stem into a thin sheet after removing moisture.



Cost of Plant & machinery

S No.	Name of the machineries	Unit Price	Qty	Cost (INR)
1.	Stem Cutter	75,000	2	1,50,000
2.	Pulp Beater	3,00,000	1	3,00,000
3.	Hydraulic Press	4,15,000	1	4,15,000
4.	Screen plate	2,50,000	1	2,50,000
5.	Other Equipment			85,000
TOTAL				12,00,000

Note: The aforesaid cost of Plant and Machinery is inclusive of GST and other transportation cost.

4. LICENSE AND APPROVALS

1. MSME Udyam online registration.
2. GST Registration
3. BIS Certification
4. NOC from the Pollution Department

(in Lacs)

PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
<u>Liabilities</u>					
Capital					
Opening Balance		4.68	6.68	8.30	10.32
Add:- Own Capital	1.65				
Add:- Retained Profit	5.03	6.01	6.86	7.78	8.73
Less:- Drawings	2.00	4.00	5.25	5.75	6.50
Closing Balance	4.68	6.68	8.30	10.32	12.55
Term Loan	10.60	7.95	5.30	2.65	-
Working Capital Limit	2.89	2.89	2.89	2.89	2.89
Sundry Creditors	1.52	1.81	1.83	2.05	2.14
Provisions & Other Liabilities	1.00	1.50	1.80	2.16	2.59
TOTAL :	20.69	20.84	20.12	20.07	20.18
<u>Assets</u>					
Fixed Assets (Gross)	13.25	13.25	13.25	13.25	13.25
Gross Depreciation	1.96	3.63	5.06	6.27	7.30
Net Fixed Assets	11.29	9.62	8.19	6.98	5.95
Current Assets					
Sundry Debtors	2.16	2.63	3.96	4.51	4.80
Stock in Hand	2.57	3.13	3.60	4.10	4.62
Cash and Bank	0.67	0.46	0.87	0.48	0.30
Loans and advances/other current assets	4.00	5.00	3.50	4.00	4.50
TOTAL :	20.69	20.84	20.12	20.07	20.18

<u>PROJECTED PROFITABILITY STATEMENT</u>					(in Lacs)
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
Capacity Utilisation %	50%	55%	60%	65%	70%
<u>SALES</u>					
BANANA PAPER	49.88	60.77	69.91	79.64	89.98
Total	49.88	60.77	69.91	79.64	89.98
<u>COST OF SALES</u>					
Raw material cost	24.00	27.19	30.55	34.09	37.82
Electricity Expenses	3.60	3.96	4.32	4.68	5.04
Depreciation	1.96	1.67	1.42	1.21	1.03
Wages & labour	9.54	11.26	13.28	15.67	18.50
Repair & maintenance	0.25	0.61	0.87	1.19	1.35
Consumables	0.75	0.91	1.05	1.19	1.35
Packaging cost	0.62	1.06	1.47	1.99	2.52
Cost of Production	40.72	46.66	52.97	60.04	67.60
Add: Opening Stock	-	2.49	3.04	3.50	3.98
Less: Closing Stock	2.49	3.04	3.50	3.98	4.50
Cost of Sales	38.23	46.12	52.51	59.55	67.09
GROSS PROFIT	11.65	14.65	17.39	20.09	22.89
Salary to Staff	2.40	2.88	3.46	4.15	4.98
Interest on Term Loan	1.17	1.03	0.74	0.45	0.16
Interest on working Capital	0.32	0.32	0.32	0.32	0.32
Rent	1.44	1.73	2.07	2.49	2.99
Selling & Administration Expenses	1.12	2.28	3.32	4.06	4.63
TOTAL	6.45	8.24	9.91	11.46	13.07
NET PROFIT	5.19	6.42	7.48	8.63	9.82
Taxation	0.16	0.41	0.62	0.85	1.09
PROFIT (After Tax)	5.03	6.01	6.86	7.78	8.73

(in Lacs)

PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
<u>SOURCES OF FUND</u>					
Own Margin	1.65				
Net Profit	5.19	6.42	7.48	8.63	9.82
Depriciation & Exp. W/off	1.96	1.67	1.42	1.21	1.03
Increase in Cash Credit	2.89	-	-	-	-
Increase In Term Loan	11.93	-	-	-	-
Increase in Creditors	1.52	0.29	0.02	0.21	0.10
Increase in Provisions & Other liabilities	1.00	0.50	0.30	0.36	0.43
TOTAL :	26.14	8.88	9.23	10.41	11.38
<u>APPLICATION OF FUND</u>					
Increase in Fixed Assets	13.25				
Increase in Stock	2.57	0.56	0.47	0.50	0.53
Increase in Debtors	2.16	0.47	1.33	0.55	0.29
Increase in loans and advances	4.00	1.00 -	1.50	0.50	0.50
Repayment of Term Loan	1.33	2.65	2.65	2.65	2.65
Drawings	2.00	4.00	5.25	5.75	6.50
Taxation	0.16	0.41	0.62	0.85	1.09
TOTAL :	25.47	9.09	8.82	10.80	11.55
Opening Cash & Bank Balance	-	0.67	0.46	0.87	0.48
Add : Surplus	0.67	-0.21	0.41	-0.39	-0.17
Closing Cash & Bank Balance	0.67	0.46	0.87	0.48	0.30

<u>CALCULATION OF D.S.C.R</u>					
PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
CASH ACCRUALS	6.99	7.68	8.29	8.99	9.76
Interest on Term Loan	1.17	1.03	0.74	0.45	0.16
Total	8.16	8.71	9.03	9.44	9.92
<u>REPAYMENT</u>					
Instalment of Term Loan	1.33	2.65	2.65	2.65	2.65
Interest on Term Loan	1.17	1.03	0.74	0.45	0.16
Total	2.50	3.68	3.39	3.10	2.81
DEBT SERVICE COVERAGE RATIO	3.27	2.37	2.66	3.04	3.53
AVERAGE D.S.C.R.	2.97				

REPAYMENT SCHEDULE OF TERM LOAN							
						Interest	11.00%
Year	Particulars	Amount	Addition	Total	Interest	Repayment	Closing Balance
1st	Opening Balance	-					
	1st month		11.93	11.93	-		11.93
	2nd month	11.93	-	11.93	0.11	-	11.93
	3rd month	11.93	-	11.93	0.11	-	11.93
	4th month	11.93	-	11.93	0.11	-	11.93
	5th month	11.93	-	11.93	0.11	-	11.93
	6th month	11.93	-	11.93	0.11	-	11.93
	7th month	11.93	-	11.93	0.11	0.22	11.70
	8th month	11.70	-	11.70	0.11	0.22	11.48
	9th month	11.48	-	11.48	0.11	0.22	11.26
	10th month	11.26	-	11.26	0.10	0.22	11.04
	11th month	11.04	-	11.04	0.10	0.22	10.82
	12th month	10.82	-	10.82	0.10	0.22	10.60
					1.17	1.33	
2nd	Opening Balance						
	1st month	10.60	-	10.60	0.10	0.22	10.38
	2nd month	10.38	-	10.38	0.10	0.22	10.16
	3rd month	10.16	-	10.16	0.09	0.22	9.94
	4th month	9.94	-	9.94	0.09	0.22	9.72
	5th month	9.72	-	9.72	0.09	0.22	9.50
	6th month	9.50	-	9.50	0.09	0.22	9.28
	7th month	9.28	-	9.28	0.09	0.22	9.05
	8th month	9.05	-	9.05	0.08	0.22	8.83
	9th month	8.83	-	8.83	0.08	0.22	8.61
	10th month	8.61	-	8.61	0.08	0.22	8.39
	11th month	8.39	-	8.39	0.08	0.22	8.17
	12th month	8.17	-	8.17	0.07	0.22	7.95
					1.03	2.65	
3rd	Opening Balance						
	1st month	7.95	-	7.95	0.07	0.22	7.73
	2nd month	7.73	-	7.73	0.07	0.22	7.51
	3rd month	7.51	-	7.51	0.07	0.22	7.29
	4th month	7.29	-	7.29	0.07	0.22	7.07
	5th month	7.07	-	7.07	0.06	0.22	6.85
	6th month	6.85	-	6.85	0.06	0.22	6.63
	7th month	6.63	-	6.63	0.06	0.22	6.40
	8th month	6.40	-	6.40	0.06	0.22	6.18
	9th month	6.18	-	6.18	0.06	0.22	5.96
	10th month	5.96	-	5.96	0.05	0.22	5.74
	11th month	5.74	-	5.74	0.05	0.22	5.52

	12th month	5.52	-	5.52	0.05	0.22	5.30
					0.74	2.65	
4th	Opening Balance						
	1st month	5.30	-	5.30	0.05	0.22	5.08
	2nd month	5.08	-	5.08	0.05	0.22	4.86
	3rd month	4.86	-	4.86	0.04	0.22	4.64
	4th month	4.64	-	4.64	0.04	0.22	4.42
	5th month	4.42	-	4.42	0.04	0.22	4.20
	6th month	4.20	-	4.20	0.04	0.22	3.98
	7th month	3.98	-	3.98	0.04	0.22	3.75
	8th month	3.75	-	3.75	0.03	0.22	3.53
	9th month	3.53	-	3.53	0.03	0.22	3.31
	10th month	3.31	-	3.31	0.03	0.22	3.09
	11th month	3.09	-	3.09	0.03	0.22	2.87
	12th month	2.87	-	2.87	0.03	0.22	2.65
					0.45	2.65	
5th	Opening Balance						
	1st month	2.65	-	2.65	0.02	0.22	2.43
	2nd month	2.43	-	2.43	0.02	0.22	2.21
	3rd month	2.21	-	2.21	0.02	0.22	1.99
	4th month	1.99	-	1.99	0.02	0.22	1.77
	5th month	1.77	-	1.77	0.02	0.22	1.55
	6th month	1.55	-	1.55	0.01	0.22	1.33
	7th month	1.33	-	1.33	0.01	0.22	1.10
	8th month	1.10	-	1.10	0.01	0.22	0.88
	9th month	0.88	-	0.88	0.01	0.22	0.66
	10th month	0.66	-	0.66	0.01	0.22	0.44
	11th month	0.44	-	0.44	0.00	0.22	0.22
	12th month	0.22	-	0.22	0.00	0.22	-
					0.16	2.65	
	DOOR TO DOOR	60	MONTHS				
	MORATORIUM PERIOD	6	MONTHS				
	REPAYMENT PERIOD	54	MONTHS				