



## BAMBOO STICKS FOR INCENSE MAKING

## Introduction

Incense sticks also called Agarbatti are fragranced sticks used from ancient period by people all over the world. Incense sticks find their way to most homes for religious or fragrance purposes. Agarbatti is a consumer product that the demand is found throughout the year and it increases during festive days. The Agarbatti industry depends heavily on forest products for its raw materials and Bamboo sticks are the major raw materials used in the Agarbatti industry. Now a days, electric operated high capacity round stick making machineries are available for processing of bamboo sticks, which are very much suitable for the industry. These machines are easy to operate and produces quality incense sticks.

This project profile is for setting up of a Bamboo Round Stick making unit, based on 300 working days per annum and 8 working hours per day. The installed production capacity of the unit per annum is as follows:

**Bamboo Round Stick** - 72

**The model DPR has been prepared on the basis of existing market rates.**

## Market Potential

Bamboo sticks is the backbone of Agarbatti business. Bamboo is an important non-timber forest produce of the North-eastern Region of India. The states of North East India are fulfilling major share of raw bamboo sticks market demand in India. The market for bamboo incense sticks is vast and the demand is growing with increase in the size of population. The incense stick market experiences higher upsurge in demand during the festive season. Demand from both domestic and international sectors peaks up during festivals like Dussehra and Diwali. Owing to the low level of technology, production activity of bamboo incense sticks can be taken to rural areas without much difficulty.

## Product Uses

The uses of natural honey are as follows: –

- Bamboo Round Sticks is used to manufacture Incense Sticks.
- These can also be used for hand rolling for manufacturing floral incense stick.

## Manufacturing Process



## Cost of Project

Particulars	Amount (Rs. in Lakhs)
Owned land	-
Civil works and Buildings (1000 sq. feet @ Rs. 800)	8.00
Plant and machinery (Annexure)	7.96
Miscellaneous Fixed Assets (Annexure)	1.50
D G Set (15 KVA)	1.25
Escalation & Contingencies	0.94
Preliminary & Preoperative Expenses	1.49
<b>Sub-total (A)</b>	<b>21.13</b>
Working Capital Margin @40% of Total WC Requirement	6.70
<b>Total Project Cost</b>	<b>27.83</b>
Total Working Capital Required (B)	16.74
<b>MEANS OF FINANCE</b>	
<b>Total Funds Required (A+B)</b>	<b>37.87</b>
<u>Loan Component</u>	
TERM LOAN (60% of A)	12.68
WORKING CAPITAL (60% of B)	10.04
<b>Total</b>	<b>22.72</b>
Equity	15.15
<b>Total</b>	<b>37.87</b>

## Detailed Cost Element

Sl. No.	Particulars	Quantity	Rate	Amount (Rs. in Lakhs)
1	Bamboo Cross Cutting Machine	2	35000	0.70
2	Manual Splitter Machine	3	7000	0.21
3	Bamboo Round Stick Machine	2	170000	3.40
4	Bamboo Stick Dryer Machine	1	25000	0.25
5	Bamboo Stick Polish Machine	1	100000	1.00
6	Bamboo Stick Sizing Machine	2	100000	2.00
7	Weighing Machine	2	20000	0.40
	<b>TOTAL</b>			<b>7.96</b>

## Contingencies and Escalations

It has been assumed at approximately 5% at cost.

## Preliminary Expenses

Particulars	Amount (Rs. in Lakhs)
Incorporation Expenses	0.15
Project Report Preparation and Consultation	0.35
Feasibility and Engineer's/Architect's Report and Plans	0.20
Legal Charges - Drafting for agreements, contracts, stamp paper, notary and affidavit cost	0.05
Security guard and others	0.40
Interest Cost for period before commercial operations	0.34
<b>Total</b>	<b>1.49</b>

## Salary

Designation	Manpower	Amount (Rs. in Lakhs)
Manager	1	3.00
Sales Person	1	2.40
Skilled Workers	3	2.88
Watchman	1	1.80
Unskilled Workers	6	1.20

## Profitability Statement

Particulars	Amount (Rs. in lakhs)				
	Year- 1	Year- 2	Year- 3	Year- 4	Year- 5
<b><u>A. INCOME</u></b>					
Production Capacity (MT per annum)	72	72	72	72	72
Capacity utilisation	60%	65%	70%	75%	80%
Production During the year	43.20	46.80	50.40	54.00	57.60
Annual turnover	66.96	72.54	78.12	83.70	89.28
<b>Total income during the year</b>	<b>66.96</b>	<b>72.54</b>	<b>78.12</b>	<b>83.70</b>	<b>89.28</b>
<b><u>B. OPERATING EXPENSES</u></b>					
Raw Material	28.87	31.27	33.68	36.08	38.49
Salary	18.12	19.03	19.98	20.98	22.02
Repair & Maintenance	1.34	1.45	1.56	1.67	1.79
Power & utilities	3.90	3.98	4.06	4.14	4.23
Depreciation and Amortisation	1.47	1.47	1.47	1.34	1.34
<b>Total Operating Expenses</b>	<b>53.70</b>	<b>57.20</b>	<b>60.75</b>	<b>64.21</b>	<b>67.86</b>
<b>Operating Profit (A-B)</b>	<b>13.26</b>	<b>15.34</b>	<b>17.37</b>	<b>19.49</b>	<b>21.42</b>
<b><u>C. FINANCIAL EXPENSES</u></b>					
Interest on Term Loan	0.98	0.76	0.55	0.33	0.12
Interest on WC Loan	0.85	0.85	0.85	0.85	0.85
<b><u>D. Other Expenses</u></b>					
Administrative and general Expenses	1.34	1.45	1.56	1.67	1.79
<b>Total Expenses</b>	<b>3.17</b>	<b>3.07</b>	<b>2.96</b>	<b>2.86</b>	<b>2.76</b>
<b>Profit Before Tax</b>	<b>10.09</b>	<b>12.27</b>	<b>14.41</b>	<b>16.63</b>	<b>18.66</b>
Provision for Tax	2.52	3.07	3.60	4.16	4.67
<b>Profit after Tax (PAT)</b>	<b>7.57</b>	<b>9.20</b>	<b>10.80</b>	<b>12.47</b>	<b>14.00</b>
Dividend Declared	0.00	0.00	0.00	0.00	0.00
<b>Retained Profit</b>	<b>7.57</b>	<b>9.20</b>	<b>10.80</b>	<b>12.47</b>	<b>14.00</b>

## Breakeven Point

Break Even Point (BEP)		Amount (Rs. In Lakhs)				
SL	Particulars	Year - 1	Year - 2	Year - 3	Year - 4	Year - 5
A.	Net Sales	66.96	72.54	78.12	83.70	89.28
B.	Variable Cost					
	Raw Material	28.87	31.27	33.68	36.08	38.49
	Power and Utility	3.90	3.98	4.06	4.14	4.23
	Total Variable Cost	32.77	35.25	37.74	40.23	42.72
C.	Contribution (A-B)	34.19	37.29	40.38	43.47	46.56
D.	Fixed cost					
	Salary	18.12	19.03	19.98	20.98	22.02
	Interest on Term Loan	0.98	0.76	0.55	0.33	0.12
	Interest on WC Loan	0.85	0.85	0.85	0.85	0.85
	Repair & Maintenance	1.34	1.45	1.56	1.67	1.79
	Depreciation and Amortization	1.47	1.47	1.47	1.34	1.34
	Total Fixed Cost	22.76	23.56	24.41	25.17	26.12
E.	Breakeven Point	67%	63%	60%	58%	56%
F.	Cash BEP	62%	59%	57%	55%	53%

## Debt-Service Coverage Ratio

		Amount (Rs. In lakhs)				
SL	Particulars	Year - 1	Year - 2	Year - 3	Year - 4	Year - 5
i	Profit	7.57	9.20	10.80	12.47	14.00
ii	Depreciation	1.47	1.47	1.47	1.34	1.34
iii	Interest	0.98	0.76	0.55	0.33	0.12
A	Total (i + ii + iii)	10.01	11.44	12.82	14.14	15.45
i	Interest	0.98	0.76	0.55	0.33	0.12
ii	Principal repayment	2.54	2.54	2.54	2.54	2.54
B	Total (i + ii)	3.51	3.30	3.08	2.87	2.65
	DSCR (A / B)	2.85	3.47	4.16	4.93	5.82

## Interest on Term Loan and Principal Repayment

Refer Annexure I for Loan Repayment Schedule.

We have assumed the repayment tenure of term loan for a period of 5 years, Rate of interest being 8.5% p.a.

## Address of Vendors

Name of the Vendor	Address and Contact Number
M/s B Sen Barry & Company	65/11, New Rohtak Road New Delhi-110005, (India). Phone: 91-11-65702298, 65702299, 28720553, 28726429. E-Mail: info@bsenbarry.com.
M/s Industrial Equipment	Mahapurush Damodardev Path, Paltan Bazaar, Guwahati, Assam 781001. Phone: 0361 254 1063.
M/s Archana Machinery Stores	M S Road, Fancy Bazar, Guwahati – 781001. Phone: +(91)-361-2545780

# ANNEXURE - 1

Year	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Annually
I													
<b>Principal</b>													
Opening	12.68	12.47	12.26	12.04	11.83	11.62	11.41	11.20	10.99	10.78	10.57	10.35	
Repaid	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	<b>2.54</b>
Closing	12.47	12.26	12.04	11.83	11.62	11.41	11.20	10.99	10.78	10.57	10.35	10.14	
<b>Interest</b>	0.09	0.09	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.07	<b>0.98</b>
II													
<b>Principal</b>													
Opening	10.14	9.93	9.72	9.51	9.30	9.09	8.87	8.66	8.45	8.24	8.03	7.82	
Repaid	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	<b>2.54</b>
Closing	9.93	9.72	9.51	9.30	9.09	8.87	8.66	8.45	8.24	8.03	7.82	7.61	
<b>Interest</b>	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	<b>0.76</b>
III													
<b>Principal</b>													
Opening	7.61	7.40	7.18	6.97	6.76	6.55	6.34	6.13	5.92	5.71	5.49	5.28	
Repaid	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	<b>2.54</b>
Closing	7.40	7.18	6.97	6.76	6.55	6.34	6.13	5.92	5.71	5.49	5.28	5.07	
<b>Interest</b>	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.04	<b>0.55</b>
IV													
<b>Principal</b>													
Opening	5.07	4.86	4.65	4.44	4.23	4.01	3.80	3.59	3.38	3.17	2.96	2.75	
Repaid	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	<b>2.54</b>
Closing	4.86	4.65	4.44	4.23	4.01	3.80	3.59	3.38	3.17	2.96	2.75	2.54	
<b>Interest</b>	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	<b>0.33</b>
V													
<b>Principal</b>													
Opening	2.54	2.32	2.11	1.90	1.69	1.48	1.27	1.06	0.85	0.63	0.42	0.21	
Repaid	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	<b>2.54</b>
Closing	2.32	2.11	1.90	1.69	1.48	1.27	1.06	0.85	0.63	0.42	0.21	0.00	
<b>Interest</b>	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	<b>0.12</b>