



## **BAMBOO FURNITURE**

### **Introduction**

Bamboo based industries have been identified as potential sunrise industries in India. Bamboo is used for making variety of decorative items. The eco-friendly products of bamboo are light in weight and have their own style and elegance. These products have a high life with minimum maintenance equivalent to wooden products. Strips of bamboo and various types of canes are extensively used to manufacture different utility and decorative items. Mats, lamp shades, trays, baskets are weaved and knitted by the skilled hands of the artisans. Bamboo furniture has fine grain and appears as unique furniture, which are very popular now. Jewellery, bags and handbags are the other popular items of this craft.

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

### **Market Potential**

Bamboo have a wide variety of products ranging from baskets, musical instruments to utility items like pen stand, mugs, hair clips, vases, containers. Household furnitures like chairs, sofa sets, moorahs (small stools) are also made out of cane and bamboo. There is tremendous demand of the products in domestic as well as in international market. Furniture and utility items of various designs are exported to the foreign countries as well. Nowadays, the products are also used for Interior Decoration of houses, hotels and offices etc.

### **Manufacturing Process**

The production process comprises of the following different process.

1. Selection of Bamboo- There is not much problem in selecting the cane & bamboo for the work by the handicraft people. Bamboo is easily available in the market & in many forests in Assam. For making different furnishing & decorative items different types of bamboo are used. For making items like japi, saloni, dala, duli, tukuri etc. different bamboos are used. By using cane many furniture are made with the combination of bamboo.
2. Cutting as per required size- The bamboo are cut into different shapes & sizes as per required designs. The bamboo is first selected and then it is cut into sizes which

is required by the workers to make different items from it. The workers used to cut the bamboo in reqd. length needed by them.

3. Drying- After the bamboos' are selected then it is first dried in the sun. As there is moisture present in the bamboo so it is dried for a period and then the actual work is carried out. If the bamboo are not dried properly then it may get damaged by some insects, so first of all this must be properly dried.

4. Surface decoration- Surface decoration is very important for bamboo products. After the product is completed the surface is decorated which gives an attractive look to the product. The surface is decorated by various means like burning the sides of a bamboo item & colouring it to give a fascinating look. All these ways helps to attract the eyes of the customers.

5. Framing & binding as per design (shape) - To make a product it is very important to cut the bamboo & cane into required size & shapes as per the design of the product. The bamboo is cut into pieces reqd. by the workers & then the different sizes of bamboos are joined or bind together by the means of nails or some adhesive.

6. Application of polishing- Polishing is an important application which is required to give to the finished goods. After polishing the product gives a bright look. When the product is prepared then it is sent for polishing, then it can be sent for marketing. After polishing the furniture or decorative items become more smooth.

## Cost of Project

Particulars	Amount (Rs. in Lakhs)
Land (Owned)	0.00
Civil Works and Building	12.00
Plant and Machinery	7.56
Miscellaneous Fixed Assets	1.20
DG Set	2.00
Escalation & Contingencies	1.14
Preliminary & Preoperative Expenses	1.78
<b>Sub-total (A)</b>	<b>25.68</b>
Working Capital Margin @40% of Total WC Requirement	3.46
<b>Total Project Cost</b>	<b>29.13</b>
Total Working Capital Requirements (25% of 1st Year Project Turnover) (B)	8.64
<b>MEANS OF FINANCE</b>	
<b>Total funds required (A+B)</b>	<b>34.32</b>
<u>Loan component-</u>	
Term loan (60% of A)	15.41
Working capital (60% of B)	5.18
<b>TOTAL</b>	<b>20.59</b>
Equity	13.73
<b>TOTAL</b>	<b>34.32</b>

## Detailed Cost Element

Sl. no.	Particulars	Amount (Rs. in Lakhs)
1	Bamboo Cross Cutting Machine	0.52
2	Bamboo Splitter	4.20
3	Bamboo Slicer	1.80
4	Hand Drilling Machine	0.11
5	Blow Lamp	0.03
6	Pipes for Bending, Planner, Hand Saw, Pliers, Hammers etc.	0.50
7	Miscellaneous Hand Tools and Equipment	0.40
	<b>TOTAL</b>	<b>7.56</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	0.30
Legal Charges - Drafting for agreements, contracts, stamp paper, notary and affidavit cost	0.05
Other recurring expenses of revenue nature upto start of commercial operations -salary, etc	0.75
Interest Cost for period before commercial operations	0.18
<b>Total</b>	<b>1.78</b>

## Salary

Designation	Manpower	Amount (Rs. In lakhs)
Manager	1	3.00
Sales Person	1	1.20
Office staff cum accountant	1	2.16
Machine Operators	2	1.92
Workers	4	2.88
Security Guard	1	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 (Items /per annum)	2000	2000	2000	2000	2000
Capacity utilisation	60%	65%	70%	75%	80%
Production During the year	1200	1300	1400	1500	1600
Annual turnover	34.56	37.44	40.32	43.20	46.08
<b>Total income during the year</b>	<b>34.56</b>	<b>37.44</b>	<b>40.32</b>	<b>43.20</b>	<b>46.08</b>
<b><u>B. OPERATING EXPENSES</u></b>					
Raw Material	5.83	6.31	6.80	7.28	7.77
Salary	12.36	12.98	13.63	14.31	15.02
Repair & Maintenance	0.69	0.75	0.81	0.86	0.92
Power & utilities	4.40	4.49	4.58	4.67	4.77
Depreciation and Amortisation	1.64	1.64	1.64	1.54	1.54
<b>Total Operating Expenses</b>	<b>24.93</b>	<b>26.18</b>	<b>27.46</b>	<b>28.67</b>	<b>30.02</b>
<b>Operating Profit (A-B)</b>	<b>9.63</b>	<b>11.26</b>	<b>12.86</b>	<b>14.53</b>	<b>16.06</b>
<b><u>C. FINANCIAL EXPENSES</u></b>					
Interest on term loan	1.22	1.04	0.85	0.66	0.48
Interest on working capital loan	0.44	0.44	0.44	0.44	0.44
<b><u>D. Other Expenses</u></b>					
Administrative and general Expenses	0.69	0.75	0.81	0.86	0.92
<b>Total Expenses</b>	<b>2.36</b>	<b>2.23</b>	<b>2.10</b>	<b>1.97</b>	<b>1.84</b>
<b>Profit Before Tax</b>	<b>7.28</b>	<b>9.04</b>	<b>10.77</b>	<b>12.56</b>	<b>14.22</b>
Provision for Tax	1.82	2.26	2.69	3.14	3.56
<b>Profit after Tax (PAT)</b>	<b>5.46</b>	<b>6.78</b>	<b>8.07</b>	<b>9.42</b>	<b>10.67</b>
Dividend Declared	0.00	0.00	0.00	0.00	0.00
<b>Retained Profit</b>	<b>5.46</b>	<b>6.78</b>	<b>8.07</b>	<b>9.42</b>	<b>10.67</b>

## Breakeven Point

Break Even Point (BEP)		Amount (Rs. In Lakhs)				
SL	Particulars	Year - 1	Year - 2	Year - 3	Year - 4	Year - 5
<b>A.</b>	<b>Net Sales</b>	<b>34.56</b>	<b>37.44</b>	<b>40.32</b>	<b>43.20</b>	<b>46.08</b>
<b>B.</b>	<b>Variable Cost</b>					
	Raw Material	5.83	6.31	6.80	7.28	7.77
	Power and Utility	4.40	4.49	4.58	4.67	4.77
	<b>Total Variable Cost</b>	<b>10.23</b>	<b>10.80</b>	<b>11.38</b>	<b>11.96</b>	<b>12.54</b>
<b>C.</b>	<b>Contribution (A-B)</b>	<b>24.33</b>	<b>26.64</b>	<b>28.94</b>	<b>31.24</b>	<b>33.54</b>
<b>D.</b>	<b>Fixed</b>					
	Salary	12.36	12.98	13.63	14.31	15.02
	Interest on term loan	1.22	1.04	0.85	0.66	0.48
	interest on working capital	0.44	0.44	0.44	0.44	0.44
	Repair & Maintenance	0.69	0.75	0.81	0.86	0.92
	Depreciation and Amortisation	1.64	1.64	1.64	1.54	1.54
	<b>Total Fixed Cost</b>	<b>16.36</b>	<b>16.85</b>	<b>17.37</b>	<b>17.82</b>	<b>18.40</b>
<b>E.</b>	<b>Breakeven Point</b>	<b>67%</b>	<b>63%</b>	<b>60%</b>	<b>57%</b>	<b>55%</b>
<b>F.</b>	<b>Cash BEP</b>	<b>60%</b>	<b>57%</b>	<b>54%</b>	<b>52%</b>	<b>50%</b>

## Debt-Service Coverage Ratio

		Amount (Rs. In Lakhs)				
SL	Particulars	Year - 1	Year - 2	Year - 3	Year - 4	Year - 5
i	Profit	5.46	6.78	8.07	9.42	10.67
ii	Depreciation	1.64	1.64	1.64	1.54	1.54
iii	Interest on term loan	1.22	1.04	0.85	0.66	0.48
<b>A</b>	<b>Total ( i + ii + iii )</b>	<b>8.33</b>	<b>9.46</b>	<b>10.57</b>	<b>11.63</b>	<b>12.68</b>
i	Interest on term loan	1.22	1.04	0.85	0.66	0.48
ii	Principal repayment on term loan	2.20	2.20	2.20	2.20	2.20
<b>B</b>	<b>Total ( i + ii )</b>	<b>3.42</b>	<b>3.24</b>	<b>3.05</b>	<b>2.86</b>	<b>2.68</b>
	<b>DSCR ( A / B )</b>	<b>2.43</b>	<b>2.92</b>	<b>3.46</b>	<b>4.06</b>	<b>4.74</b>

## 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 7 years, Rate of interest being 8.5% p.a.

### Address of Vendors

Name of Vendor	Address and Contact Number
Nirvan Resources	Neo Square, Pandit Nehru Marg, Near Ambar Cinema, Indradeep Society, Jamnagar, Gujarat-361008 Contact No.- 090333 40196
Anil Enterprises	11, Ujjain Rd, Ravi Shankar Market, Industrial Area, Itawa, Dewas, Madhya Pradesh 455001 Contact No.- 08048757004
Jatan Industries	Khoraj, Nikol Gam Rd, Ahmedabad, Gujarat-382421 Contact No.- 08048558782
Garnet Machines	Shed No, 5, Ujjain Rd, Industrial Area, Dewas, Madhya Pradesh-455001 Contact No.- 080 4325 9042

## ANNEXURE- I

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
<b>I</b>													
<b>Principal</b>													
Opening	15.41	15.22	15.04	14.86	14.67	14.49	14.31	14.12	13.94	13.75	13.57	13.39	
Repaid	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	2.20
Closing	15.22	15.04	14.86	14.67	14.49	14.31	14.12	13.94	13.75	13.57	13.39	13.20	
<b>Interest</b>	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.09	1.22
<b>II</b>													
<b>Principal</b>													
Opening	13.20	13.02	12.84	12.65	12.47	12.29	12.10	11.92	11.74	11.55	11.37	11.19	
Repaid	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	2.20
Closing	13.02	12.84	12.65	12.47	12.29	12.10	11.92	11.74	11.55	11.37	11.19	11.00	
<b>Interest</b>	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.08	0.08	0.08	0.08	0.08	1.04
<b>III</b>													
<b>Principal</b>													
Opening	11.00	10.82	10.64	10.45	10.27	10.09	9.90	9.72	9.54	9.35	9.17	8.99	
Repaid	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	2.20
Closing	10.82	10.64	10.45	10.27	10.09	9.90	9.72	9.54	9.35	9.17	8.99	8.80	
<b>Interest</b>	0.08	0.08	0.08	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.85
<b>IV</b>													
<b>Principal</b>													
Opening	8.80	8.62	8.44	8.25	8.07	7.89	7.70	7.52	7.34	7.15	6.97	6.79	
Repaid	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	2.20
Closing	8.62	8.44	8.25	8.07	7.89	7.70	7.52	7.34	7.15	6.97	6.79	6.60	
<b>Interest</b>	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.66
<b>V</b>													
<b>Principal</b>													
Opening	6.60	6.42	6.24	6.05	5.87	5.69	5.50	5.32	5.14	4.95	4.77	4.58	
Repaid	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	2.20
Closing	6.42	6.24	6.05	5.87	5.69	5.50	5.32	5.14	4.95	4.77	4.58	4.40	
<b>Interest</b>	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.48
<b>VI</b>													
<b>Principal</b>													
Opening	4.40	4.22	4.03	3.85	3.67	3.48	3.30	3.12	2.93	2.75	2.57	2.38	
Repaid	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	2.20
Closing	4.22	4.03	3.85	3.67	3.48	3.30	3.12	2.93	2.75	2.57	2.38	2.20	
<b>Interest</b>	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.29
<b>VII</b>													
<b>Principal</b>													
Opening	2.20	2.02	1.83	1.65	1.47	1.28	1.10	0.92	0.73	0.55	0.37	0.18	
Repaid	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	2.20
Closing	2.02	1.83	1.65	1.47	1.28	1.10	0.92	0.73	0.55	0.37	0.18	0.00	
<b>Interest</b>	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.10