



MODEL PROJECT REPORT



PROJECT REPORT ON BAMBOO FURNITURE

SWAVALAMBI BHARAT ABHIYAN

PROJECT AT A GLANCE

- 1 Name of the Entrepreneur : xxxxxxxx
- 2 Constitution (legal Status) : xxxxxxxx
- 3 Father / Spouse Name : xxxxxxxx
- 4 Unit Address : xxxxxxxxxxxxxxxxxxxxxxxx
- District : xxxxxx
Pin: xxxxxx State: xxxxxxxx
Mobile xxxxxx
- 5 Product and By Product : **BAMBOO FURNITURE**
- 6 Name of the project / business activity proposed : **BAMBOO FURNITURE MAKING UNIT**
- 7 Cost of Project : Rs.16.64 Lakhs
- 8 Means of Finance
Term Loan Rs.11 Lakhs
Own Capital Rs.1.64 Lakhs
Working Capital Rs.4 Lakhs
- 9 Debt Service Coverage Ratio : 2.71
- 10 Pay Back Period : 5 Years
- 11 Project Implementation Period : 5-6 Months
- 12 Break Even Point : 27%
- 13 Employment : 7 Persons
- 14 Power Requirement : 20.00 HP
- 15 Major Raw materials : Bamboo, Other consumables such as oil, glue, nails, etc.
- 16 Estimated Annual Sales Turnover (Max Capacity) : 97.13 Lakhs
- 17 Detailed Cost of Project & Means of Finance

COST OF PROJECT

(Rs. In Lakhs)	
Particulars	Amount
Land	Own/Rented
Building /Shed 1000 Sq ft	5.00
Plant & Machinery	6.20
Furniture & Fixtures	1.00
Working Capital	4.44
Total	16.64

MEANS OF FINANCE

Particulars	Amount
Own Contribution	1.64
Working Capital(Finance)	4.00
Term Loan	11.00
Total	16.64

BAMBOO FURNITURE

Introduction: Bamboo is one of the fastest growing plant, whether it is called as green gold, giant grass or woody grass it is one of the amazing raw materials to explore in various ways and means for all kinds of applications. Bamboo is the best material to substitute many applications of wood, steel, plastic etc. Bamboo can be used to produce chairs, sofas, bookshelves, cabinets and tables and is widely regarded as an excellent substitute for wood. It is produced from bamboo components and to the uninitiated eye the furniture is unrecognizable as having been produced from bamboo. A huge range of furniture can be produced, such as tables and chairs, bookshelves, beds, cabinets and recliners. The furniture is durable, practical and has a modern appearance. Bamboo furniture can withstand everyday use. It is far more resistant to damage than traditional hardwoods. This project deals with set of furniture having 4 chairs and 1 table.



Uses & Market Potential: Bamboo furniture can withstand everyday use. Bamboo furniture won't swell or shrink due to atmospheric changes. For this reason, outdoor furniture made from bamboo withstands the change from humid to dry air and changes in temperature. Bamboo features a fine grain that adds beauty and elegance to any piece of furniture and is available in a wide variety of stains and finishes. Bamboo is also used in commercial places such as hotels, offices, and recreational areas.

The global bamboo furniture market size was valued at USD 10.09 billion in 2018 and is expected to expand at a CAGR of 5.2% from 2019 to 2025. The growth is primarily attributed to rising investments in infrastructure developments coupled with the use of sustainable raw materials for furniture. The market is majorly driven by the rise in residential application. Along with offering aesthetic appeal to interiors, bamboo is gaining significant acceptance as a wood substitute due to its mechanical strength, durability, and easy availability. Rising environmental awareness among wood processing companies is anticipated to drive the adoption of bamboos as a sustainable building material.

Machinery & equipments: Major machines are as follows:

Name	Unit	Price
Crosscut Machine	1	26000
Band saw Machine	1	195000
Wood Ripening Machine(Seasoning Plant)	1	185000
Bamboo Slicer Machine	1	85000
Nail Gun	1	12000
Glue Spreading Machine	1	85000
Other carpentry tools	Ls	32000

Raw materials: Major raw materials are as follows:

1. Bamboo
2. Other consumables such as Glue, oil, nail, etc.

Assuming average raw material cost per set containing 4 chairs & 1 table is 3000-3800 per set.

Manufacturing Process: All bamboo and materials required for production are procured from local vendors. Bamboos are initially cut to manageable sizes using carpenter saws and similar tools and machines. The bamboos are then cleaned of all unwanted materials like leaves & protrude at nodes. Bamboos then as per requirement are seasoned in a seasoning plant as per furniture to be made though much furniture can be made with almost no to minor processing. Bamboos either way are allowed to disperse a portion of their moisture content before actual manufacturing of furniture starts.

The next step prior to manufacturing is surface cleaning & smoothening of bamboo using sand paper, though bamboo is fundamentally smooth, but during processing fibers can be exposed, scratches can be formed which are not desirable hence smoothened with sand paper or appropriate machines. Then bamboos are cut in appropriate sizes as per furniture to be made, these parts are assembled into furniture utilizing a combination of nails, glue etc. All the edges of assembled product are once again smoothened prior to its dispatch for sale.

Area: The industrial setup requires space for Inventory, workshop or manufacturing area, space for power supply utilities and auxiliary like Generator setup. Also some of the area of building is required for office staff facilities, documentation, office furniture, etc. Thus, the approximate total area required for complete industrial setup is 1000 to 1500Sqft. Civil work cost will be around 5 Lac Rs. (Approx.)

Power Requirement –The power consumption required to run all the machinery could be approximated as 20hp.

Manpower Requirement- There are requirement of skilled machine operators to run the machine set. Experience quality engineers are required for desired quality control. Some helpers are also required to transfer the material from one work station to other. Office staffs are required to maintain the documentation. The approximate manpower required is 7 including 1 Plant operator, 1 unskilled worker , 1 Helper, 1 Security guard. 3 Skilled worker including Accountant, Manager and Sales person.

Bank Term Loan: Rate of Interest is assumed to be at 11%

Depreciation: Depreciation has been calculated as per the Provisions of Income Tax Act, 1961

Approvals & Registration Requirement:

Basic registration required in this project:

- GST Registration
- Udyog Aadhar Registration (Optional)
- Choice of a Brand Name of the product and secure the name with Trademark if require

Implementation Schedule:

S No.	Activity	Time required
1.	Acquisition of premises	1-2 Months
2.	Procurement & installation of Plant & Machinery	1-2 Months
3.	Arrangement of Finance	1.5-2 Months
4.	Requirement of required Manpower	1 Month
5.	Commercial Trial Runs	1 Month
	Total time Required (some activities shall run concurrently)	5-6 Months

FINANCIALS

PROJECTED CASH FLOW STATEMENT					
PARTICULARS	I	II	III	IV	V
SOURCES OF FUND					
Own Contribution	1.64	-			
Reserve & Surplus	3.87	5.77	7.06	9.35	11.13
Depriciation & Exp. W/off	1.53	1.33	1.16	1.01	0.88
Increase In Cash Credit	4.00				
Increase In Term Loan	11.00	-	-	-	-
Increase in Creditors	2.03	0.26	0.27	0.28	0.29
TOTAL :	24.07	7.37	8.49	10.64	12.29
APPLICATION OF FUND					
Increase in Fixed Assets	12.20	-	-	-	-
Increase in Stock	3.99	0.53	0.55	0.57	0.59
Increase in Debtors	2.95	0.56	0.43	0.45	0.46
Repayment of Term Loan	1.22	2.44	2.44	2.44	2.44
Taxation	-	0.58	1.06	2.34	3.34
Drawings	2.00	2.50	3.00	4.00	5.00
TOTAL :	22.36	6.61	7.49	9.80	11.83
Opening Cash & Bank Balance	-	1.70	2.46	3.46	4.30
Add : Surplus	1.70	0.76	1.00	0.84	0.46
Closing Cash & Bank Balance	1.70	2.46	3.46	4.30	4.76

PROJECTED BALANCE SHEET					
PARTICULARS	I	II	III	IV	V
SOURCES OF FUND					
Capital Account					
Opening Balance	-	3.51	6.21	9.21	12.23
Add: Additions	1.64	-	-	-	-
Add: Net Profit	3.87	5.20	6.01	7.01	7.79
Less: Drawings	2.00	2.50	3.00	4.00	5.00
Closing Balance	3.51	6.21	9.21	12.23	15.02
CC Limit	4.00	4.00	4.00	4.00	4.00
Term Loan	9.78	7.33	4.89	2.44	-
Sundry Creditors	2.03	2.29	2.56	2.84	3.12
TOTAL :	19.31	19.83	20.66	21.51	22.14
APPLICATION OF FUND					
Fixed Assets (Gross)	12.20	12.20	12.20	12.20	12.20
Gross Dep.	1.53	2.86	4.02	5.03	5.91
Net Fixed Assets	10.67	9.34	8.18	7.17	6.29
Current Assets					
Sundry Debtors	2.95	3.51	3.94	4.39	4.86
Stock in Hand	3.99	4.52	5.07	5.64	6.22
Cash and Bank	1.70	2.46	3.46	4.30	4.76
TOTAL :	19.31	19.83	20.66	21.51	22.14

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PROJECTED PROFITABILITY STATEMENT					
PARTICULARS	I	II	III	IV	V
A) SALES					
Gross Sale	59.00	70.15	78.84	87.83	97.13
Total (A)	59.00	70.15	78.84	87.83	97.13
B) COST OF SALES					
Raw Material Consumed	40.50	45.75	51.15	56.70	62.40
Electricity Expenses	1.45	1.61	1.77	1.93	2.10
Repair & Maintenance	3.54	3.51	3.94	3.51	3.89
Labour & Wages	4.03	4.64	5.19	5.92	6.51
Depreciation	1.53	1.33	1.16	1.01	0.88
Cost of Production	51.05	56.84	63.22	69.08	75.77
Add: Opening Stock /WIP	-	2.64	3.00	3.37	3.75
Less: Closing Stock /WIP	2.64	3.00	3.37	3.75	4.14
Cost of Sales (B)	48.41	56.48	62.85	68.69	75.38
C) GROSS PROFIT (A-B)	10.58	13.67	15.99	19.14	21.75
	17.94%	19.48%	20.29%	21.79%	22.39%
D) Bank Interest (Term Loan)	1.19	0.97	0.71	0.44	0.17
ii) Interest On Working Capital	0.44	0.44	0.44	0.44	0.44
E) Salary to Staff	3.78	4.73	5.81	6.45	7.10
F) Selling & Adm Expenses Exp.	1.30	1.75	1.97	2.46	2.91
TOTAL (D+E)	6.71	7.89	8.93	9.79	10.62
H) NET PROFIT	3.87	5.77	7.06	9.35	11.13
	6.6%	8.2%	9.0%	10.6%	11.5%
I) Taxation	-	0.58	1.06	2.34	3.34
J) PROFIT (After Tax)	3.87	5.20	6.01	7.01	7.79

<u>COMPUTATION OF MAKING OF TABLE & CHAIR</u>			
Item to be Manufactured	Table & chair set		
Manufacturing Capacity per day		10	Set
No. of Working Hour		8	
No of Working Days per month		25	
No. of Working Day per annum		300	
Total Production per Annum		3,000	Set
Total Production per Annum		3,000	Set
Year		Capacity	BAMBOO
		Utilisation	FURNITURE
I		45%	1,350.00
II		50%	1,500.00
III		55%	1,650.00
IV		60%	1,800.00
V		65%	1,950.00

Raw Material Consumed	Capacity	Rate	Amount (Rs.)
	Utilisation		
I	45%	3000.00	40.50
II	50%	3050.00	45.75
III	55%	3100.00	51.15
IV	60%	3150.00	56.70
V	65%	3200.00	62.40

<u>COMPUTATION OF SALE</u>					
Particulars	I	II	III	IV	V
Op Stock	-	67.50	75.00	82.50	90.00
Production	1,350.00	1,500.00	1,650.00	1,800.00	1,950.00
	1,350.00	1,567.50	1,725.00	1,882.50	2,040.00
Less : Closing Stock(15 Days)	67.50	75.00	82.50	90.00	97.50
Net Sale	1,282.50	1,492.50	1,642.50	1,792.50	1,942.50
Sale Price per set	4,600.00	4,700.00	4,800.00	4,900.00	5,000.00
Sale (in Lacs)	59.00	70.15	78.84	87.83	97.13

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL					
PARTICULARS	I	II	III	IV	V
Finished Goods					
(15 Days requirement)	2.64	3.00	3.37	3.75	4.14
Raw Material					
(10 Days requirement)	1.35	1.53	1.71	1.89	2.08
Closing Stock	3.99	4.52	5.07	5.64	6.22

COMPUTATION OF WORKING CAPITAL REQUIREMENT			
Particulars	Amount	Margin(10%)	Net Amount
Stock in Hand	3.99		
Less:			
Sundry Creditors	2.03		
Paid Stock	1.96	0.20	1.77
Sundry Debtors	2.95	0.29	2.65
Working Capital Requirement			4.42
Margin			0.49
MPBF			4.42
Working Capital Demand			4.00

<u>BREAK UP OF LABOUR</u>				
Particulars		Wages	No of	Total
		Per Month	Employees	Salary
Plant Operator		10,000.00	1	10,000.00
Unskilled Worker		8,000.00	1	8,000.00
Helper		8,000.00	1	8,000.00
Security Guard		6,000.00	1	6,000.00
				32,000.00
Add: 5% Fringe Benefit				1,600.00
Total Labour Cost Per Month				33,600.00
Total Labour Cost for the year (In Rs. Lakhs)			4	4.03

<u>BREAK UP OF SALARY</u>				
Particulars		Salary	No of	Total
		Per Month	Employees	Salary
Manager		12,000.00	1	12,000.00
Accountant cum store keeper		10,000.00	1	10,000.00
Sales		8,000.00	1	8,000.00
Total Salary Per Month				30,000.00
Add: 5% Fringe Benefit				1,500.00
Total Salary for the month				31,500.00
Total Salary for the year (In Rs. Lakhs)			3	3.78

COMPUTATION OF DEPRECIATION					
Description	Land	Building/shed	Plant & Machinery	Furniture	TOTAL
Rate of Depreciation		10.00%	15.00%	10.00%	
Opening Balance	Leased		-	-	-
Addition	-	5.00	6.20	1.00	12.20
	-	5.00	6.20	1.00	12.20
		-	-	-	
TOTAL		5.00	6.20	1.00	12.20
Less : Depreciation	-	0.50	0.93	0.10	1.53
WDV at end of Ist year	-	4.50	5.27	0.90	10.67
Additions During The Year	-	-	-	-	-
	-	4.50	5.27	0.90	10.67
Less : Depreciation	-	0.45	0.79	0.09	1.33
WDV at end of IInd Year	-	4.05	4.48	0.81	9.34
Additions During The Year	-	-	-	-	-
	-	4.05	4.48	0.81	9.34
Less : Depreciation	-	0.41	0.67	0.08	1.16
WDV at end of IIIrd year	-	3.65	3.81	0.73	8.18
Additions During The Year	-	-	-	-	-
	-	3.65	3.81	0.73	8.18
Less : Depreciation	-	0.36	0.57	0.07	1.01
WDV at end of IV year	-	3.28	3.24	0.66	7.17
Additions During The Year	-	-	-	-	-
	-	3.28	3.24	0.66	7.17
Less : Depreciation	-	0.33	0.49	0.07	0.88
WDV at end of Vth year	-	2.95	2.75	0.59	6.29

REPAYMENT SCHEDULE OF TERM LOAN						11.0%	
Year	Particulars	Amount	Addition	Total	Interest	Repayment	CI Balance
I	Opening Balance						
	Ist Quarter	11.00	-	11.00	0.30	-	11.00
	Iind Quarter	11.00	-	11.00	0.30	-	11.00
	IIIrd Quarter	11.00	-	11.00	0.30	0.61	10.39
	Ivth Quarter	10.39	-	10.39	0.29	0.61	9.78
					1.19	1.22	
II	Opening Balance						
	Ist Quarter	9.78	-	9.78	0.27	0.61	9.17
	Iind Quarter	9.17	-	9.17	0.25	0.61	8.56
	IIIrd Quarter	8.56	-	8.56	0.24	0.61	7.94
	Ivth Quarter	7.94		7.94	0.22	0.61	7.33
					0.97	2.44	
III	Opening Balance						
	Ist Quarter	7.33	-	7.33	0.20	0.61	6.72
	Iind Quarter	6.72	-	6.72	0.18	0.61	6.11
	IIIrd Quarter	6.11	-	6.11	0.17	0.61	5.50
	Ivth Quarter	5.50		5.50	0.15	0.61	4.89
					0.71	2.44	
IV	Opening Balance						
	Ist Quarter	4.89	-	4.89	0.13	0.61	4.28
	Iind Quarter	4.28	-	4.28	0.12	0.61	3.67
	IIIrd Quarter	3.67	-	3.67	0.10	0.61	3.06
	Ivth Quarter	3.06		3.06	0.08	0.61	2.44
					0.44	2.44	
V	Opening Balance						
	Ist Quarter	2.44	-	2.44	0.07	0.61	1.83
	Iind Quarter	1.83	-	1.83	0.05	0.61	1.22
	IIIrd Quarter	1.22	-	1.22	0.03	0.61	0.61
	Ivth Quarter	0.61		0.61	0.02	0.61	0.00
					0.17	2.44	

Door to Door Period 60 Months
Moratorium Period 6 Months
Repayment Period 54 Months

<u>CALCULATION OF D.S.C.R</u>					
PARTICULARS	I	II	III	IV	V
<u>CASH ACCRUALS</u>	5.40	6.53	7.16	8.02	8.67
Interest on Term Loan	1.19	0.97	0.71	0.44	0.17
Total	6.59	7.50	7.87	8.46	8.84
<u>REPAYMENT</u>					
Repayment of Term Loan	1.22	2.44	2.44	2.44	2.44
Interest on Term Loan	1.19	0.97	0.71	0.44	0.17
Total	2.42	3.42	3.15	2.88	2.61
DEBT SERVICE COVERAGE RATIO	2.73	2.19	2.50	2.94	3.38
AVERAGE D.S.C.R.			2.71		

COMPUTATION OF ELECTRICITY				
(A) POWER CONNECTION				
Total Working Hour per day		Hours	8	
Electric Load Required		HP	20	
Load Factor			0.7460	
Electricity Charges		per unit	7.50	
Total Working Days			300	
Electricity Charges				2,68,560.00
Add : Minimim Charges (@ 10%)				
(B) DG set				
No. of Working Days			300	days
No of Working Hours			0.3	Hour per day
Total no of Hour			90	
Diesel Consumption per Hour			8	
Total Consumption of Diesel			720	
Cost of Diesel			65.00	Rs. /Ltr
Total cost of Diesel			0.47	
Add : Lube Cost @15%			0.07	
Total			0.54	
Total cost of Power & Fuel at 100%				3.22
Year		Capacity		Amount
				(in Lacs)
I		45%		1.45
II		50%		1.61
III		55%		1.77
IV		60%		1.93
V		65%		2.10