

BROOM STICK



1.0 INTRODUCTION

Brooms are used for floor cleaning, dust removing etc. Broom making is a livelihood for large number of tribal in hill areas. Such are non-timber forest produce, have good potential for generating local employment and can be used for enhancing rural income.

This project profile is for setting up a Broom stick making unit, based on 300 working days per annum and 8 working hours per day. Economics are worked out based on average costs and these may vary moderately from location to location and required to be modified. The installed production capacity of the unit per annum is as follows;

Broom - 36000 Nos.

2.0 MARKET POTENTIAL

Broom is a common household item. It is transported to various districts for marketing. It has good demand and marketed through Super Bazars, Kirana Shops and other outlets.

3.0 PROCESS DETAILS

The process is simple. On harvesting, they are cut into required size with a cutter and made them a suitable bundle using packing machine. Collection of brooms from wild area and arranging them by sizing, grading and packing can be done simultaneously.

4.0. COST OF THE PROJECT

The estimated project cost is given below:

		(Rs. in lacs)
Particulars	Amount (Rs)	
Land & Site Development	Rented	
Building & Civil works	Rented	
Plant & Machinery	0.55	
Misc. Fixed assets	0.17	
Preliminary & pre-operative expenses	0.32	
Contingencies & escalation @ 3%	0.02	
Working capital	0.19	
TOTAL	1.25	

4.1 Land & Site Development: Nil. Covered Area: 750 Sq. Ft.

4.2 Building & Civil Works: Nil.

4.3 Plant & Machinery: Details of plant & machinery are given below.

Particulars	Qty	Rate (Rs)	Amount (Rs)
Broom Sizing and Cutting Machine	1	25000	25000
Bundle Making Machine	1	15000	15000
Tools and equipment	LS	--	5000
Sub total			45000
Add: Installation, transportation, etc @ 10%			4500
TOTAL			54500
Say (Rs. in lacs)			0.55

4.4 Misc. Fixed assets: Details of miscellaneous fixed assets are given below.

Particulars	Qty	Rate (Rs)	Amount (Rs)
Furniture & fixtures	LS	--	10000
Miscellaneous items	LS	--	5000
Sub total			15000
Add: Installation, transportation, etc @ 10%			1500
TOTAL			16500
Say (Rs. in lacs)			0.17

4.5 Contingencies & escalation: Contingencies & escalation has been assumed at 3% of the cost of land & site development, building & civil works, plant & machinery and miscellaneous fixed assets.**4.6 Preliminary & pre-operative expenses:** Details of preliminary & pre-operative expenses are given below.

		(Rs. in lacs)
Particulars	Amount (Rs)	
Travelling expenses	6000	
Professional & other fees	10000	
Interest during implementation	1420	
Miscellaneous expenses	15000	
TOTAL	32420	
Say (Rs. in lacs)	0.32	

4.7 Working capital: Details of working capital are given below.

		(Rs. in lacs)		
	Period (Days)	Total Current Assets		
		Year 1	Year 2	Year 3
Raw materials	30	0.07	0.09	0.10
Power & Utility	30	0.01	0.01	0.01
Salary	30	0.14	0.14	0.14
Finished Goods	15	0.12	0.13	0.14
Receivables	15	0.12	0.14	0.17
Total		0.46	0.51	0.55
Working capital margin in Year 1 (40%)		0.19		

5.0 MEANS OF FINANCE

The means of finance for the project is estimated as below.

(Rs. in lacs)		
Particulars	Percent	Amount
<u>EQUITY</u>		
A. Equity from Promoters	40%	0.50
B. Subsidy from Central/State Govt.	-	
<u>DEBT</u>		
Term Loan from Banks/Financial Institutions	60%	0.75
TOTAL	100%	1.25

6.0 PROFITABILITY STATEMENT

(Rs. in lacs)

Particulars	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
<u>A. INCOME</u>					
Production Capacity (Nos./annum)	36000	36000	36000	36000	36000
Capacity utilisation	60%	70%	80%	80%	80%
Production/annum at capacity utilisation	21600	25200	28800	28800	28800
Price of Broom Sticks (Rs/Broomstick)	14	14	14	14	14
Total income/annum	3.02	3.53	4.03	4.03	4.03
<u>B. OPERATING EXPENSES</u>					
Raw Materials	0.91	1.06	1.22	1.22	1.22
Power & Utility	0.14	0.16	0.18	0.18	0.18
Salary	1.66	1.66	1.67	1.68	1.69
Repair & Maintenance	0.01	0.01	0.01	0.01	0.01
Other Expenses	0.15	0.18	0.20	0.20	0.20
Total Operating Expenses	2.87	3.08	3.29	3.30	3.30
Operating profit	0.15	0.45	0.75	0.74	0.73
<u>C. FINANCIAL EXPENSES</u>					
Depreciation	0.04	0.04	0.04	0.04	0.04
Interest on Term Loan	0.06	0.05	0.03	0.02	0.01
Interest on Working Capital Loan	0.02	0.02	0.03	0.03	0.03
Net Profit	0.06	0.36	0.67	0.68	0.68
Net cash accruals	0.10	0.40	0.71	0.72	0.72
Principal Repayment	0.08	0.17	0.17	0.17	0.17

6.1 Production capacity: Total production of **Broomsticks** at 100% capacity utilization is estimated as below.

Broom Sticks	36000 Nos.
Total production per annum at 100% capacity (in Nos.)	36000 Nos.

6.2 Raw materials: Total expenses on raw materials at 100% capacity utilization are estimated as below.

Broom-grass from Wild	23 Ton
Collection Expense of Broom-grass	4000 per Ton
Sub Total	92000
Consumables like Plastic Handle and Others	60000
Expenses on raw material at 100% capacity (Rs)	152000

6.3 Power & Utility: Total expenses on power & utility at 100% capacity utilization is estimated as below.

Particulars	Quantity	Power (Kw)	Total (Kw)
Plant & Machinery	--	2.00	2.00
General Lighting	5	0.10	0.50
Total power requirement/ day (Kw)			2.50
No. of hrs/day	8		
No. of days/annum	300		
Annual power requirement (kwh)	6000		
Rate per unit (Rs)	3.50		
Expenses on power (Rs)	21000		
Expenses on other Utility (Rs)	1800		
Expenses on power & utility at 100% capacity (Rs)	22800		

6.4 Salary: Total expenses on salary in the 1st year are estimated as given below. It is assumed that salary expenses will increase @ 0.5% every subsequent year.

Particulars of Employees	Numbers	Salary/ Month (Rs)	Cost/ annum (Rs)
Manager	1	5800	69600
Skilled Worker	1	5000	60000
Unskilled Worker	1	3000	36000
Expenses on salary in the 1st year (Rs)			165600

6.5 Repair & Maintenance: Total expenses on repair & maintenance in the 1st year is estimated as given below. It is assumed that expenses on repair & maintenance will increase @ 2% every subsequent year.

(Rs. in lacs)			
Particulars	Cost (Rs)	Rate	Amount (Rs)
Building & Civil works	0.00	1.00%	0.00
Plant & Machinery	0.55	2.00%	0.01
Misc. Fixed assets	0.17	1.50%	0.00
Expenses on repair & maintenance in year 1			0.01

6.6 Other Expenses: Other expenses have been assumed at 5% of sales realisation.

6.7 Depreciation: Depreciation has been calculated by straight line method. The details of calculation are given below.

6.8 Interest on term loan & principal repayment: Interest rate has been assumed at 8%. Duration of Loan repayment has been considered for a period of 5 years including moratorium period of 6 months with equal monthly instalments. The details of calculation are given below.

(Rs. in lacs)						
Month	Year	1	2	3	4	5
Month 1	Opening balance	0.75	0.66	0.50	0.33	0.17
	Repayment	0.00	0.01	0.01	0.01	0.01
	Interest (8%)	0.00	0.00	0.00	0.00	0.00
	Closing balance	0.75	0.65	0.48	0.32	0.15
Month 2	Opening balance	0.75	0.65	0.48	0.32	0.15
	Repayment	0.00	0.01	0.01	0.01	0.01
	Interest	0.00	0.00	0.00	0.00	0.00
	Closing balance	0.75	0.64	0.47	0.30	0.14

Month 3	Opening balance	0.75	0.64	0.47	0.30	0.14
	Repayment	0.00	0.01	0.01	0.01	0.01
	Interest	0.00	0.00	0.00	0.00	0.00
	Closing balance	0.75	0.62	0.46	0.29	0.12
Month 4	Opening balance	0.75	0.62	0.46	0.29	0.12
	Repayment	0.00	0.01	0.01	0.01	0.01
	Interest	0.00	0.00	0.00	0.00	0.00
	Closing balance	0.75	0.61	0.44	0.28	0.11
Month 5	Opening balance	0.75	0.61	0.44	0.28	0.11
	Repayment	0.00	0.01	0.01	0.01	0.01
	Interest	0.00	0.00	0.00	0.00	0.00
	Closing balance	0.75	0.60	0.43	0.26	0.10
Month 6	Opening balance	0.75	0.60	0.43	0.26	0.10
	Repayment	0.00	0.01	0.01	0.01	0.01
	Interest	0.00	0.00	0.00	0.00	0.00
	Closing balance	0.75	0.58	0.42	0.25	0.08
Month 7	Opening balance	0.75	0.58	0.42	0.25	0.08
	Repayment	0.01	0.01	0.01	0.01	0.01
	Interest	0.00	0.00	0.00	0.00	0.00
	Closing balance	0.73	0.57	0.40	0.24	0.07
Month 8	Opening balance	0.73	0.57	0.40	0.24	0.07
	Repayment	0.01	0.01	0.01	0.01	0.01
	Interest	0.00	0.00	0.00	0.00	0.00
	Closing balance	0.72	0.55	0.39	0.22	0.06
Month 9	Opening balance	0.72	0.55	0.39	0.22	0.06
	Repayment	0.01	0.01	0.01	0.01	0.01
	Interest	0.00	0.00	0.00	0.00	0.00
	Closing balance	0.71	0.54	0.37	0.21	0.04
Month 10	Opening balance	0.71	0.54	0.37	0.21	0.04
	Repayment	0.01	0.01	0.01	0.01	0.01
	Interest	0.00	0.00	0.00	0.00	0.00
	Closing balance	0.69	0.53	0.36	0.19	0.03
Month 11	Opening balance	0.69	0.53	0.36	0.19	0.03
	Repayment	0.01	0.01	0.01	0.01	0.01
	Interest	0.00	0.00	0.00	0.00	0.00
	Closing balance	0.68	0.51	0.35	0.18	0.01
Month 12	Opening balance	0.68	0.51	0.35	0.18	0.01
	Repayment	0.01	0.01	0.01	0.01	0.01
	Interest	0.00	0.00	0.00	0.00	0.00
	Closing balance	0.66	0.50	0.33	0.17	0.00
Principal Repayment		0.08	0.17	0.17	0.17	0.17
Interest		0.06	0.05	0.03	0.02	0.01

7.0 DEBT SERVICE COVERAGE RATIO (DSCR)

(Rs. in lacs)

Year	1	2	3	4	5
Profit After Tax (Net Profit)	0.06	0.36	0.67	0.68	0.68
Depreciation	0.04	0.04	0.04	0.04	0.04
Interest	0.08	0.07	0.06	0.05	0.03
Total	0.18	0.47	0.77	0.76	0.75
Interest	0.08	0.07	0.06	0.05	0.03
Loan repayment	0.08	0.17	0.17	0.17	0.17
Total	0.16	0.24	0.23	0.21	0.20
DSCR	1.08	2.00	3.41	3.58	3.77

Average DSCR = 2.69

8.0 BREAK EVEN POINT (BEP)

(Rs. in lacs)

Year	1	2	3
A. Net sales	3.02	3.53	4.03
B. Variable cost			
Raw Materials	0.91	1.06	1.22
Power & Utility	0.14	0.16	0.18
Other expenses	0.15	0.18	0.20
Interest on Working Capital Loan	0.02	0.02	0.03
Total variable cost	1.22	1.42	1.63
C. Contribution (A-B)	1.80	2.10	2.41
D. Fixed & Semi-fixed Costs			
Salary	1.66	1.66	1.67
Repair & maintenance	0.01	0.01	0.01
Interest on Term Loan	0.06	0.05	0.03
Depreciation	0.04	0.04	0.04
Total fixed cost	1.77	1.76	1.76
E. BREAK EVEN POINT	98.10%	83.89%	73.16%
F. BEP at operating capacity	58.86%	58.72%	58.53%
G. Cash BEP	57.54%	57.41%	57.22%

9.0 INTERNAL RATE OF RETURN (IRR)**(Rs. in lacs)**

Year	0	1	2	3	4	5
CASH OUTFLOW						
Capital Expenditure	0.74	0.00	0.00	0.00	0.00	0.00
Working Capital	0.00	0.46	0.04	0.04	0.00	0.00
Total (A)	0.74	0.46	0.04	0.04	0.00	0.00
CASH INFLOW						
Profit After Tax		0.06	0.36	0.67	0.68	0.68
Add: Depreciation		0.04	0.04	0.04	0.04	0.04
Add: Interest		0.06	0.05	0.03	0.02	0.01
Add: Salvage Value						
Total (B)	0.00	0.15	0.45	0.75	0.74	0.73
NET FLOW (B-A)	-0.74	-0.31	0.41	0.70	0.74	0.73

IRR = 43%