

# PROJECT REPORT

Of

## MINI TUFTING UNIT

### PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding **MINI TUFTING UNIT**

The objective of the pre-feasibility report is primarily to facilitate potential entrepreneurs in project identification for investment and in order to serve his objective; the document covers various aspects of the project concept development, start-up, marketing, finance and management.

[We can modify the project capacity and project cost as per your requirement. We can also prepare project report on any subject as per your requirement.]



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**PROJECT AT A GLANCE**

- 1 Name of the Entrepreneur : XXXXXXXX
- 2 Constitution (legal Status) : XXXXXXXX
- 3 Father's/Spouce's Name : XXXXXXXX
- 4 Unit Address : XXXXXXXX
- Taluk/Block: \_\_\_\_\_
- District : XXXXX
- Pin: XXXXX State: XXXXX
- E-Mail : XXXXX
- Mobile XXXXX
- 5 Product and By Product : **PROJECT PROFILE FOR MINI TUFTING UNIT**
- 6 Name of the project / business activity proposed : **PROJECT PROFILE FOR MINI TUFTING UNIT**
- 7 Cost of Project : Rs25.00lac
- 8 Means of Finance
- |                   |                              |
|-------------------|------------------------------|
| Term Loan         | Rs.16.64 Lacs                |
| KVIC Margin Money | - As per Project Eligibility |
| Own Capital       | Rs.2.5 Lacs                  |
| Working Capital   | Rs.5.86 Lacs                 |
- 9 Debt Service Coverage Ratio : 2.26
- 10 Pay Back Period : 5 Years
- 11 Project Implementation Period : 6 Months
- 12 Break Even Point : 35%
- 13 Employment : 8 Persons
- 14 Power Requirement : 12.00 HP
- 15 Major Raw materials : COIR YARN
- 16 Estimated Annual Sales Turnover : 263.18 Lacs
- 16 Detailed Cost of Project & Means of Finance

**COST OF PROJECT**

(Rs. In Lacs)

Particulars	Amount
Land	Rented/Owned
Building & Civil Work	Rented/Owned
Plant & Machinery	18.00
Furniture & Fixtures	0.49
Pre-operative Expenses	-
Working Capital Requirement	6.51
<b>Total</b>	<b>25.00</b>

**MEANS OF FINANCE**

(Rs. In Lacs)

Particulars	Amount
Own Contribution @10%	2.50
Term Loan	16.64
Workign Capital Finance	5.86
<b>Total</b>	<b>25.00</b>

	<b>General</b>	<b>Special</b>
Beneficiary's Margin Monery	10%	5%

## **PROJECT PROFILE FOR MINI TUFTING UNIT**



- **INTRODUCTION**

.PVC backed non-woven mat in 50cm width and different length and pile height and PVC thickness can be adjusted by cutting and doctor blade.Cutting head has a spreading platform for PVC/Latex emulsion and device for controlling its thickness.

- **PROCESS OF MANUFACTURE**

Hanks of coir yarn are wound into spools by using spool winding machines. Hanks are placed on the flyers supplied with this machine and yarn is taken through yarn tensioners and attached to the empty spools on the winding drum. When the machines start the winding drum rotates and the yarn is wound into spools. The yarn released from the spools is first chopped into equal preset lengths and thickly implanted vertically onto the PVC resin/latex sheet by passing the materials through a chute. The pile height is controlled for achieving the required thickness of the sheet.

A conveyor with heat resistant Teflon belt running along the length of the machine and movement of this conveyor is regulated by the belt aligner. The conveyor belt is Teflon

coated, capable of withstanding temperature up to 250°C, so as to facilitate easy removal of the sheet after cooling.

The conveyor in its forward movement passes over the heating oven and cooling zone and by doing so, the bits of coir yarn gets implanted family over the PVC/Latex base and forms the mats. The mat can be rolled out of the machine in continuous length or cutting to mat size by longitudinal and cross cutting. Starting from the creel stand to the delivery end, the machine performs automatically.

## **BASIS AND PRESUMPTIONS**

- The Project Profile is based on 8 working hours for 2 shifts in a day and 25 days in a month and the Break Even efficiency has been calculated on 55%, 65%, 75%, 85% and 95% capacity utilization.
- The rate of interest both for fixed asset and working capital have been taken as 11.5% p.a.

- **TECHNICAL ASPECTS**

Installed Production capacity per day	:	250 sq.meter
Number of Shift per day	:	2
Working days p.a	:	300 days
Capacity Utilization		
-First year	:	55%
-Second year	:	65%
-Third year	:	75%
-Fourth year	:	85%
-Fifth year	:	95%
Rate of Average Sales Realization	:	Rs. 330 per sq.meter
Rate of Average cost of raw material	:	Rs.300
Interest on term Loan	:	11.50%
Interest on working capital	:	11.50%
<b>Manpower requirement</b>		
Skilled worker	:	2
Unskilled worker	:	6
Total HP required	:	12 HP

## PLANT & MACHINERY

PARTICULARS	QTY.	RATE	AMOUNT IN RS.
Creel Stands to carry yarn in spools	1.00		
Pre heated to eliminate excess moisture in yarn	1.00		
Motorized stirrer/Pulveriser unit for PVC/ Latex emulsion	1.00		
Cutting head to cut the yarn into bits as per pile height of mat	1.00		
Belt joining device	1.00		
Teflon conveyor	1.00		
Heating panels of required quantities	1.00		
Cooling zone of required length	1.00		
Roll winding device	1.00		
Electrical panel board	1.00		
Total Cost of Plant and Machineries			18,00,000.00

**PROJECTED BALANCE SHEET**

<b>PARTICULARS</b>	<b>IST YEAR</b>	<b>IIND YEAR</b>	<b>IIIRD YEAR</b>	<b>IVTH YEAR</b>	<b>VTH YEAR</b>
<b><u>SOURCES OF FUND</u></b>					
Capital Account	2.50	2.50	2.50	2.50	2.50
Retained Profit	5.11	11.53	19.82	30.57	42.51
Term Loan	16.64	12.48	8.32	4.16	0.00
Cash Credit	5.86	5.86	5.86	5.86	5.86
Sundry Creditors	8.25	9.75	11.25	12.75	13.50
Provisions & Other Liab	0.36	0.40	0.44	0.48	0.53
<b>TOTAL :</b>	<b>38.72</b>	<b>42.51</b>	<b>48.18</b>	<b>56.32</b>	<b>64.89</b>
<b><u>APPLICATION OF FUND</u></b>					
<b>Fixed Assets ( Gross)</b>	18.49	18.49	18.49	18.49	18.49
Gross Dep.	2.72	5.07	7.06	8.75	10.20
Net Fixed Assets	15.77	13.42	11.43	9.74	8.29
<b>Current Assets</b>					
Sundry Debtors	2.63	3.20	3.70	4.19	4.45
Stock in Hand	12.13	14.33	16.54	18.74	19.85
Cash and Bank	5.70	8.81	13.49	20.32	28.65
Deposits & Advances	2.50	2.75	3.03	3.33	3.66
<b>TOTAL :</b>	<b>38.72</b>	<b>42.51</b>	<b>48.18</b>	<b>56.32</b>	<b>64.89</b>

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**PROJECTED CASH FLOW STATEMENT**

<b>PARTICULARS</b>	<b>IST YEAR</b>	<b>IIND YEAR</b>	<b>IIIRD YEAR</b>	<b>IVTH YEAR</b>	<b>VTH YEAR</b>
<b><u>SOURCES OF FUND</u></b>					
Share Capital	2.50	-			
Reserve & Surplus	5.11	7.13	10.36	13.44	14.92
Depriciation & Exp. W/off	2.72	2.34	1.99	1.70	1.44
Increase in Cash Credit	5.86	-	-	-	-
Increase In Term Loan	16.64	-	-	-	-
Increase in Creditors	8.25	1.50	1.50	1.50	0.75
Increase in Provisions	0.36	0.04	0.04	0.04	0.05
<b>TOTAL :</b>	<b>41.44</b>	<b>11.01</b>	<b>13.89</b>	<b>16.68</b>	<b>17.16</b>
<b><u>APPLICATION OF FUND</u></b>					
Increase in Fixed Assets	18.49	-	-	-	-
Increase in Stock	12.13	2.21	2.21	2.21	1.10
Increase in Debtors	2.63	0.57	0.49	0.50	0.26
Increase in Deposits & Adv	2.50	0.25	0.28	0.30	0.33
Repayment of Term Loan	-	4.16	4.16	4.16	4.16
Taxation	-	0.71	2.07	2.69	2.98
<b>TOTAL :</b>	<b>35.75</b>	<b>7.90</b>	<b>9.21</b>	<b>9.85</b>	<b>8.84</b>
Opening Cash & Bank Balance	-	5.70	8.81	13.49	20.32
Add : Surplus	5.70	3.11	4.68	6.83	8.33
Closing Cash & Bank Balance	<b>5.70</b>	<b>8.81</b>	<b>13.49</b>	<b>20.32</b>	<b>28.65</b>

**PROJECTED PROFITABILITY STATEMENT**

<b>PARTICULARS</b>	<b>IST YEAR</b>	<b>IIND YEAR</b>	<b>IIIRD YEAR</b>	<b>IVTH YEAR</b>	<b>VTH YEAR</b>
<b>A) SALES</b>					
Gross Sale	263.18	320.10	369.60	419.10	444.68
<b>Total (A)</b>	<b>263.18</b>	<b>320.10</b>	<b>369.60</b>	<b>419.10</b>	<b>444.68</b>
<b>B) COST OF SALES</b>					
Raw Mateiral Consumed	247.50	292.50	337.50	382.50	405.00
Electricity Expenses	0.83	0.98	1.13	1.28	1.35
Repair & Maintenance	-	3.20	3.70	4.19	4.45
Labour & Wages	6.07	6.68	7.35	8.08	8.89
Depriciation	2.72	2.34	1.99	1.70	1.44
<b>Cost of Production</b>	<b>257.12</b>	<b>305.70</b>	<b>351.66</b>	<b>397.75</b>	<b>421.13</b>
<b>Add: Opening Stock /WIP</b>	<b>-</b>	<b>6.35</b>	<b>7.51</b>	<b>8.66</b>	<b>9.82</b>
<b>Less: Closing Stock /WIP</b>	<b>6.35</b>	<b>7.51</b>	<b>8.66</b>	<b>9.82</b>	<b>10.40</b>
Cost of Sales (B)	250.77	304.54	350.51	396.59	420.56
<b>C) GROSS PROFIT (A-B)</b>	<b>12.40</b>	<b>15.56</b>	<b>19.09</b>	<b>22.51</b>	<b>24.12</b>
	<b>5%</b>	<b>5%</b>	<b>5%</b>	<b>5%</b>	<b>5%</b>
D) Bank Interest (Term Loan )	1.44	1.73	1.26	0.78	0.30
Bank Interest ( C.C. Limit )	0.59	0.59	0.59	0.59	0.59
E) Salary to Staff	2.64	2.90	3.19	3.51	3.87
F) Selling & Adm Expenses Exp.	2.63	3.20	3.70	4.19	4.45
<b>TOTAL (D+E)</b>	<b>7.29</b>	<b>8.43</b>	<b>8.73</b>	<b>9.07</b>	<b>9.20</b>
H) NET PROFIT	5.11	7.13	10.36	13.44	14.92
I) Taxation	-	0.71	2.07	2.69	2.98
J) PROFIT (After Tax)	5.11	6.42	8.29	10.75	11.94



**COMPUTATION OF SALE**

Particulars	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
Op Stock	-	2,750	3,250	3,750	4,250
Production	82,500	97,500	1,12,500	1,27,500	1,35,000
	82,500	1,00,250	1,15,750	1,31,250	1,39,250
Less : Closing Stock	2,750	3,250	3,750	4,250	4,500
Net Sale	79,750	97,000	1,12,000	1,27,000	1,34,750
Sale Price per MT	330.00	330.00	330.00	330.00	330.00
<b>Sale (in Lacs)</b>	<b>263.18</b>	<b>320.10</b>	<b>369.60</b>	<b>419.10</b>	<b>444.68</b>

**COMPUTATION OF ELECTRICITY**

<b>(A) POWER CONNECTION</b>				
Total Working Hour per day		Hours	8	
Electric Load Required			12	
Load Factor			0.7460	
Electricity Charges		per unit	7.00	
Total Working Days			300	
<b>Electricity Charges ( 8 Hrs Per day )</b>				1,50,393.60
Add : Minimim Charges (@ 10%)				
<b>(B) D.G. SET</b>				
No. of Working Days			300	days
No of Working Hours			-	Hour per day
Total no of Hour			-	
Diesel Consumption per Hour			8	
Total Consumption of Diesel			-	
Cost of Diesel			65.00	Rs. /Ltr
Total cost of Diesel			-	
Add : Lube Cost @15%			-	
Total			-	
Total cost of Power & Fuel at 100%				1.50
Year		Capacity		Amount
				(in Lacs)
IST YEAR		55%		0.83
IIND YEAR		65%		0.98
IIIRD YEAR		75%		1.13
IVTH YEAR		85%		1.28
VTH YEAR		90%		1.35

**COMPUTATION OF CLOSING STOCK & WORKING CAPITAL**

PARTICULARS	IST YEAR	IIND YEAR	IIIRD YEAR	IVTH YEAR	VTH YEAR
<b>Finished Goods</b>					
(10 Days requirement)	6.35	7.51	8.66	9.82	10.40
<b>Raw Material</b>					
(7 Days requirement)	5.78	6.83	7.88	8.93	9.45
<b>Closing Stock</b>	<b>12.13</b>	<b>14.33</b>	<b>16.54</b>	<b>18.74</b>	<b>19.85</b>

**COMPUTATION OF WORKING CAPITAL REQUIREMENT**

Particulars			Total
			Amount
Stock in Hand			12.13
Sundry Debtors			2.63
		Total	14.76
Sundry Creditors			8.25
Working Capital Requirement			<b>6.51</b>
Margin			0.65
Working Capital Finance			<b>5.86</b>

**BREAK UP OF LABOUR**

Particulars		Wages	No of	Total
		Per Month	Employees	Salary
Skilled Worker		8,000.00	2	16,000.00
Unskilled Worker		5,000.00	6	30,000.00
				46,000.00
Add: 10% Fringe Benefit				4,600.00
Total Labour Cost Per Month				50,600.00
Total Labour Cost for the year ( In Rs. Lakhs)				6.07

**BREAK UP OF SALARY**

Particulars		Salary	No of	Total
		Per Month	Employees	Salary
Manager		12,000.00	1	12,000.00
Accountant		8,000.00	1	8,000.00
Total Salary Per Month				20,000.00
Add: 10% Fringe Benefit				2,000.00
Total Salary for the month				22,000.00
Total Salary for the year ( In Rs. Lakhs)				2.64

**COMPUTATION OF DEPRECIATION**

Description	Land	Building/shed	Plant & Machinery	Furniture	TOTAL
Rate of Depreciation		10.00%	15.00%	10.00%	
<b>Opening Balance</b>	Leased	-	-	-	-
Addition	-	-	18.00	0.49	18.49
	-	-	18.00	0.49	18.49
Less : Depreciation	-	-	2.70	0.02	2.72
WDV at end of Ist year	-	-	15.30	0.47	15.77
Additions During The Year	-	-	-	-	-
	-	-	15.30	0.47	15.77
Less : Depreciation	-	-	2.30	0.05	2.34
WDV at end of IIInd Year	-	-	13.01	0.42	13.42
Additions During The Year	-	-	-	-	-
	-	-	13.01	0.42	13.42
Less : Depreciation	-	-	1.95	0.04	1.99
WDV at end of IIIrd year	-	-	11.05	0.38	11.43
Additions During The Year	-	-	-	-	-
	-	-	11.05	0.38	11.43
Less : Depreciation	-	-	1.66	0.04	1.70
WDV at end of IV year	-	-	9.40	0.34	9.74
Additions During The Year	-	-	-	-	-
	-	-	9.40	0.34	9.74
Less : Depreciation	-	-	1.41	0.03	1.44
WDV at end of Vth year	-	-	7.99	0.31	8.29

**REPAYMENT SCHEDULE OF TERM LOAN**

11.5%

Year	Particulars	Amount	Addition	Total	Interest	Repayment	CI Balance
<b>IST YEAR</b>	Opening Balance						
	Ist Quarter	-	16.64	16.64	-	-	16.64
	Iind Quarter	16.64	-	16.64	0.48	-	16.64
	IIIrd Quarter	16.64	-	16.64	0.48	-	16.64
	Ivth Quarter	16.64	-	16.64	0.48	-	16.64
					1.44	-	
<b>IIND YEAR</b>	Opening Balance						
	Ist Quarter	16.64	-	16.64	0.48	1.04	15.60
	Iind Quarter	15.60	-	15.60	0.45	1.04	14.56
	IIIrd Quarter	14.56	-	14.56	0.42	1.04	13.52
	Ivth Quarter	13.52	-	13.52	0.39	1.04	12.48
					1.73	4.16	
<b>IIIRD YEAR</b>	Opening Balance						
	Ist Quarter	12.48	-	12.48	0.36	1.04	11.44
	Iind Quarter	11.44	-	11.44	0.33	1.04	10.40
	IIIrd Quarter	10.40	-	10.40	0.30	1.04	9.36
	Ivth Quarter	9.36	-	9.36	0.27	1.04	8.32
					1.26	4.16	
<b>IVTH YEAR</b>	Opening Balance						
	Ist Quarter	8.32	-	8.32	0.24	1.04	7.28
	Iind Quarter	7.28	-	7.28	0.21	1.04	6.24
	IIIrd Quarter	6.24	-	6.24	0.18	1.04	5.20
	Ivth Quarter	5.20	-	5.20	0.15	1.04	4.16
					0.78	4.16	
<b>VTH YEAR</b>	Opening Balance						
	Ist Quarter	4.16	-	4.16	0.12	1.04	3.12
	Iind Quarter	3.12	-	3.12	0.09	1.04	2.08
	IIIrd Quarter	2.08	-	2.08	0.06	1.04	1.04
	Ivth Quarter	1.04	-	1.04	0.03	1.04	0.00
					0.30	4.16	

**CALCULATION OF D.S.C.R**

<b>PARTICULARS</b>	<b>IST YEAR</b>	<b>IIND YEAR</b>	<b>IIIRD YEAR</b>	<b>IVTH YEAR</b>	<b>VTH YEAR</b>
<b><u>CASH ACCRUALS</u></b>	7.84	8.76	10.28	12.45	13.38
Interest on Term Loan	1.44	1.73	1.26	0.78	0.30
Total	9.27	10.49	11.54	13.23	13.68
<b><u>REPAYMENT</u></b>					
Instalment of Term Loan	4.16	4.16	4.16	4.16	4.16
Interest on Term Loan	1.44	1.73	1.26	0.78	0.30
Total	5.60	5.89	5.42	4.94	4.46
<b>DEBT SERVICE COVERAGE RATIO</b>	<b>1.66</b>	<b>1.78</b>	<b>2.13</b>	<b>2.68</b>	<b>3.07</b>
<b>AVERAGE D.S.C.R.</b>			<b>2.26</b>		

## BREAK EVEN POINT ANALYSIS

Year	I	II	III	IV	V
<b>Net Sales &amp; Other Income</b>	263.18	320.10	369.60	419.10	444.68
Less : Op. WIP Goods	-	6.35	7.51	8.66	9.82
Add : Cl. WIP Goods	6.35	7.51	8.66	9.82	10.40
<b>Total Sales</b>	<b>269.53</b>	<b>321.26</b>	<b>370.76</b>	<b>420.26</b>	<b>445.25</b>
<b>Variable &amp; Semi Variable Exp.</b>					
Raw Material & Tax	247.50	292.50	337.50	382.50	405.00
Electricity Exp/Coal Consumption at 85%	0.70	0.83	0.96	1.09	1.15
Manufacturing Expenses 80%	-	2.56	2.96	3.35	3.56
Wages & Salary at 60%	5.23	5.75	6.32	6.96	7.65
Selling & administrative Expenses 80%	2.11	2.56	2.96	3.35	3.56
Intt. On Working Capital Loan	0.59	0.59	0.59	0.59	0.59
<b>Total Variable &amp; Semi Variable Exp</b>	<b>256.12</b>	<b>304.79</b>	<b>351.28</b>	<b>397.84</b>	<b>421.50</b>
<b>Contribution</b>	<b>13.41</b>	<b>16.47</b>	<b>19.47</b>	<b>22.42</b>	<b>23.75</b>
<b>Fixed &amp; Semi Fixed Expenses</b>					
Manufacturing Expenses 20%	0.00	0.64	0.74	0.84	0.89
Electricity Exp/Coal Consumption at 15%	0.12	0.15	0.17	0.19	0.20
Wages & Salary at 40%	3.48	3.83	4.22	4.64	5.10
Interest on Term Loan	1.44	1.73	1.26	0.78	0.30
Depreciation	2.72	2.34	1.99	1.70	1.44
Selling & administrative Expenses 20%	0.53	0.64	0.74	0.84	0.89
<b>Total Fixed Expenses</b>	<b>8.30</b>	<b>9.34</b>	<b>9.11</b>	<b>8.98</b>	<b>8.83</b>
<b>Capacity Utilization</b>	<b>55%</b>	<b>65%</b>	<b>75%</b>	<b>85%</b>	<b>90%</b>
<b>OPERATING PROFIT</b>	<b>5.11</b>	<b>7.13</b>	<b>10.36</b>	<b>13.44</b>	<b>14.92</b>
<b>BREAK EVEN POINT</b>	<b>34%</b>	<b>37%</b>	<b>35%</b>	<b>34%</b>	<b>33%</b>
<b>BREAK EVEN SALES</b>	<b>166.77</b>	<b>182.14</b>	<b>173.51</b>	<b>168.32</b>	<b>165.48</b>

## **DISCLAIMER**

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