

# PROJECT REPORT

Of

## SILK CARPET UNIT

### PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding Silk Carpet 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 : xxxxxxxxx
- 2 Constitution (legal Status) : xxxxxxxxx
- 3 Father / Spouse Name : xxxxxxxxx
- 4 Unit Address : xxxxxxxxxxxxxxxxxxxxxxxxx
- District : xxxxxx  
Pin: xxxxxxx State: xxxxxxxxx  
Mobile xxxxxxx
- 5 Product and By Product : **SILK CARPET**
- 6 Name of the project / business activity proposed : **SILK CARPET MANUFACTURING UNIT**
- 7 Cost of Project : Rs.9.89 Lakhs
- 8 Means of Finance  
Term Loan Rs.5.4 Lakhs  
Own Capital Rs.0.99 Lakhs  
Working Capital Rs.3.5 Lakhs
- 9 Debt Service Coverage Ratio : 2.76
- 10 Pay Back Period : 5 Years
- 11 Project Implementation Period : 5-6 Months
- 12 Break Even Point : 47%
- 13 Employment : 8 Persons
- 14 Power Requirement : 5.00 HP
- 15 Major Raw materials : Silk, Cotton,Dyes, Chemicals
- 16 Estimated Annual Sales Turnover (Max Capacity) : 67.95 Lakhs
- 17 Detailed Cost of Project & Means of Finance

**COST OF PROJECT**

(Rs. In Lakhs)

Particulars	Amount
Land	Own/Rented
Building /Shed 1500 Sq ft	5.00
Furniture & Fixtures	1.00
Working Capital	3.89
<b>Total</b>	<b>9.89</b>

**MEANS OF FINANCE**

Particulars	Amount
Own Contribution	0.99
Working Capital(Finance)	3.50
Term Loan	5.40
<b>Total</b>	<b>9.89</b>

## SILK CARPET UNIT



### **2. Introduction:**

Beautifying one's house has been an ancient tradition since ages; the rich do it with expensive materials while the lower income households too decorate their homes in their own creative ways.

Floor covering weaving keeps on being a wellspring of vocation for some craftsmans in India. The rug weaving industry in India, is exceptionally work serious and it shapes an extensive piece of the handloom business. It has been giving a gigantic lift to India's fare and has been contributing essentially to Indian economy. The business gives vocation to roughly 2.5 million craftsmans and procures huge unfamiliar trade for the country. Export

earnings from carpet industry have been increasing over the years especially from 1996 onwards and touching over USD 621 million during 2005-06. Presently, India exports carpets worth over Rupees 2600 crores.

Being so fragile, silk is infrequently utilized in rug yet it carries certain something to the best handcrafted mats, especially those from the Center East and Indian locales. Bhadohi - Mirzapur, structure the excellent rug producing territories lately. Hand hitched floor coverings can be made of fleece, cotton, silk, jute and other normal materials. Silk is at times utilized in fleece carpets for the layouts or features of the example to improve the plan. Hand hitched and hand woven mats can last numerous ages on the off chance that they are of acceptable quality and appropriately kept up. Additionally called Oriental carpets, hand tied and hand woven mats are regularly collectibles. The nature of these floor coverings relies upon various elements, for example, the bunch check, colors utilized and nature of the yarns. Hand tied carpets are normally more expensive, yet the life expectancy of these mats is more noteworthy and subsequently typically a superior incentive for your cash. It is normally handcrafted and hitched by hand and made of unadulterated fleece or silk while a bad quality fleece, silk and rayon might be a mixture. Silk rugs are typically woven with mulberry silk and its quality is checked which is done on numerous nautical bases. 600-900 ocean sorts of meat per inch show an extremely high caliber and solidness.

### **3. Market Potential:**

The carpet weaving had been started way long back in 16th century in Mughal era. In current scenario India is the largest producer and exporter of carpet in the world in term of both volume and value. Approximately 80 percent of carpet manufactured in India are exported. India is popular in

global market for its excellent design especially Persian design. India has pioneered as largest exporter of handmade carpets.

Known as the 'Carpet City', the Mirzapur-Bhadohi region is the largest handmade carpet-weaving cluster, engaging around 3.2 million people in the industry. A major part of arts and handicrafts, this profession continues to be very popular in the region of Uttar Pradesh, where the major centers of production are Bhadohi, Sonbhadra, Mirzapur & Japunpur. In 2010, the carpets of the UP region received the Geographical Indication (GI) tag, which means carpets manufactured in nine districts of the region, Bhadohi, Mirzapur, Varanasi, Ghazipur, Sonebhadra, Kaushambi, Allahabad, Jaunpur and Chandauli would be tagged with 'handmade carpet of Bhadohi'. The production of the Bhadohi carpets is aimed at exporting to foreign countries.

Notable rug types from Bhadohi incorporate cotton Dhurry/Dhurries, Chhapra Mir rugs, Loribaft, Indo Gabbeh yet additionally Nepalese rugs and later shaggy sort rugs. They are produced in different characteristics. The prominence of the Bhadohi floor coverings prompted the arrangement of the All India Rug Producers Affiliation (AICMA) in the year 1985 by assembling and fare firms for advancement of fares and treatment of purchasers who play with cost by providing cheaper estimate of contenders.

The homegrown market size is about Rs 200 crores. Numerous Industry players feel that Indian market will extend quickly dependent on current retail blast. Throughout the long term cover weaving focus has arisen across India. Each has its own particular intensity. These focuses utilize a large number of individuals.

## **4. Product Description:**

**4.1. Product Uses:** Made totally from silks, these rugs have appealed and caught the minds of man from days of yore. In most floor covering belts, assembling and weaving silk rugs is a privately-owned company where the insider facts and procedures are moved from one age to the accompanying ones. They are incredible for home style outfitting purposes.

### **4.2. Raw Material:**

- Silk: The significant crude material utilized for the floor covering making is the yarn which is made of fleece (wool).
- Cotton is likewise utilized for cover making..
- Yarn is either obtained from nearby turning factories or from Bikaner and Surat through dealers.
- Dyes and Chemicals: Dyes used for the dyeing of wool also forms one of the important raw materials.
- Chemicals used in chemical and mechanical finishing are supplied through dealers and distributors operating in the cluster.

Average raw material cost of Silk Carpet per sqft. will be Rs. 40-50  
(Approx.)

**4.3. Manufacturing Process:** These carpets are predominantly produced in the Bhadohi- Mirzapur regions of Uttar Pradesh. The process is quite laborious and involves a lot of time and different steps starting right from the cultivation of the silk or wool, treating and dyeing it, deciding the pattern, weaving and then adding the final touches.

Nakaash is the person who designs the carper, a kalimba is the weaver and the ranger is the person who dyes the carpet. In the making of the carpet, the

weaver follows the Talim chart which is a coded colour chart. The chart indicates the number of knots which has to be weaved according to the planned colours. The production follows these following steps:



- The silk to be used for carpet weaving goes through following process before designs on carpet are drawn. These are:
  - Washing and Drying of the yarn- The wool to be used for carpet weaving carries dust, grease which has to be removed and it is done by thoroughly washing and drying in the sun for 2-3 days.
  - Carding- It is a mechanical process that disentangles, cleans and intermixes fibres to produce a continuous web. It breaks up locks and unorganized clumps of fiber and then aligns the individual fibers to be parallel with each other. This process ensures that the fiber strands flow smoothly while spinning. This process is also used to blend different wools.
  - Spinning- The carded wool is spun on a Charkha or the spinning wheel to produce the yarn. The thickness of the yarn depends on the quality of the carpet and usually a 3 ply yarn is used.
  - Dyeing / Coloring- The dyeing of wool is a delicate process which varies according to the dyestuff used and the color desired. This process

is accomplished in hot chamber for even dyeing of wools. And then the wools are dried in open space under the sun.

- **Designing:** It's the first step toward a beautiful and elegant looking carpet. The designer is called nakshakar. The nakshakar expresses his imagination in a hard paper sheet or cloth piece. The weaver will follow the design to weave.
- **Wrapping:** Wrapping is orchestrating of the yarn so it runs the long way in weaving. Bent string is utilized for fine and careful weaves and jute is additionally utilized for more unpleasant examples. In twisting activity, all the twists for the floor covering weaving are brought to the thick iron bar and afterward moved to a slight steel bar. At that point it is collapsed and taken to the loom for mounting on the loom and the way toward weaving is completed.
- **Process of weaving:** Before starting the weaving process, a designer draws the design on a white paper and a graph is created. After that, weaver adjusts handloom according to the size of the carpet. Maximum three people work together in a single handloom. First, they bind the warp in cotton yarn, wool yarn, silk yarn horizontally on the handloom then begin to weave the carpet starting from all the way at the bottom in an upward direction towards the top. They make knots (combination of the vertical pile and horizontal pile) and bind together. After creating about ten wefts the weavers work fast. This is call weft. Weft means the upper part of carpet which is made of silk and wool.
- **Washing:** After the weaving process is completed the contractor takes the carpet back again measured in kilogram. Then the carpet is being washed thoroughly to wash out the dusts and extra cotton and wool micro-particles.



- Finishing and packaging: Then the carpet is further subjected to inspection for texture and color evenness of design. After they do some manual adjustment it proceeds for packing and shipping.

## **5. Project Components:**

**5.1. Land-** The industrial setup requires space for Inventory, workshop or manufacturing area, space for power supply utilities weaving, designing and finishing area. 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 small scale factory setup is 1500-2000Sq. ft. approximately.

**5.2. Civil Work-** Micro, small and medium enterprises are engaged in this work accounting for the total manufacturing units.

- Workshop Area- This area includes the machinery setup and foundation space for all equipments, work floor area, and designing, dyeing, weaving and finishing. Total workshop area is approx. 1200Sqft.
- Inventory Area- This area includes the storage space for all the raw materials, tooling and die storage space and finished goods. Total inventory area is approx. 300Sqft.
- Office Area – This space includes staff working region, their accommodation space, canteen area, medical facility etc. Total workshop area is approx. 300Sqft. This may be considered above the ground floor.
- Parking Space, Electricity Utensils Mounting Space, and Others. This could be approx. 200Sqft.

Land and building requirement may vary depending on the size of project. Civil work cost will be Rs 5 Lac (Approx.).

**5.3. Stores & Spares-** Carpets woven by hand on a structure called loom. Weaving of carpets is different in many aspects from the weaving of a fabric. Handmade carpet is a labor intensive unit with no machines and only wooden looms and loose tools are required in this unit. Average cost of Store & spares including hand tools will be Rs. 40000-45000 (Approx.)

- Carpet Loom- Loom is a wooden frame supporting the warp on which weaving of the carpet is done.



- Carpet Scraping- Carpet processing involves several steps, e.g., weaving (hand knotting), washing, drying, trimming, etc. In this section, focus is given on the carpet washing. The carpet woven on handloom is to be washed and trimmed an extra tuft length. This is traditionally done manually using wooden plank.



- Various types of hand tools like knife for cutting the yarn while tying the knots, a comb like tool for packing down the knots of weft while weaving, a

pair of shears for trimming the yarn, tufting machine which resembles a large scissor are required for the process of carpet making.

**5.4. Miscellaneous Assets-**

- ✓ Water Supply Arrangements
- ✓ Furniture
- ✓ Computers and Stationary

**5.5. Power Requirement-** The power requirement is estimated to be around 5 HP.

**5.6. Man Power Requirement-** Following manpower is required:

- Loom Operator-3
- Skilled/Unskilled Worker-3
- Helper-2

**6.**

**FINANCIAL  
ASPECTS**

**PROJECTED BALANCE SHEET**

PARTICULARS	I	II	III	IV	V
<b>SOURCES OF FUND</b>					
<b>Capital Account</b>					
Opening Balance	-	2.17	3.46	5.04	6.63
Add: Additions	0.99	-	-	-	-
Add: Net Profit	1.28	2.29	3.08	4.08	4.68
Less: Drawings	0.10	1.00	1.50	2.50	3.00
<b>Closing Balance</b>	<b>2.17</b>	<b>3.46</b>	<b>5.04</b>	<b>6.63</b>	<b>8.31</b>
CC Limit	3.50	3.50	3.50	3.50	3.50
Term Loan	4.80	3.60	2.40	1.20	-
Sundry Creditors	1.51	1.68	1.85	2.03	2.21
<b>TOTAL :</b>	<b>11.98</b>	<b>12.24</b>	<b>12.79</b>	<b>13.35</b>	<b>14.02</b>
<b>APPLICATION OF FUND</b>					
<b>Fixed Assets ( Gross)</b>	<b>6.00</b>	<b>6.00</b>	<b>6.00</b>	<b>6.00</b>	<b>6.00</b>
Gross Dep.	0.60	1.14	1.63	2.06	2.46
Net Fixed Assets	5.40	4.86	4.37	3.94	3.54
<b>Current Assets</b>					
Sundry Debtors	2.15	2.53	2.80	3.09	3.40
Stock in Hand	3.28	3.65	4.05	4.46	4.88
Cash and Bank	1.15	1.20	1.57	1.87	2.20
<b>TOTAL :</b>	<b>11.98</b>	<b>12.24</b>	<b>12.79</b>	<b>13.35</b>	<b>14.02</b>
	-	-	-	-	-

<b>PROJECTED PROFITABILITY STATEMENT</b>					
<b>PARTICULARS</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>
<b><u>A) SALES</u></b>					
Gross Sale	43.09	50.51	56.08	61.89	67.95
<b>Total (A)</b>	<b>43.09</b>	<b>50.51</b>	<b>56.08</b>	<b>61.89</b>	<b>67.95</b>
<b><u>B) COST OF SALES</u></b>					
Raw Material Consumed	30.24	33.54	36.96	40.50	44.16
Electricity Expenses	0.67	0.73	0.78	0.84	0.90
Stores & Spares	0.40	0.44	0.46	0.49	0.51
Labour & Wages	10.33	11.37	12.73	14.00	15.26
Depreciation	0.60	0.54	0.49	0.44	0.39
<b>Cost of Production</b>	<b>42.24</b>	<b>46.61</b>	<b>51.42</b>	<b>56.26</b>	<b>61.22</b>
<b>Add: Opening Stock /WIP</b>	<b>-</b>	<b>2.27</b>	<b>2.54</b>	<b>2.81</b>	<b>3.11</b>
<b>Less: Closing Stock /WIP</b>	<b>2.27</b>	<b>2.54</b>	<b>2.81</b>	<b>3.11</b>	<b>3.41</b>
<b>Cost of Sales (B)</b>	<b>39.98</b>	<b>46.35</b>	<b>51.14</b>	<b>55.97</b>	<b>60.92</b>
<b>C) GROSS PROFIT (A-B)</b>	<b>3.12</b>	<b>4.16</b>	<b>4.94</b>	<b>5.92</b>	<b>7.03</b>
	<b>7.23%</b>	<b>8.24%</b>	<b>8.80%</b>	<b>9.57%</b>	<b>10.35%</b>
D) Bank Interest i) (Term Loan )	0.59	0.48	0.35	0.21	0.08
ii) Interest On Working Capital	0.39	0.39	0.39	0.39	0.39
F) Selling & Adm Expenses Exp.	0.86	1.01	1.12	1.24	1.36
<b>TOTAL (D+E)</b>	<b>1.83</b>	<b>1.87</b>	<b>1.85</b>	<b>1.84</b>	<b>1.83</b>
<b>H) NET PROFIT</b>	<b>1.28</b>	<b>2.29</b>	<b>3.08</b>	<b>4.08</b>	<b>5.20</b>
	<b>3.0%</b>	<b>4.5%</b>	<b>5.5%</b>	<b>6.6%</b>	<b>7.7%</b>
I) Taxation	-	-	-	-	0.52
<b>J) PROFIT (After Tax)</b>	<b>1.28</b>	<b>2.29</b>	<b>3.08</b>	<b>4.08</b>	<b>4.68</b>

**PROJECTED CASH FLOW STATEMENT**

PARTICULARS	I	II	III	IV	V
<b>SOURCES OF FUND</b>					
Own Contribution	0.99	-			
Reserve & Surplus	1.28	2.29	3.08	4.08	5.20
Depriciation & Exp. W/off	0.60	0.54	0.49	0.44	0.39
Increase In Cash Credit	3.50				
Increase In Term Loan	5.40	-	-	-	-
Increase in Creditors	1.51	0.17	0.17	0.18	0.18
<b>TOTAL :</b>	<b>13.28</b>	<b>2.99</b>	<b>3.74</b>	<b>4.70</b>	<b>5.78</b>
<b>APPLICATION OF FUND</b>					
Increase in Fixed Assets	6.00	-	-	-	-
Increase in Stock	3.28	0.38	0.39	0.41	0.43
Increase in Debtors	2.15	0.37	0.28	0.29	0.30
Repayment of Term Loan	0.60	1.20	1.20	1.20	1.20
Taxation	-	-	-	-	0.52
Drawings	0.10	1.00	1.50	2.50	3.00
<b>TOTAL :</b>	<b>12.13</b>	<b>2.95</b>	<b>3.37</b>	<b>4.40</b>	<b>5.45</b>
Opening Cash & Bank Balance	-	1.15	1.20	1.57	1.87
Add : Surplus	1.15	0.04	0.37	0.30	0.33
Closing Cash & Bank Balance	<b>1.15</b>	<b>1.20</b>	<b>1.57</b>	<b>1.87</b>	<b>2.20</b>

REPAYMENT SCHEDULE OF TERM LOAN							11.0%
Year	Particulars	Amount	Addition	Total	Interest	Repayment	CI Balance
I	Opening Balance						
	Ist Quarter	-	5.40	5.40	0.15	-	5.40
	IInd Quarter	5.40	-	5.40	0.15	-	5.40
	IIIRD Quarter	5.40	-	5.40	0.15	0.30	5.10
	Ivth Quarter	5.10	-	5.10	0.14	0.30	4.80
					0.59	0.60	
II	Opening Balance						
	Ist Quarter	4.80	-	4.80	0.13	0.30	4.50
	IInd Quarter	4.50	-	4.50	0.12	0.30	4.20
	IIIRD Quarter	4.20	-	4.20	0.12	0.30	3.90
	Ivth Quarter	3.90	-	3.90	0.11	0.30	3.60
					0.48	1.20	
III	Opening Balance						
	Ist Quarter	3.60	-	3.60	0.10	0.30	3.30
	IInd Quarter	3.30	-	3.30	0.09	0.30	3.00
	IIIRD Quarter	3.00	-	3.00	0.08	0.30	2.70
	Ivth Quarter	2.70	-	2.70	0.07	0.30	2.40
					0.35	1.20	
IV	Opening Balance						
	Ist Quarter	2.40	-	2.40	0.07	0.30	2.10
	IInd Quarter	2.10	-	2.10	0.06	0.30	1.80
	IIIRD Quarter	1.80	-	1.80	0.05	0.30	1.50
	Ivth Quarter	1.50	-	1.50	0.04	0.30	1.20
					0.21	1.20	
V	Opening Balance						
	Ist Quarter	1.20	-	1.20	0.03	0.30	0.90
	IInd Quarter	0.90	-	0.90	0.02	0.30	0.60
	IIIRD Quarter	0.60	-	0.60	0.02	0.30	0.30
	Ivth Quarter	0.30	-	0.30	0.01	0.30	0.00
					0.08	1.20	

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



**COMPUTATION OF CLOSING STOCK & WORKING CAPITAL**

PARTICULARS	I	II	III	IV	V
<b>Finished Goods</b>					
(15 Days requirement)	2.27	2.54	2.81	3.11	3.41
<b>Raw Material</b>					
(10 Days requirement)	1.01	1.12	1.23	1.35	1.47
<b>Closing Stock</b>	<b>3.28</b>	<b>3.65</b>	<b>4.05</b>	<b>4.46</b>	<b>4.88</b>

**COMPUTATION OF WORKING CAPITAL REQUIREMENT**

Particulars	Amount	Margin(10%)	Net Amount
Stock in Hand	3.28		
Less:			
Sundry Creditors	1.51		
<b>Paid Stock</b>	<b>1.76</b>	<b>0.18</b>	<b>1.59</b>
Sundry Debtors	2.15	0.22	1.94
<b>Working Capital Requirement</b>			<b>3.53</b>
<b>Margin</b>			0.39
<b>MPBF</b>			<b>3.53</b>
<b>Working Capital Demand</b>			<b>3.50</b>

CALCULATION OF D.S.C.R

PARTICULARS	I	II	III	IV	V
<u>CASH ACCRUALS</u>	1.88	2.83	3.57	4.52	5.08
Interest on Term Loan	0.59	0.48	0.35	0.21	0.08
Total	2.47	3.30	3.92	4.73	5.16
<u>REPAYMENT</u>					
Repayment of Term Loan	0.60	1.20	1.20	1.20	1.20
Interest on Term Loan	0.59	0.48	0.35	0.21	0.08
Total	1.19	1.68	1.55	1.41	1.28
<b>DEBT SERVICE COVERAGE RATIO</b>	<b>2.08</b>	<b>1.97</b>	<b>2.53</b>	<b>3.35</b>	<b>4.02</b>
<b>AVERAGE D.S.C.R.</b>			<b>2.76</b>		

**Assumptions:**

1. Production Capacity of a Silk Carpet unit is taken at 400 Sq Ft per day. First year, Capacity has been taken @ 60%.
2. Working shift of 10 hours per day has been considered.
3. Raw Material stock and Finished goods closing stock has been taken for 15-15 days.
4. Credit period to Sundry Debtors has been given for 15 days.
5. Credit period by the Sundry Creditors has been provided for 15 days.
6. Depreciation and Income tax has been taken as per the Income tax Act,1961.
7. Interest on working Capital Loan and Term loan has been taken at 11%.
8. Salary and wages rates are taken as per the Current Market Scenario.
9. Power Consumption has been taken at 5 HP.
10. Selling Prices & Raw material costing has been increased by 3% & 3% respectively in the subsequent years.

## **DISCLAIMER**

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