

Pre-Feasibility Study

(Furniture Manufacturing Unit - Wooden)



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1. DISCLAIMER

This information memorandum is to introduce the subject matter and provide a general idea and information on the subject. Although, the material included in this document is based on data / information gathered from various reliable sources; however, it is based upon certain assumptions which may differ from case to case. The information has been provided on 'as is where is' basis without any warranties or assertions as to the correctness or soundness thereof. Although, due care and diligence has been taken to compile this document, the contained information may vary due to any change in any of the concerned factors, and the actual results may differ substantially from the presented information. SMEDA, its employees or agents do not assume any liability for any financial or other loss resulting from this memorandum in consequence of undertaking this activity. The contained information does not preclude any further professional advice. The prospective user of this memorandum is encouraged to carry out additional diligence and gather any information which is necessary for making an informed decision, including taking professional advice from a qualified consultant / technical expert before taking any decision to act upon the information.

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The logo for SMEDA, consisting of the letters S, M, E, D, and A in a large, white, serif font, set against a dark blue rectangular background. The logo is positioned at the bottom center of the page, below a decorative graphic of a light blue curved line and a grid of small blue squares.

2. PURPOSE OF THE DOCUMENT

The objective of the pre-feasibility study is primarily to facilitate potential entrepreneurs in project identification for investment. The project pre-feasibility may form the basis of an important investment decision and in order to serve this objective, the document / study covers various aspects of project concept development, start-up, production, marketing, finance and business management.

The purpose of this document is to facilitate potential investors in establishing **Wooden Furniture Manufacturing Unit** by providing them with a general understanding of the business with the intention of supporting potential investors in crucial investment decisions.

The need to come up with pre-feasibility reports for undocumented or minimally documented sectors attains greater importance, as the research that precedes such reports reveal certain thumb rules; best practices developed by existing enterprises by trial and error, and certain industrial norms that become a guiding source regarding various aspects of business set-up and its successful management.

Apart from carefully studying the whole document one must consider critical aspects provided later on, which form basis of any investment decision.

3. INTRODUCTION TO SMEDA

The Small and Medium Enterprises Development Authority (SMEDA) was established in October 1998 with an objective to provide fresh impetus to the economy through development of Small and Medium Enterprises (SMEs).

With a mission "to assist in employment generation and value addition to the national income, through development of the SME sector, by helping increase the number, scale and competitiveness of SMEs", SMEDA has carried out 'sectoral research' to identify policy, access to finance, business development services, strategic initiatives, institutional collaboration and networking initiatives.

Preparation and dissemination of pre-feasibility studies in key areas of investment has been a hallmark of SME facilitation by SMEDA.

Concurrent to the pre-feasibility studies, a broad spectrum of business development services is also offered to SMEs by SMEDA. These services include identification of experts and consultants and delivery of need based capacity building programs of different types in addition to business guidance through help desk services.

4. INTRODUCTION TO SCHEME

Prime Minister's Youth Business Loan' scheme, for young entrepreneurs, with an allocated budget of Rs. 5.0 Billion for the year 2013-14, is designed to provide subsidised financing at 8% mark-up per annum for one hundred thousand (100,000) beneficiaries, through designated financial institutions, initially by the National Bank of Pakistan (NBP) and the First Women Bank Ltd. (FWBL).

Loans from Rs. 0.1 million to Rs. 2.0 million with tenure up to 8 years inclusive of 1 year grace period, and a debt : equity of 90 : 10 will be disbursed to SME beneficiaries across Pakistan, covering; Punjab, Sindh, Khyber Pakhtunkhwa, Balochistan, Gilgit Baltistan, Azad Jammu & Kashmir and Federally Administered Tribal Areas (FATA).

5. EXECUTIVE SUMMARY

The proposed project is for setting up a **Wooden Furniture Manufacturing** Unit. This unit will be capable of integrated wooden furniture manufacturing from sourcing and cutting of wood, to retailing of product to the end customer.

The project will cater to the growing needs of domestic wooden furniture market. The housing and construction industry has seen a steady growth over the last many years due to a number of factors. These include; development of new housing schemes, introduction of housing finance schemes / loans by different banks, increased urbanization, a growing middle class and enhanced purchasing power of the public. All these factors have contributed directly and indirectly towards an increased demand for wooden furniture.

The wooden furniture business venture entails a total investment of about Rs. 2.20 million. This includes a capital investment of Rs. 1.10 million and a sum of Rs. 1.10 million as initial working capital. The project is financed through 90% debt and 10% equity. The Net Present Value (NPV) of the project is around Rs. 25.27 million with an Internal Rate of Return (IRR) of 59% and a payback period of 3.08 years. Higher returns on investment and a steady growth of business is expected if the entrepreneur has some prior experience / education in the related field of business. The project will generate direct employment opportunity for 21 persons.

6. BRIEF DESCRIPTION OF PROJECT & PRODUCT

This unit is capable of producing different types of wooden furniture i.e. bed sets, dining sets, sofa sets, centre tables, tables for sofa set and office furniture.

The entire finished product depends on the quality of wood. Detailed technical know-how about the quality of wood and the use of seasoned / dry wood plays a vital role in the manufacturing of quality furniture. It is recommended that dry wood, from forests is used for manufacturing quality wooden furniture. Forest reserves like Changa Manga, Pakhowal, Kundian, Chicha watni, Bahawalpur and other forests are potential sources of quality wood. Furniture manufacturing units in Pakistan mostly use Sheesham wood. Other types of woods used in manufacturing furniture are; Teak wood, Walnut wood and Keekar wood. Besides this, substitute material like Lasani and Vinboard are also used in the manufacturing of furniture. Other materials used in furniture manufacturing process are nails, screws, glue / solution, spirit, lakh, thinner, lacquer, sealer, hardener etc. These raw materials are easily available in the market.

The demand for wooden furniture in the domestic market is consistent throughout the year; however, it significantly increases during the period of October to March due to 'wedding season'. The demand for furniture almost doubles during this period and is a good time to enter the market. Since strong competition already exists in the domestic market, manufacturing of high quality trendy designs and aggressive marketing is essential to get a prominent place in the market. Despite the introduction of new / alternative materials in furniture manufacturing, wooden furniture is still preferred in the domestic as well as in the international market due to its traditional appeal and durability. Over the years, entry into the global market has also become more competitive, due to demanding factors like green furniture, multi-functionality, simplicity and neutral colors, Ready-to-assemble (RTA) and Do-it-yourself (DIY) furniture. Malaysia, Philippines, Indonesia and China have established strong brand names and have emerged as key market players.

7. CRITICAL FACTORS

- Ensuring availability of seasoned (dry) wood for high quality furniture manufacturing. Seasoned wood minimizes deforming that may occur due to dampness in wood.
- Selection of skilled labor is an important factor, as it can improve quality of finished products by better craftsmanship & lower wastage. It is recommended that specialized labor is hired for this business.

- New designs and styles can build brand equity for the business. Creation of new designs and styles is vital for setting new trends as the market is quite competitive.
- Aggressive virtual marketing needs to be undertaken in the absence of a physical showroom.
- Though skilled labor is available in the market, additional manufacturing workload can be sub-contracted to save time and resources.
- The manufacturing unit will require selling directly to showrooms and direct clients, for which the owner would need to develop extensive knowledge of the market.
- Higher return on investment and a steady growth of business is expected with the entrepreneur having some prior experience / education in the related field of business.
- Easy access to raw material should be ensured.

8. INSTALLED & OPERATIONAL CAPACITY

The proposed project is capable of manufacturing complete range of wooden furniture and other allied products to meet the demand of domestic market. The Unit will work on 8 hours shift for 300 days. Total number of furniture items produced in year 1 would be 202 i.e. 60% of total production capacity.

9. GEOGRAPHICAL POTENTIAL FOR INVESTMENT

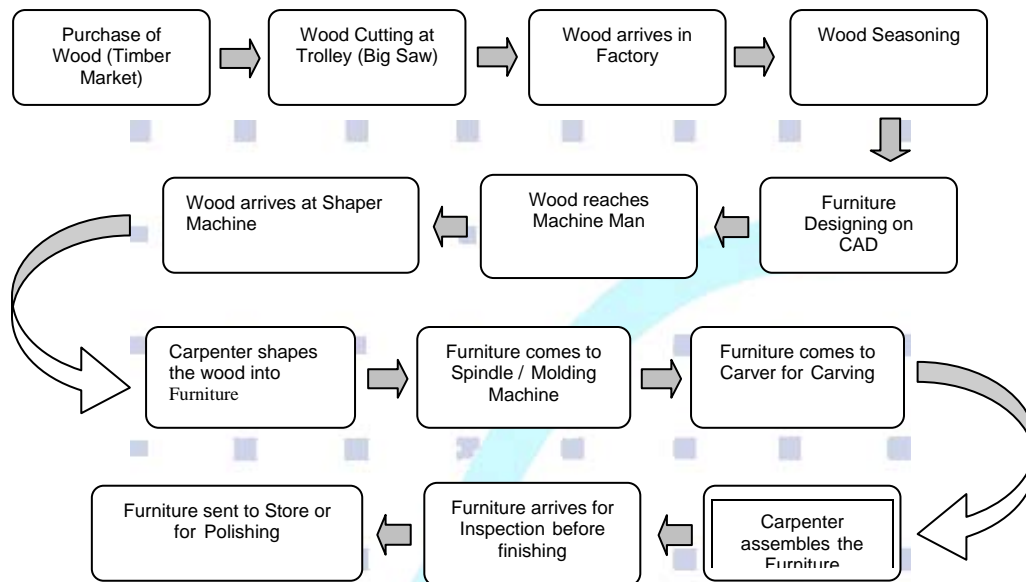
The demand for wooden furniture is higher in densely populated cities of Pakistan i.e. Lahore, Multan, Karachi, Peshawar, Quetta, Rawalpindi and Islamabad, making all these cities viable for business. However, establishment of the unit in the vicinity of established wooden furniture clusters i.e. Lahore, Chiniot or Gujrat gives the added advantage of easy availability of skilled labor.

10. POTENTIAL TARGET MARKETS

Potential markets for wooden furniture can be categorized into the following; newly constructed house, gift on weddings, for renovations, institutional buyers (public & private sector), etc. Majority of customers in the domestic market belong to first and second category. These customers require furniture for their newly built houses and usually buy a range of products like bed sets, dining sets and sofa sets with other decorative material for their entire house. Initially, entrepreneurs should target these customers to establish the business and

increase their customer base. Flourishing hotel and tourism industry can considerably increase the demand for wooden furniture whereby, large orders can also be secured to supply wooden furniture to hotels and resorts. Wooden furniture retail clusters are found in most areas of all big cities of Pakistan, where manufactured furniture can be sold.

11. PRODUCTION PROCESS FLOW



12. PROJECT COST SUMMARY

A detailed financial model has been developed to analyze the commercial viability of Wooden Furniture Manufacturing Unit. Various costs and revenue related assumptions along with results of the analysis are outlined in this section.

The projected Income Statement, Cash Flow Statement and Balance Sheet are attached as annexure.

12.1 Project Economics

The unit is capable of producing different types of wooden furniture, as it builds predominantly upon, craftsmanship of skilled labor. However, this particular pre-feasibility focuses on manufacturing of bed sets, dining sets, sofa sets, office furniture and miscellaneous furniture (centre table & tables for sofa set etc.).

Details of proposed production mix offered by the business is provided in the table below:

Table 1 - Proposed Production Mix

Description	Percentage
Bed Set	40%

Dinning Set	10%
Sofa Set	25%
Misc. Furniture	15%
Office Furniture	10%
Total	100%

Table 2 - Proposed Production Mix Details

	Bed Set	Dinning Set	Sofa Set	Misc. Furniture	Office Furniture
Superior	20%	20%	20%	20%	20%
Fine	30%	30%	30%	30%	30%
Normal	50%	50%	50%	50%	50%
Total	100%	100%	100%	100%	100%

The following table shows internal rate of return, payback period and net present value:

Table 3 - Project Economics

Description	Details
Internal Rate of Return (IRR)	59%
Payback Period (Yrs)	3.08
Net Present Value (NPV)	Rs. 25,274,301

Returns on investment and profitability depend upon the entrepreneur's practical knowledge about furniture manufacturing, quality of wood, skilled labor and design & style of furniture manufactured.

12.2 Project Financing

Following table provides details of the equity required and variables related to bank loan:

Table 4 - Project Financing

Description	Details
Total Equity (10%)	Rs. 219,677
Bank Loan (90%.)	Rs. 1,977,097
Markup to the Borrower (%age/annum)	8%
Tenure of the Loan (Years)	8
Grace Period (Year)	1

12.3 Project Cost

Following requirements have been identified for operations of the proposed business:

Table 5 - Capital Investment for the Project

Capital Investment	Amount (Rs.)
Furniture & Fixtures	69,000
Machinery & Equipment	827,000
Office Equipment	168,000
Pre-operating Cost	35,829
Total Capital Cost	1,099,829
Initial Working Capital	1,096,945
Total Project Cost	2,196,774

12.4 Space Requirement

2 kanals (with covered area of 7,200 sq. ft) land is sufficient for setting up the proposed wooden furniture manufacturing unit. The land would be acquired on lease, preferably in the outskirts of the city. Covered area details of the manufacturing unit are as follows:

Table 6 - Factory (Covered Area)

Description	Area (Sq. ft)
Factory Main Hall	2,000
Carving Room	750
Polish Room	1,000
Store for un-finished products	1,000
Store for finished product	1,500
Office for factory admin officer & CAD operator	300
Rooms for Labor	500
Kitchen & Washrooms	150
Total	7,200

It is recommended to set-up the proposed business on rental premises at a cost of approximately Rs. 50,000 per month, hence, total rent of set-up unit during year 1 would be approximately Rs. 600,000.

12.5 Machinery & Equipment

Machinery & equipment required for Wooden Furniture Manufacturing unit can be easily purchased locally. Following table provides list of machinery required for the factory:

Table 7 – Factory Machinery Details

Machinery Description	Unit	Unit Price	Total Cost
Saw 18"	1	42,000	42,000
Saw 27"	1	70,000	70,000
Saw 30"	1	80,000	80,000
Cutter sliding	1	20,000	20,000
Cutter round	1	15,000	15,000
Gauge 14"	1	60,000	60,000
Gauge 18"	1	110,000	110,000
Planer / Shaper 12"	2	70,000	140,000
Spindle Moulder Machine	2	50,000	100,000
Chapaka	2	15,000	30,000
Hand Chapaka (jug saw)	2	15,000	30,000
Grinder	2	6,500	13,000
Drill machine	10	3,500	35,000
Compressor	2	16,000	32,000
Miscellaneous Tools (Hand Tools, Paint Gun etc.)	1	20,000	20,000
Installation costs for machines	1	30,000	30,000
Total Machinery and Equipment			827,000

12.6 Machine Maintenance

Technically advanced machines are not required in the manufacturing process. Therefore, machine maintenance cost is also expected to be on the lower side. The major maintenance cost will be of oiling and greasing of machines.

12.7 Furniture

Following furniture will be required at the factory:

Table 8 – Furniture Costs

Description	Unit	Cost/Unit (Rs)	Total Cost (Rs)
Office Table Set for CAD Operator	1	10,000	10,000
Visitors Chairs	4	3,500	14,000
Table & Chair set for admin., store & production	3	12,000	36,000

Fire Extinguishers	2	4,500	9,000
Total Furniture & Fixtures			69,000

12.8 Office Equipment

Details of office equipment are as follows:

Table 9 – Office Equipment Costs

Description	Unit	Cost/Unit (Rs)	Total Cost (Rs)
Computer with LCD	1	40,000	40,000
Printer	1	15,000	15,000
UPS 1.5 KW	1	30,000	30,000
Telephone Sets	2	1,500	3,000
Fax Machine	1	10,000	10,000
Generator 6 KVA	1	70,000	70,000
Total Office Equipment			168,000



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12.9 Raw Material Requirements

As different variety of material is used for the manufacturing of each type of furniture; following tables shows the raw material requirement for each type of furniture:

Table 10 – Bed Set Cost

<i>Costing Bed Set Superior Quality</i>				<i>Costing Bed Set Fine Quality</i>				<i>Costing Bed Set Normal Quality</i>			
<i>Raw Material Cost</i>				<i>Raw Material Cost</i>				<i>Raw Material Cost</i>			
Description	No. of Unit	Rate / Unit	Total Amount	Description	No. of Unit	Rate / Unit	Total Amount	Description	No. of Unit	Rate / Unit	Total Amount
Wood (Cubic ft)	15	2,000	30,000	Wood (Cubic ft)	12	1,500	18,000	Wood (Cubic ft)	3	1,500	4,500
Nails/Screws	1	350	350	Nails/Screws	1	350	350	Lasani	5	2,250	11,250
Glue/Solution	1	300	300	Glue/Solution	1	300	300	Nails/Screws	1	350	350
Spirit (in Ltr.)	20	60	1,200	Spirit (in Ltr.)	15	60	900	Glue/Solution	1	300	300
Lakh (in kgs)	1.5	350	525	Lakh (in kgs)	1	350	350	Paint (in Ltr.)	1	1,500	1,500
Thinner (in Ltr.)	8	120	960	Thinner (in Ltr.)	4	120	480	Thinner (in Ltr.)	10	120	1,200
Lacquer (in Ltr.)	2	300	600	Lacquer (in Ltr.)	2	300	600	Lacquer (in Ltr.)	1	300	300
Wooden Frame for Mattress	1	5,000	5,000	Sealer (in Ltr.)	2	285	570	Wooden Frame for Mattress	1	4,000	4,000
Sealer (in Ltr.)	3	285	855	Wooden Frame for Mattress	1	4,000	4,000	Dressing Set Glass	16	150	2,400
Dressing Set Glass	16	200	3,200	Dressing Set Glass	16	200	3,200	Tapestry Dressing St. (in Meters)	0.5	250	125
Tapestry Dressing St. (in Meters)	0.5	250	125	Tapestry Dressing St. (in Meters)	0.5	250	125	Foam	1	150	150
Foam	1	150	150	Foam	1	150	150	COB (alternate for Hardner)	1	450	450
Channels, Handles	1	2,500	2,500	Channels, Handles	1	2,000	2,000	Thinner (Butyl)	1	160	160
Thinner (Butyl)	1	160	160	Thinner (Butyl)	1	160	160	Thinner (imported)	1	240	240
Thinner (imported)	1	240	240	Thinner (imported)	1	240	240	Channels, Handles	1	2,000	2,000
Total			46,165	Total			31,425	Total			28,925

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Table 11 – Dining Set Cost

Costing Dining Set Superior Quality				Costing Dining Set Fine Quality				Costing Dining Set Normal Quality			
<i>Raw Material Cost</i>				<i>Raw Material Cost</i>				<i>Raw Material Cost</i>			
Description	No. of Unit	Rate / Unit	Total Amount	Description	No. of Unit	Rate / Unit	Total Amount	Description	No. of Unit	Rate / Unit	Total Amount
Wood (Cubic ft)	8	2,000	16,000	Wood (Cubic ft)	8	1,500	12,000	Wood (Cubic ft)	4	1,500	6,000
Poshish/Seat	8	375	3,000	Poshish/seat	8	375	3,000	Poshish/seat	8	250	2,000
Nails/Screws	1	400	400	Nails/Screws	1	400	400	Nails/Screws	1	400	400
Glue/Solution	1	400	400	Glue/Solution	1	400	400	Glue/Solution	1	400	400
Spirit (in Ltrs.)	18	60	1,080	COB	1	450	450	COB	1	450	450
Lakh (in Kgs)	2	350	700	Paint	1	2,000	2,000	Lasani	1	2,200	2,200
Thinner (in Ltrs.)	8	120	960	Thinner (in Ltrs.)	15	120	1,800	Paint	1	2,000	2,000
Lacquer (in Ltrs.)	2	300	600	Lacquer	2	300	600	Thinner (in Ltrs.)	10	120	1,200
Sealer (in Ltrs.)	2	285	570	Glass Top 12mm in (Sq.ft)	32	200	6,400	Lacquer	2	300	600
Glass Top (12 mm) in sq.ft	32	200	6,400	Foam	1	1,500	1,500	Glass Top 12mm in (Sq.ft)	32	155	4,960
Foam	1	2,000	2,000	Tapestry (in Meters)	3	250	750	Foam	1	1,200	1,200
Tapestry (in Meters)	5	250	1,250	Misc.	1	1,000	1,000	Tapestry (in Meters)	3	250	750
Misc.	1	1,000	1,000					Misc.	1	1,000	1,000
Total			34,360	Total			30,300	Total			23,160

Table 12 – Sofa Set Cost

Costing Sofa Set Superior Quality				Costing Sofa Set Fine Quality				Costing Sofa Set Normal Quality			
<i>Raw Material Cost</i>				<i>Raw Material Cost</i>				<i>Raw Material Cost</i>			
Description	No. of Unit	Rate / Unit	Total Amount	Description	No. of Unit	Rate / Unit	Total Amount	Description	No. of Unit	Rate / Unit	Total Amount
Wood (Cubic ft)	6	700	4,200	Wood (Cubic ft)	6	700	4,200	Wood (Cubic ft)	6	700	4,200
Poshish/per seat	6	1,200	7,200	Poshish/Seat	6	1,200	7,200	Poshish/Seat	6	1,200	7,200
Nails/Screws	1	200	200	Nails/Screws	1	200	200	Nails/Screws	1	200	200
Glue/Solution	1	300	300	Glue/Solution	1	300	300	Glue/Solution	1	300	300
Springs (Dozs)	7	200	1,400	Spring (Doz)	7	200	1,400	Spring (Doz)	7	200	1,400
Tat (in Meters)	10	75	750	Tat (in Meters)	10	75	750	Tat (in Meters)	10	75	750
Rubber Pati	25	22	550	Rubber Patti	25	22	550	Rubber Patti	22	22	484
Dori (in Kgs)	0.5	180	90	Dori (in Kgs)	0.5	180	90	Dori (in Kgs)	0.5	180	90
Foam "A"	1	3,500	3,500	Foam	1	3,000	3,000	Foam	1	3,000	3,000
Tapestry (in Meters)	30	400	12,000	Tapestry	25	250	6,250	Tapestry (in Meters)	20	200	4,000
Total			30,190	Total			23,940	Total			21,624

Table 13 – Misc. Furniture Cost

Costing Misc. Furniture Superior Quality				Costing Misc. Furniture Fine Quality				Costing Misc. Furniture Normal Quality			
Raw Material Cost				Raw Material Cost				Raw Material Cost			
Description	No. of Unit	Rate / Unit	Total Amount	Description	No. of Unit	Rate / Unit	Total Amount	Description	No. of Unit	Rate / Unit	Total Amount
Wood (Cubic ft)	6	2,000	12,000	Wood (Cubic ft)	6	1,500	9,000	Wood (Cubic ft)	3	1,500	4,500
Nails/Screws	1	200	200	Nails/Screws	1	200	200	Nails/Screws	1	200	200
Glue/Solution	1	300	300	Glue/Solution	1	300	300	Glue/Solution	1	300	300
Spirit (in Ltrs.)	8	60	480	COB	1	450	450	COB	1	450	450
Lakh (in Kgs)	1	350	350	Paint	1	2,000	2,000	Lasani	1	2,200	2,200
Thinner (in Ltrs.)	3	120	360	Thinner (in Ltrs.)	8	120	960	Paint	1	1,800	1,800
Lacquer (in Ltrs.)	1	300	300	Lacquer	1	300	300	Thinner (in Ltrs.)	8	300	2,400
Sealer (in Ltrs.)	1	185	185	Glass Top 12mm in (Sq.ft)	17	200	3,400	Lacquer (in Ltrs.)	1	200	200
Glass Top (12 mm) in sq.ft	17	200	3,400	Misc.	1	750	750	Glass Top 12mm in (Sq.ft)	17	200	3,400
Misc.	1	750	750					Misc.	1	750	750
Total			18,325	Total			17,360	Total			16,200

Table 14 – Office Furniture Cost

Costing Office Furniture Superior Quality				Costing Office Furniture Fine Quality				Costing Office Furniture Normal Quality			
Raw Material Cost				Raw Material Cost				Raw Material Cost			
Description	No. of Unit	Rate / Unit	Total Amount	Description	No. of Unit	Rate / Unit	Total Amount	Description	No. of Unit	Rate / Unit	Total Amount
Wood (Cubic ft)	10	2,000	20,000	Wood (Cubic ft)	6	1,500	9,000	Wood (Cubic ft)	2	1,500	3,000
Nails/Screws	1	400	400	Nails/Screws	1	200	200	Nails/Screws	1	200	200
Glue/Solution	1	300	300	Glue/Solution	1	300	300	Glue/Solution	1	300	300
Spirit (in Ltrs.)	10	60	600	COB	1	450	450	COB	1	450	450
Lakh (in Kgs)	1.5	350	525	Paint	1	1,500	1,500	Lasani	2	2,200	4,400
Thinner (in Ltrs.)	5	120	600	Thinner (in Ltrs.)	8	120	960	Paint	1	1,500	1,500
Lacquer (in Ltrs.)	2	300	600	Lacquer	1	300	300	Thinner (in Ltrs.)	10	60	600
Sealer (in Ltrs.)	2	285	570	Glass Top 12mm in (Sq.ft)	21	200	4,200	Lacquer (in Ltrs.)	2	300	600
Channels, Handles	1	2,500	2,500	Channels, Handles	1	2,000	2,000	Channels, Handles	1	1,500	1,500
Thinner (Butyl)	1	160	160	Executive Chair	1	7,500	7,500	Executive Chair	1	6,000	6,000
Thinner (imported)	1	240	240	Visitors Chair	2	3,500	7,000	Visitors Chair	2	3,000	6,000
Executive Chair	1	12,000	12,000	Misc.	1	1,000	1,000	Misc.	1	1,000	1,000
Visitors Chair	2	4,500	9,000								
Misc.	1	1,000	1,000								
Total			48,495	Total			34,410	Total			25,550

12.10 Human Resource Requirement

The labor required for manufacturing process is easily available on daily wages and on per unit basis. It is recommended that only selective skilled labor be employed permanently, while others should be hired on temporary basis. Following permanent human resource is required at the factory.

Table 15 – Factory Staff requirement details in Year 1

Description	No.	Monthly Salary (Rs)	Total Annual Salary (Rs)
Production supervisor	1	30,000	360,000
Carpenter	8	16,000	1,536,000
Machine man	1	16,000	192,000
Polish man	3	16,000	576,000
Carving	2	18,000	432,000
Helpers	2	10,000	240,000
Factory admin officer	1	15,000	180,000
Draftsman / CAD Operator	1	15,000	180,000
Purchaser/Store Officer	1	15,000	180,000
Gate Keeper	1	10,000	120,000
Total Production Staff	21		3,996,000

Table 16 – Additional Human Resource Required in Year 2

Description	No.	Monthly Salary (Rs)	Total Annual Salary (Rs)
Carpenter	1	16,000	192,000
Machine man	1	16,000	192,000
Polish man	1	16,000	192,000
Helpers	1	10,000	120,000
Total Additional Staff	4		696,000

Table 17 – Additional Human Resource Required in Year 3

Description	No.	Monthly Salary (Rs)	Total Annual Salary (Rs)
Carpenter	1	16,000	192,000
Helpers	1	10,000	120,000
Total Additional Staff	2		312,000

One production supervisor is sufficient for 30 workers. Salaries of all employees are estimated to increase at 10% annually.

12.11 Revenue Generation and Production Mix

Expected production figures of proposed product mix during year 1 are given in table below:

Table 18 – Number of Furniture Sale during Year 1

Description	Product Mix	Total Units Sold
Bed Set		
Superior	20%	8
Fine	30%	17
Normal	50%	36
Dinning Set		
Superior	20%	2
Fine	30%	4
Normal	50%	9
Sofa Set		
Superior	20%	5
Fine	30%	11
Normal	50%	23
Misc. Furniture		
Superior	20%	6
Fine	30%	14
Normal	50%	30
Office Furniture		
Superior	20%	5
Fine	30%	11
Normal	50%	23
Total Furniture Units		202

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Table 19 – Revenue from Sale of Furniture during Year 1

Revenue from selling to other Showrooms in (Rs)	
Bed Sets	3,161,043
Dinning Sets	731,394
Sofa Sets	1,684,478
Misc. furniture	1,273,491
Office furniture	1,433,372
Total Revenue from selling to other Showrooms	8,283,777
Revenue from selling to own Customers in (Rs)	
Bed Sets	1,185,391
Dinning Sets	274,273
Sofa Sets	631,679
Misc. furniture	477,559
Office furniture	537,514
Total Revenue from selling to own Customers	3,106,416
Total Revenue in (Rs)	
Bed Sets	4,346,434
Dinning Sets	1,005,667
Sofa Sets	2,316,157
Misc. furniture	1,751,050
Office furniture	1,970,886
Total Revenue from selling to own Customers and other Showrooms	11,390,194



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13. CONTACTS – SUPPLIERS, EXPERTS / CONSULTANTS

- Wood Working Service Centre, TEVTA Punjab
Small Industrial Estate, G.T. Road, Gujrat
Ph: 053 – 3520250
- Wood Working Service Centre,
Tipu Road, Near Moti Mahal Cinema, Rawalpindi, TEVTA Punjab
Ph: 051-9280758, 9280561
- Wood Working Service Centre, TEVTA Khyber Pakhtunkhwa
Small Industrial Estate, Kohat Road, Peshawar
Ph: 091-9212731, 9211861



14. ANNEXURE

14.1 Income Statement

Calculations										
Projected Income Statement										
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Revenue	11,390,194	14,585,516	17,883,542	21,628,836	26,367,442	32,415,994	40,202,397	50,306,665	63,517,015	80,906,951
<i>Cost of sales</i>										
Procurement Cost	5,364,197	6,732,769	8,468,317	10,682,765	13,524,860	17,192,580	21,949,731	28,148,119	36,257,176	46,903,503
Direct Labor (Production Staff)	3,336,000	4,365,600	5,114,160	5,625,576	6,188,134	6,806,947	7,487,642	8,236,406	9,060,046	9,966,051
Direct Electricity	504,000	547,800	595,485	647,406	703,948	765,529	832,606	905,681	985,299	1,072,058
Total cost of sales	9,204,197	11,646,169	14,177,962	16,955,747	20,416,941	24,765,055	30,269,978	37,290,206	46,302,522	57,941,613
Gross Profit	2,185,997	2,939,347	3,705,580	4,673,089	5,950,501	7,650,939	9,932,419	13,016,460	17,214,494	22,965,338
<i>General administration & selling expenses</i>										
Administration expense	660,000	726,000	798,600	878,460	966,306	1,062,937	1,169,230	1,286,153	1,414,769	1,556,245
Building rental expense for Factory	600,000	660,000	726,000	798,600	878,460	966,306	1,062,937	1,169,230	1,286,153	1,414,769
Communications expense (phone, fax, mail, internet, etc.)	66,000	72,600	79,860	87,846	96,631	106,294	116,923	128,615	141,477	155,625
Transportation cost	53,642	67,328	84,683	106,828	135,249	171,926	219,497	281,481	362,572	469,035
Office expenses (stationary, entertainment, janitorial services, etc.)	3,300	3,630	3,993	4,392	4,832	5,315	5,846	6,431	7,074	7,781
Marketing expense	56,951	72,928	89,418	108,144	131,837	162,080	201,012	251,533	317,585	404,535
Professional fees (legal, audit, consultants, etc.)	25,000	26,250	27,563	28,941	30,388	31,907	33,502	35,178	36,936	38,783
Depreciation expense	145,600	145,600	145,600	154,427	154,427	154,427	164,645	164,645	164,645	176,474
Amortization of pre-operating costs	7,166	7,166	7,166	7,166	7,166	-	-	-	-	-
Subtotal	1,617,659	1,781,501	1,962,882	2,174,804	2,405,294	2,661,191	2,973,593	3,323,267	3,731,211	4,223,247
Operating Income	568,338	1,157,846	1,742,698	2,498,285	3,545,207	4,989,748	6,958,826	9,693,193	13,483,283	18,742,091
<i>Other income (interest on cash)</i>										
Earnings Before Interest & Taxes	568,338	1,157,846	1,843,498	2,498,285	3,545,207	5,156,837	6,958,826	9,693,193	13,701,909	18,742,091
Interest on short term debt	-	-	-	-	-	-	-	-	-	-
Interest expense on long term debt (Debt facility : Bank 1)	164,098	150,233	132,011	112,275	90,902	67,755	42,687	15,538	-	-
Subtotal	164,098	150,233	132,011	112,275	90,902	67,755	42,687	15,538	-	-
Earnings Before Tax	404,240	1,007,613	1,711,488	2,386,010	3,454,304	5,089,081	6,916,139	9,677,655	13,701,909	18,742,091
Tax	424	73,642	189,797	324,702	586,076	1,049,224	1,643,148	2,609,678	4,018,167	5,782,231
NET PROFIT/(LOSS) AFTER TAX	403,816	933,971	1,521,690	2,061,308	2,868,229	4,039,857	5,272,991	7,067,976	9,683,741	12,959,860

14.2 Balance Sheet

Calculations											
Projected Balance Sheet											
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Assets											
<i>Current assets</i>											
Cash & Bank	196,037	228,082	630,299	1,545,358	2,849,913	4,802,618	7,795,316	11,801,997	17,414,664	25,811,517	37,527,771
Accounts receivable		132,886	303,050	378,806	460,978	559,957	685,807	847,215	1,055,939	1,327,943	1,684,946
Finished goods inventory		191,754	242,629	295,374	353,245	425,353	515,939	630,625	776,879	964,636	1,207,117
Raw material inventory	700,908	1,008,556	1,448,723	2,077,945	2,976,589	4,258,761	6,086,283	8,688,394	12,389,489	17,648,135	25,111,913
Pre-paid building rent	200,000	220,000	242,000	266,200	292,820	322,102	354,312	389,743	428,718	471,590	-
Total Current Assets	1,096,945	1,781,277	2,866,700	4,563,682	6,933,545	10,368,790	15,437,657	22,357,973	32,065,690	46,223,820	65,531,747
<i>Fixed assets</i>											
Land	-	-	-	-	-	-	-	-	-	-	-
Building/Infrastructure	-	-	-	-	-	-	-	-	-	-	-
Machinery & equipment	827,000	744,300	661,600	578,900	496,200	413,500	330,800	248,100	165,400	82,700	-
Furniture & fixtures	69,000	62,100	55,200	48,300	41,400	34,500	27,600	20,700	13,800	6,900	-
Office vehicles	-	-	-	-	-	-	-	-	-	-	-
Office equipment	168,000	112,000	56,000	194,481	129,654	64,827	225,136	150,091	75,045	260,623	173,749
Total Fixed Assets	1,064,000	918,400	772,800	821,681	667,254	512,827	583,536	418,891	254,245	350,223	173,749
<i>Intangible assets</i>											
Pre-operation costs	35,829	28,663	21,497	14,332	7,166	-	-	-	-	-	-
Total Intangible Assets	35,829	28,663	21,497	14,332	7,166	-	-	-	-	-	-
TOTAL ASSETS	2,196,774	2,728,340	3,660,998	5,399,695	7,607,965	10,881,617	16,021,193	22,776,864	32,319,935	46,574,043	65,705,496
Liabilities & Shareholders' Equity											
<i>Current liabilities</i>											
Accounts payable		127,326	271,923	342,426	422,196	520,427	647,815	814,447	1,034,111	1,325,687	1,715,049
Other liabilities											
Total Current Liabilities	-	127,326	271,923	342,426	422,196	520,427	647,815	814,447	1,034,111	1,325,687	1,715,049
<i>Other liabilities</i>											
Deferred tax		424	74,066	263,863	588,565	1,174,641	2,223,865	3,867,013	6,476,691	10,494,859	16,277,090
Long term debt (Debt facility : Bank 1)	1,977,097	1,977,097	1,757,545	1,519,770	1,262,260	983,377	681,346	354,248	-	-	-
Total Long Term Liabilities	1,977,097	1,977,521	1,831,611	1,783,633	1,850,825	2,158,018	2,905,211	4,221,260	6,476,691	10,494,859	16,277,090
<i>Shareholders' equity</i>											
Paid-up capital	219,677	219,677	219,677	414,158	414,158	414,158	639,294	639,294	639,294	899,918	899,918
Retained earnings		403,816	1,337,787	2,859,477	4,920,786	7,789,014	11,828,871	17,101,862	24,169,839	33,853,580	46,813,440
Total Equity	219,677	623,493	1,557,465	3,273,636	5,334,944	8,203,173	12,468,166	17,741,157	24,809,133	34,753,498	47,713,357
TOTAL CAPITAL AND LIABILITIES	2,196,774	2,728,340	3,660,998	5,399,695	7,607,965	10,881,617	16,021,193	22,776,864	32,319,935	46,574,043	65,705,496

14.3 Cash Flow Statement

Calculations											
Projected Cash Flow Statement											
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
<i>Operating activities</i>											
Net profit		403,816	933,971	1,521,690	2,061,308	2,868,229	4,039,857	5,272,991	7,067,976	9,683,741	12,959,860
Add: depreciation expense		145,600	145,600	145,600	154,427	154,427	154,427	164,645	164,645	164,645	176,474
amortization of pre-operating costs		7,166	7,166	7,166	7,166	7,166	-	-	-	-	-
Deferred income tax		424	73,642	189,797	324,702	586,076	1,049,224	1,643,148	2,609,678	4,018,167	5,782,231
Accounts receivable		(132,886)	(170,164)	(75,756)	(82,172)	(98,979)	(125,850)	(161,408)	(208,724)	(272,004)	(357,003)
Finished goods inventory		(191,754)	(50,874)	(52,746)	(57,871)	(72,108)	(90,586)	(114,686)	(146,255)	(187,757)	(242,481)
Equipment inventory		-	-	-	-	-	-	-	-	-	-
Raw material inventory	(700,908)	(307,648)	(440,167)	(629,222)	(898,644)	(1,282,172)	(1,827,522)	(2,602,112)	(3,701,095)	(5,258,646)	(7,463,778)
Pre-paid building rent	(200,000)	(20,000)	(22,000)	(24,200)	(26,620)	(29,282)	(32,210)	(35,431)	(38,974)	(42,872)	471,590
Accounts payable		127,326	144,596	70,503	79,770	98,231	127,388	166,631	219,664	291,577	389,361
Other liabilities		-	-	-	-	-	-	-	-	-	-
Cash provided by operations	(900,908)	32,044	621,770	1,152,833	1,562,066	2,231,587	3,294,729	4,333,779	5,966,915	8,396,853	11,716,254
<i>Financing activities</i>											
Debt facility : Bank 1 - principal repayment		-	(219,552)	(237,775)	(257,510)	(278,883)	(302,030)	(327,099)	(354,248)	-	-
Additions to Debt facility : Bank 1	1,977,097	-	-	-	-	-	-	-	-	-	-
Issuance of shares	219,677	-	-	194,481	-	-	225,136	-	-	260,623	-
Cash provided by / (used for) financing activities	2,196,774	-	(219,552)	(43,294)	(257,510)	(278,883)	(76,894)	(327,099)	(354,248)	260,623	-
<i>Investing activities</i>											
Capital expenditure	(1,099,829)	-	-	(194,481)	-	-	(225,136)	-	-	(260,623)	-
Acquisitions		-	-	-	-	-	-	-	-	-	-
Cash (used for) / provided by investing activities	(1,099,829)	-	-	(194,481)	-	-	(225,136)	-	-	(260,623)	-
NET CASH	196,037	32,044	402,218	915,058	1,304,556	1,952,704	2,992,699	4,006,680	5,612,668	8,396,853	11,716,254



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14.4 Useful Project Management Tips

Technology

- **Required Spare Parts & Consumables:** Suppliers credit agreements and availability as per schedule of maintenance be ensured before start of operations. The machines proposed are new and locally made, hence requiring little maintenance and repairing.
- **Energy Requirement:** A generator is recommended but should be used only for operating the machinery and other necessary equipment. **Machinery Suppliers:** In selecting the machinery, multiple sources must be explored. The availability of spares should also be considered. Such machinery is easily available in local markets e.g. Gujranwala, Lahore and Karachi.

Marketing

- **Product Development:** Creation of new designs and styles is vital not only for setting new trends in the furniture business but can also build brand equity for the business.
- **Advertisement and Promotion:** Brochures, Website and Cable Ads of the business should be developed and regularly updated.
- **Sales & Distribution Network:** The owner should develop contacts/linkages with prospective buyers and suppliers through email, fax and telephone and social media.

Human Resources

Adequacy & Competencies: Skilled and experienced carpenters are necessary for the unit. Staff having experience in craftsmanship, carving, polishing, etc. should be preferred.

14.5 Useful Links

- Prime Minister's Office, www.pmo.gov.pk
- Small and Medium Enterprise Development Authority, www.smeda.org.pk
- National Bank of Pakistan (NBP), www.nbp.com.pk
- First Women Bank Limited (FWBL), www.fwbl.com.pk
- Government of Pakistan, www.pakistan.gov.pk
- Ministry of Industries & Production, www.moip.gov.pk
- Ministry of Education, Training & Standards in Higher Education,

<http://moptt.gov.pk>

- Government of Punjab, www.punjab.gov.pk
- Government of Sindh, www.sindh.gov.pk
- Government of Khyber Pakhtunkhwa, www.khyberpakhtunkhwa.gov.pk
- Government of Balochistan, www.balochistan.gov.pk
- Government of Gilgit Baltistan, www.gilgitbaltistan.gov.pk
- Government of Azad Jammu & Kashmir, www.ajk.gov.pk
- Trade Development Authority of Pakistan (TDAP), www.tdap.gov.pk
- Securities & Exchange Commission of Pakistan (SECP), www.secp.gov.pk
- Federation of Pakistan Chambers of Commerce and Industry (FPCCI)
www.fpcci.com.pk
- State Bank of Pakistan (SBP), www.sbp.org.pk
- Furniture Pakistan, www.furniturepakistan.org
- Pakistan Institute of Fashion Design (PIFD), www.pifd.edu.pk



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15. KEY ASSUMPTIONS

Table 20: Operating Assumptions

Factory	
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Hours Operational per day	8
Days operational per month	25
Days operational per year	300

Table 21: Economy Related Assumptions

Annual Electricity Price Growth	10%
Annual Salary Growth Rate	10%
Rent Growth Rate	10%
Annual Sale Price Growth Rate for own Customers	3%
Annual Raw Material Price Growth Rate for Wood	30%
Annual Raw Material Price Growth Rate other than Wood	10%

Table 22: Expense Assumptions

Communication Expense	10% of Administrative Costs
Transportation Expense	1% of Material Procurement
Marketing Expense	0.50% of Revenues

Table 23: Cash Flow Assumptions

Initial Cash in Bank	Rs. 196,037
Accounts Payable Cycle in (Days)	7
Accounts Receivable Cycle in (Days)	7
Finished Goods Inventory in (Days)	7
Raw Material Inventory of Wood in (Days)	120
Raw Material Inventory other than Wood in (Days)	15

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Table 24: Depreciation Expense

Depreciation Rate for Machinery & Equipment (Annual)	10%
Depreciation Rate for Furniture & Fixture (Annual)	10%
Depreciation Rate for Office Equipments (Annual)	33%

Table 25: Financial Assumptions

Project Life (Years)	10
Debt Equity Ratio	90 : 10
Interest Rate on Long Term Debt	8%
Long Term Debt Tenure (Years)	8
Number of Payment/Year	12
Income Tax Rates	Sole Proprietorship Tax Slabs
Grace Period (Years)	1

