# **Pre-Feasibility Study**

# **Denim Jeans Stitching Unit**



# **Small and Medium Enterprises Development Authority**

# Ministry of Industries & Production Government of Pakistan

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December 2015

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#### 1 DISCLAIMER

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#### **Document Control**

Document No.	PREF-01
Revision	No. 4
Prepared by	SMEDA-Punjab
Revision Date	December, 2015
For information	janjua@smeda.org.pk

#### 2 EXECUTIVE SUMMARY

During the last two decades, usage of denim jeans has increased tremendously in international as well as local markets. The competitive edge of Pakistan in this field stems from the ready availability of cotton yarn required to weave denim fabric. Pakistan is the leading supplier of quality denim fabric as well as denim jeans to worlds leading apparel brands.

This particular pre-feasibility study provides information on key aspects of setting up a 'Denim Jeans Stitching Unit' in any metropolitan cities of Pakistan, especially Lahore, Karachi and Faisalabad. The proposed unit will mainly produce standard five-pocket jeans trouser to cater for export markets. Through the use of high-tech equipment and modern techniques the company can produce jeans of latest trends without compromising on quality.

In order to reduce initial capital investment, the unit is proposed to be established in a rented building. The unit will have an installed capacity of stitching / producing 495,000 units of denim jeans annually, on single shift basis for 330 operational days. The starting operational capacity is assumed at 70% (i.e. 346,500). This production capacity is estimated to be economically viable and justifies the capital as well as operational costs of the project. However, entrepreneur's knowledge of textile industry in general and product segment of denim jeans in particular; quality product offering; attractive designs, competitive pricing; and strong linkages with buying houses and wholesale / retail networks are critical factors for the success of this project.

Total project cost is estimated as Rs. 19.04 million with capital investment of Rs. 13.84 million and working capital Rs. 5.20 million. Given the cost assumptions IRR, Payback and Net Present Value are 32%, 4.42 years and Rs. 19.92 million, respectively. The project will provide employment opportunities to 51 people directly including owner as CEO. Beside this machine operator, clippers and iron pressers will be hired on daily wages as per industry practice. The legal business status of this project is proposed as 'Sole Proprietorship'.

#### 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 and institutional collaboration and networking initiatives.

Preparation and dissemination of prefeasibility studies in key areas of investment has been a successful hallmark of SME facilitation by SMEDA.

Concurrent to the prefeasibility studies, a broad spectrum of business development services is also offered to the 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 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, and production, marketing, finance and business management.

The purpose of this document is to facilitate potential investors in **Denim Jeans Stitching 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 imminence 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 it's successful management.

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

## 5 BRIEF DESCRIPTION OF PROJECT & PRODUCT

During the last two decades, the usage of denim garments, especially denim jeans, has been on a rise in the international as well as the local markets. This has led to a rise in the demand of denim garments. The competitive edge of Pakistan in this field stems from the ready availability of cotton yarn required to weave denim fabric i.e. NE 7/1 to NE 14/1(Yarn Count). Resultantly, the denim fabric manufacturing capacity has also been enhanced that has provided the opportunity to the industry to strengthen. The export of denim garments from Pakistan has also been on a rise.

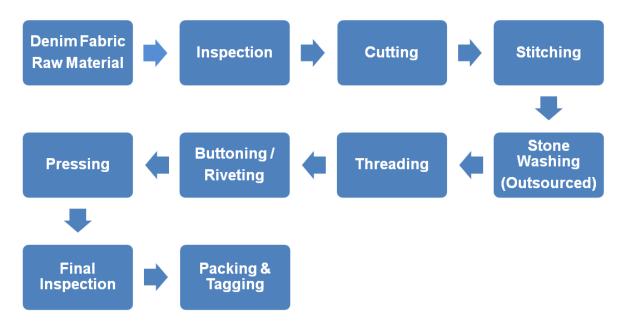
This pre-feasibility study describes the investment opportunity for setting up of a Denim Jeans Manufacturing Unit in the industrial area of a metropolitan city of Pakistan like Lahore, Karachi and Faisalabad as entrepreneur can easily find raw material suppliers, machinery and trained labour in these cities which are crucial for the success / profitability of business.

This proposed unit with modern processing machines including cutting, stitching and ironing will produce high quality 5 pocket standard denim jeans for males, females and children's in two categories i.e. Basic & Stretchable. Jeans can be stitched in all sizes depending on buyer's requirement.

This project will deal in export business only as profit margin in export market is high as compared to local market. Most of the leading international brands use to outsource their production in subcontinent countries due to low production cost and availability of well trained labor in low cost. This provides a great opportunity for jeans manufacturing units. Major export destinations include USA, UK, Spain, Germany and Belgium.

#### 5.1 Production Process Flow

The process flow will start with procurement of raw material from different suppliers as per the requirement of buyer. Inspection of inventory starts once the procurement is done. After that the process of cutting and stitching commence. Washing of the fabric will be outsourced as washing in house requires a plant which is expensive and will greatly increase the project cost. Therefore, it is recommended that the proposed project should outsource washing. Washing cost of basic jeans is Rs. 50 per piece and Rs. 100 per piece for stretchable / faded jeans. Complete process flow of said project is given below.



### 5.2 Installed And Operational Capacities

The total installed capacity of the project is assumed at 495,000 pieces of denim jeans per year. Initial operational capacity will be 70% (i.e. 346,500 pieces) with an annual growth of 5%. Maximum capacity utilization of the project is assumed at 90%. Product mix wise installed and operational capacities of the proposed unit are provided below.

**Table 1: Installed and Operational Capacities** 

Description	Percentage of Production Capacity	Total Capacity	Operational Capacity 70 % (Year 1)	Maximum Operational Capacity 90% (Year 10)
Basic Jeans	75%	371,250	259,875	334,125
Stretchable Jeans	25%	123,750	86,625	111,375
Total	100%	495,000	346,500	445,500

## 6 CRITICAL FACTORS

- ⇒ Formation of organizational system especially for operations department in order to maintain international quality standards.
- ⇒ Develop strong linkages with raw material suppliers for sourcing quality material on time at economical prices.
- ⇒ Time management is very important in export base business. Delay in delivery can cost as high as losing a customer.



- ⇒ Good working relations with buyers for repeat orders on regular basis.
- ⇒ Proficient marketing campaign in order to grab new orders from abroad is crucial for this business.
- ⇒ Efficient management of stock to keep inventory cost at the minimum.
- ⇒ Knowledge about the latest market trends is critical.
- ⇒ Induction of trained human resource for the handling of business operations especially in operations and sales.
- ⇒ Increasing competitions from different countries is very critical for business in this market.

#### 7 GEOGRAPHICAL POTENTIAL FOR INVESTMENT

Denim Jeans Stitching Unit can be established in cities like Lahore, Karachi and Faisalabad as quality raw material, skilled labor and machine suppliers & technicians are easily available in these cities. Beside this, all these cities have well established industrial estates and garments parks which provide excellent infrastructure facilities for smooth business operations.

One more vital factor for nominating these cities is that most of textile buying houses are operating in these cities which can provide a lot of business opportunities for the export of denim jeans.

#### 8 POTENTIAL TARGET CUSTOMERS / MARKETS

The proposed stitching unit is for export purpose only. Export of ready-made garment is ranked at 4<sup>th</sup> place in Pakistan's export commodities<sup>1</sup>. Countries like USA, UK, Spain, Germany, Belgium and Netherlands are the biggest buyers of Pakistani Readymade Garments. Therefore, it is proposed to target these countries as Pakistani garments already have a well-built goodwill in these countries due to high quality. However, it is also suggested to find new horizons for export of denim jeans as it is always better to have multiple options. Countries like France, Italy and UAE also have great potential for denim jeans export.

#### 9 PROJECT COST SUMMARY

#### 9.1 Project Economics

All the figures in this financial model have been calculated for estimated sales of Rs. 247.66 Million in the year one. The capacity utilization during year one is worked out at 70% with 5% increase in subsequent years up to the maximum capacity utilization of 90%.



<sup>&</sup>lt;sup>1</sup> Trade Development Authority of Pakistan (TDAP) www.tdap.gov.pk/tdap-statistics.php

The following table shows internal rate of return, payback period and net present value of the proposed venture.

**Table 2: Project Economics** 

Description	Details
Internal Rate of Return (IRR)	32%
Payback Period (yrs.)	4.42
Net Present Value (Rs.)	19,922,124

## 9.2 Project Financing

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

**Table 3: Project Financing** 

Description	Details
Total Equity (50%)	Rs. 9,519,951
Bank Loan (50%)	Rs. 9,519,951
Markup to the Borrower (%age / annum)	14%
Tenure of the Loan (Years)	5

## 9.3 Project Cost

Following fixed and working capital requirements have been identified for operations of the proposed business.

**Table 4: Project Cost** 

Description	Amount Rs.
Capital Cost	
Machinery & Equipment	9,272,000
Furniture & Fixture (Including Building Renovation)	1,623,000
Office Equipment	465,000
Office Vehicle	1,365,000
Building Security Deposit	750,000
Pre-operating Cost	361,387



Total Capital Cost	13,836,387
Working Capital	
Cash	500,000
Up-front Building Rent	750,000
Equipment Spare Part Inventory	42,470
Raw Material Inventory	3,911,044
Total Working Capital	5,203,514
Total Project Cost	19,039,901

## 9.4 Space Requirement

The space requirement for the proposed garment stitching unit (Denim Jeans) is estimated considering various facilities including management office, inventory store room, production area, finished garment store room and open space. Keeping in mind the above mentioned requirements, it is suggested to hire a building of 2 canal which is purpose fully build for garment manufacturing use may that with a minor modifications entrepreneur could initiate business. The Details of space requirement related to land & building is given below;

**Table 5: Space Requirment** 

Description	No.	Area Required (Sq. Ft)
Management Building	1	1,000
Fabric & Accessories Inventory Store	1	1,500
Cutting Room	1	700
Stitching Room	1	2,200
Inspection Room	1	1,000
Packing Room	1	1,000
Finished Garments Store	1	1,000
Open Space	1	600
Total		9,000

It is proposed to use a rental building in order to avoid high capital cost and risk. The proposed monthly rent for the building is taken at Rs. 250,000/- month. A total



amount of Rs. 400,000 estimated as renovation cost of Management building and factory as per the above mentioned area required.

## 9.5 Machinery & Equipment Requirement

Machinery and equipment for the proposed project are stated below;

**Table 6: Machinery & Equipment Requirement** 

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Auto Trimmer Direct Drive Lockstitch Machine	35	56,000	1,960,000
Twin Needle Auto Trimmer Split Bar Direct Drive	5	195,000	975,000
5 Thread Safety Over lock Machine with energy saving motor	5	62,000	310,000
3 Thread Over Lock Machine with energy saving motor	1	56,000	56,000
Feed Of Arm Machine	4	255,000	1,020,000
Cutting Machine 10 Inch	2	34,000	68,000
High Speed Bartacking Machine	5	255,000	1,275,000
Waist Band Machine	2	115,000	230,000
Eyelet Button Hole Machine	1	795,000	795,000
Loop Making Machine	1	125,000	125,000
Chain Stitch Machine	1	65,000	65,000
Auto Leather Patch Machine	1	450,000	450,000
Cover Stitch Machine	1	135,000	135,000
Button Stitching Machine	1	275,000	275,000
Snap Fastener (Local)	1	50,000	50,000
Mock Stitch Machine	1	675,000	675,000
Generator (50 KVA)	1	450,000	450,000
Other Tools (Lump Sum)	1	40,000	40,000
Machine Installation and wiring	66	3,000	198,000
Steam Boiler for Steam Press	2	50,000	100,000
Steam Iron Machine	4	5,000	20,000
Total			9,272,000

## 9.6 Furniture & Fixtures Requirement

Details of the furniture and fixture required for the project are given below;



**Table 7: Furniture & Fixture Requirement** 

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Furniture Set for CEO Office	1	75,000	75,000
Office Furniture (Set)	8	25,000	200,000
Board Room Furniture (Set)	1	35,000	35,000
UPS with Battery	2	30,000	60,000
Building Renovation	1	400,000	400,000
Air Conditioners (1.5 ton Split)	7	50,000	350,000
Shelves	10	5,000	50,000
Stools	15	800	12,000
Labor Work Station	66	6,000	396,000
Lay Tables	15	3,000	45,000
<b>Total Furniture and Fixture</b>			1,623,000

## 9.7 Office Equipment Requirement

Following office equipment will be required for the proposed Denim Jeans Stitching Unit.

**Table 8: Office Equipment Requirement** 

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Laptop	2	50,000	100,000
Desktop Computers with UPS	7	30,000	210,000
HP Laser Jet P3015 Printer and Software	1	75,000	75,000
HP Scan Jet 200 Flatbed Scanner	1	7,000	7,000
Telephone Sets	9	1,000	9,000
Fax Machine (Panasonic)	1	14,000	14,000
Networking	1	50,000	50,000
Total			465,000

## 9.8 Office Vehicle Requirement

It is proposed to buy a used vehicle for inventory transportation purposes. Vehicle cost and vehicle registration costs are given below;



**Table 9: Office Vehicle Requirement** 

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Hyundai Shehzore (Used)	1	1,300,000	1,300,000
Vehicle Registration Fee (5%)	1	65,000	65,000
Total			1,365,000

## 9.9 Raw Material Requirements

Basic raw material of Denim Jeans stitching is denim fabric. Along with denim fabric, a lot of accessories are also used in production. Major accessories are as follows:

- Stitching Thread
- Pocket Lining
- Imported Buttons
- YG Zips
- Label
- Tags

Cost and consumptions of raw material are given in annexure.

## 9.10 Human Resource Requirement

In order to run operations of Denim Jeans Stitching Unit smoothly, details of human resources required are recommended as under;

**Table 10: Human Resource Requirment** 

Description	No. of Employees	Monthly Salary per person (Rs.)
CEO / Marketing Manager	1	60,000
Production Manager	1	50,000
Pattern Master	1	35,000
Cutting Master	2	30,000
Cutting Helper	10	15,000
Final Table Quality Inspection	2	18,000
Helper (Machine Operator)	4	15,000
Packing Staff	12	15,000

Store Keeper	1	18,000
Store Keeper Helper	2	13,000
Quality Inspection Officers	4	18,000
Finance & Admin Manager	1	40,000
Accounts Officer	1	18,000
Merchandiser	1	35,000
Export Officer	1	25,000
Purchase Officer	1	25,000
Technician	1	30,000
Technician Helper	1	20,000
Electrician	1	15,000
Security Guards	2	13,000
Receptionist	1	15,000
Total	51	

As per industry practice, labor force for stitching, clipping and iron pressing will be hired on daily wages. These work forces normally work on per piece rate. An average rate per piece is 35 rupees for Stitching, 5 rupees for Clipping and 2 rupees for iron pressing. Total 65 workers would be required in order to perform above mentioned operations.

#### 9.11 Utilities and Other Costs

An essential cost to be borne by the project is the cost of electricity. The electricity expenses are estimated to be around Rs. 2.376 million per annum, whereas cost of diesel as generator fuel is estimated at Rs. 0.280 million per year. Furthermore, promotional expense being essential for marketing of Garments Stitching Unit (Denim Jeans) is estimated as 0.30% of revenue.

#### 9.12 Revenue Generation

Based on the capacity utilization of 70%, sales revenue during the first year of operations is estimated in below table.



**Table 11: Revenue Generation - Year 1** 

Description	No. of Units Produced (No.)	Finished Goods Inventory (No.)	Units available for Sale (No.)	Avg. Sale Price / unit (Rs.) <sup>2</sup>	Sales Revenue (Rs.)
Basic Jeans	259,875	5,053	254,822	729	185,765,238
Stretchable	86,625	1,684	84,941	729	61,921,989
Total	346,500	6,737	339,763	-	247,687,227 <sup>3</sup>

## **10 CONTACT DETAILS**

In order to facilitate potential investors, contact details of private sector Service Providers relevant to the proposed project be given.

## 10.1 Stitching Machinery Suppliers

Name of Supplier	Address	Phone	E-mail
Stitch Care Inter	17 Km, Ferozpur Road, Lahore	042- 35922856 / 7	mehmood@mascotmachinery.com
Ittehad Machines	Madina Market, Garden Road, Karachi	021- 32722184, 32724605	info@ittehadmachines.com

## 11 USEFUL WEB LINKS

Small & Medium Enterprises Development Authority (SMEDA)	www.smeda.org.pk
Government of Pakistan	www.pakistan.gov.pk
Ministry of Industries & Production	www.moip.gov.pk
Ministry of Federal Education and Professional Training	http://moent.gov.pk
Government of Punjab	www.punjab.gov.pk
Government of Sindh	www.sindh.gov.pk

<sup>&</sup>lt;sup>2</sup> Average Price has been taken for financial calculations.



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<sup>&</sup>lt;sup>3</sup> Difference in revenue amount is due to Rounding Off.

Government of Khyber Pakhtunkhwa	www.khyberpakhtunkhwa.gov.pk
Government of Baluchistan	www.balochistan.gov.pk
Government of Gilgit Baltistan	www.gilgitbaltistan.gov.pk
Government of Azad Jamu Kashmir	www.ajk.gov.pk
Trade Development Authority of Pakistan (TDAP)	www.tdap.gov.pk
Security 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
National Textile University, Faisalabad	www.ntu.edu.pk/
All Pakistan Textile Mills Association	www.aptma.org.pk
Pakistan Institute of Fashion Design.	www.pifd.edu.pk
Pakistan Hosiery Manufacturers & Exporters Association	http://www.phmaonline.com/
Pakistan Readymade Garments Manufacturers and Exporters Association (PRGMEA)	www.prgmea.org/

Pre-Feasibility Study

Denim Jeans Stitching Unit

# **12 ANNEXURES**

## 12.1 Income Statement

Calculations										SMEDA
Income Statement										
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Revenue	247,665,627	297,293,970	348,853,223	407,751,387	474,940,651	522,999,685	575,299,653	632,829,619	696,112,580	765,723,839
Cost of sales										
Cost of goods sold 1	201,139,400	241,444,610	283,317,991	331,151,602	385,718,756	424,749,465	467,224,412	513,946,853	565,341,538	621,875,692
Operation costs 1 (direct labor)	25,882,548	30,407,981	35,002,882	40,212,576	46,114,083	50,780,347	55,858,381	61,444,219	67,588,641	74,347,505
Operating costs 2 (machinery maintenance)	1,019,288	1,223,537	1,435,733	1,678,133	1,954,656	2,152,447	2,367,691	2,604,460	2,864,906	3,151,397
Operating costs 3 (direct electricity)	2,125,200	2,337,720	2,571,492	2,828,641	3,111,505	3,422,656	3,764,921	4,141,414	4,555,555	5,011,110
Operating costs 5 (direct gas)	84,000	92,400	101,640	111,804	122,984	135,283	148,811	163,692	180,061	198,068
Total cost of sales	230,250,436	275,506,248	322,429,738	375,982,757	437,021,984	481,240,197	529,364,217	582,300,639	640,530,703	704,583,773
Gross Profit	17,415,192	21,787,722	26,423,485	31,768,630	37,918,667	41,759,488	45,935,436	50,528,980	55,581,878	61,140,066
General administration & selling expenses										
Administration expense	3,528,000	3,880,800	4,268,880	4,695,768	5,165,345	5,681,879	6,250,067	6,875,074	7,562,581	8,318,839
Administration benefits expense	105,840	116,424	128,066	140,873	154,960	170,456	187,502	206,252	226,877	249,565
Building rental expense	3,000,000	3,300,000	3,630,000	3,993,000	4,392,300	4,831,530	5,314,683	5,846,151	6,430,766	7,073,843
Electricity expense	531,300	584,430	642,873	707,160	777,876	855,664	941,230	1,035,353	1,138,889	1,252,778
Travelling expense	1,058,400	1,164,240	1,280,664	1,408,730	1,549,603	1,704,564	1,875,020	2,062,522	2,268,774	2,495,652
Communications expense (phone, fax, mail, internet, etc.)	246,960	271,656	298,822	328,704	361,574	397,732	437,505	481,255	529,381	582,319
Office vehicles running expense	341,250	375,375	412,913	454,204	499,624	549,587	604,545	665,000	731,500	804,650
Office expenses (stationary, entertainment, janitorial services, etc.)	246,960	271,656	298,822	328,704	361,574	397,732	437,505	481,255	529,381	582,319
Promotional expense	619,164	743,235	872,133	1,019,378	1,187,352	1,307,499	1,438,249	1,582,074	1,740,281	1,914,310
Professional fees (legal, audit, consultants, etc.)	123,833	148,647	174,427	203,876	237,470	261,500	287,650	316,415	348,056	382,862
Depreciation expense	1,409,000	1,409,000	1,409,000	1,409,000	1,409,000	2,759,037	2,759,037	2,759,037	2,759,037	2,759,037
Amortization of pre-operating costs	72,277	72,277	72,277	72,277	72,277	-	-	-	-	-
Bad debt expense	495,331	594,588	697,706	815,503	949,881	1,045,999	1,150,599	1,265,659	1,392,225	1,531,448
Subtotal	11,778,316	12,932,328	14,186,583	15,577,177	17,118,838	19,963,179	21,683,593	23,576,049	25,657,750	27,947,621
Operating Income	5,636,876	8,855,394	12,236,902	16,191,452	20,799,829	21,796,309	24,251,843	26,952,931	29,924,128	33,192,445
Gain / (loss) on sale of machinery & equipment	-	-	-	-	3,708,800	-	-	-	-	
Gain / (loss) on sale of office vehicles	-	-	-	-	546,000	-	-	-	-	
Earnings Before Interest & Taxes	5,636,876	8,855,394	12,236,902	16,191,452	25,054,629	21,796,309	24,251,843	26,952,931	29,924,128	33,192,445
Interest on short term debt	337,945	383,020	45,075	-	-	-	-	-	-	
Interest expense on long term debt (Project Loan)	968,547	822,022	654,983	464,559	247,475	123,087	104,466	83,238	59,038	31,450
Interest expense on long term debt (Working Capital Loan)	201,494	-	-	- 7		-	-	-		- ,
Subtotal	1,507,986	1,205,042	700,058	464,559	247,475	123,087	104,466	83,238	59,038	31,450
Earnings Before Tax	4,128,890	7,650,352	11,536,844	15,726,894	24,807,154	21,673,222	24,147,377	26,869,693	29,865,090	33,160,994
Tax	761,167	1,900,123	3,260,395	4,726,912	7,905,003	6,808,127	7,674,081	8,626,892	9,675,281	10,828,84
NET PROFIT/(LOSS) AFTER TAX	3,367,723	5,750,230	8,276,449	10.999.982	16,902,150	14.865.095	16,473,296	18,242,801	20.189.809	22,332,147



Pre-Feasibility Study

Denim Jeans Stitching Unit

## 12.2 Balance Sheet

Calculations											SMEDA
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											
Current assets											
Cash & Bank	500,000	-	-	4,913,399	12,273,642	12,982,427	26,691,154	41,302,913	56,843,144	73,326,150	127,431,745
Finished goods inventory		4,565,873	5,364,019	6,277,096	7,319,147	8,506,839	9,357,448	10,293,193	11,322,512	12,454,764	13,700,240
Equipment spare part inventory	42,470	53,530	65,954	80,944	98,996	114,464	132,206	152,697	176,365	203,702	-
Raw material inventory	3,911,044	5,164,232	6,665,843	8,570,387	10,980,877	13,301,230	16,094,488	19,474,331	23,563,940	28,512,368	-
Pre-paid building rent	750,000	825,000	907,500	998,250	1,098,075	1,207,883	1,328,671	1,461,538	1,607,692	1,768,461	-
Total Current Assets	5,203,514	10,608,634	13,003,316	20,840,076	31,770,737	36,112,843	53,603,967	72,684,672	93,513,654	116,265,445	141,131,985
Fixed assets											
Land	-	-	-	-	-	-	-	-	-	-	-
Building/Infrastructure	-	-	-	-	-	-	-	-	-	-	-
Security Deposit	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000	750,000
Machinery & equipment	9,272,000	8,344,800	7,417,600	6,490,400	5,563,200	16,469,683	14,359,114	12,248,546	10,137,978	8,027,410	5,916,841
Furniture & fixtures	1,623,000	1,460,700	1,298,400	1,136,100	973,800	811,500	649,200	486,900	324,600	162,300	-
Office vehicles	1,365,000	1,092,000	819,000	546,000	273,000	2,198,346	1,758,677	1,319,008	879,338	439,669	-
Office equipment	465,000	418,500	372,000	325,500	279,000	232,500	186,000	139,500	93,000	46,500	-
Total Fixed Assets	13,475,000	12,066,000	10,657,000	9,248,000	7,839,000	20,462,029	17,702,991	14,943,954	12,184,916	9,425,879	6,666,841
Intangible assets											
Pre-operation costs	361,387	289,110	216,832	144,555	72,277	-	-	-	-	-	-
Total Intangible Assets	361,387	289,110	216,832	144,555	72,277	-	-	-	-	-	-
TOTAL ASSEIS	19,039,901	22,963,744	23,877,148	30,232,630	39,682,015	56,574,871	71,306,959	87,628,626	105,698,571	125,691,323	147,798,826
Liabilities & Shareholders' Equity											
Current liabilities											
Short term debt	-	4,204,486	560,794	-	-	-	-	-	-	-	-
Total Current Liabilities	-	4,204,486	560,794	-	-	-	-	-	-	-	-
Other liabilities											
Long term debt (Project Loan)	6,918,194	5,871,585	4,678,451	3,318,278	1,767,681	879,193	746,186	594,557	421,701	224,644	-
Long term debt (Working Capital Loan)	2,601,757	-	-	-	-	-	-	-	-	-	-
Total Long Term Liabilities	9,519,951	5,871,585	4,678,451	3,318,278	1,767,681	879,193	746,186	594,557	421,701	224,644	-
Shareholders' equity											
Paid-up capital	9,519,951	9,519,951	9,519,951	9,519,951	9,519,951	10,399,144	10,399,144	10,399,144	10,399,144	10,399,144	10,399,144
Retained earnings		3,367,723	9,117,953	17,394,402	28,394,383	45,296,534	60,161,629	76,634,924	94,877,726	115,067,535	137,399,682
Total Equity	9,519,951	12,887,674	18,637,903	26,914,353	37,914,334	55,695,678	70,560,773	87,034,069	105,276,870	125,466,679	147,798,826
TOTAL CAPITAL AND LIABILITIES	19,039,901	22,963,744	23,877,148	30,232,630	39,682,015	56,574,871	71,306,959	87,628,626	105,698,571	125,691,323	147,798,826



Pre-Feasibility Study

Denim Jeans Stitching Unit

## 12.3 Cash Flow Statement

Calculations											<b>SMEDA</b>
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
Operating activities											
Net profit		3,367,723	5,750,230	8,276,449	10,999,982	16,902,150	14,865,095	16,473,296	18,242,801	20,189,809	22,332,147
Add: depreciation expense		1,409,000	1,409,000	1,409,000	1,409,000	1,409,000	2,759,037	2,759,037	2,759,037	2,759,037	2,759,037
amortization of pre-operating costs		72,277	72,277	72,277	72,277	72,277	-	-	-	-	-
Finished goods inventory		(4,565,873)	(798,147)	(913,076)	(1,042,052)	(1,187,692)	(850,609)	(935,745)	(1,029,319)	(1,132,251)	(1,245,476)
Equipment inventory	(42,470)	(11,059)	(12,424)	(14,990)	(18,052)	(15,468)	(17,742)	(20,492)	(23,668)	(27,337)	203,702
Raw material inventory	(3,911,044)	(1,253,188)	(1,501,611)	(1,904,545)	(2,410,490)	(2,320,353)	(2,793,258)	(3,379,843)	(4,089,610)	(4,948,427)	28,512,368
Pre-paid building rent	(750,000)	(75,000)	(82,500)	(90,750)	(99,825)	(109,808)	(120,788)	(132,867)	(146,154)	(160,769)	1,768,461
Cash provided by operations	(4,703,514)	(1,056,120)	4,836,825	6,834,366	8,910,840	14,750,108	13,841,735	14,763,387	15,713,088	16,680,062	54,330,239
Financing activities											
Project Loan - principal repayment		(1,046,609)	(1,193,134)	(1,360,173)	(1,550,597)	(1,767,681)	(133,007)	(151,629)	(172,857)	(197,056)	(224,644)
Working Capital Loan - principal repayment		(2,601,757)	-	-	-	-	-	-	-	-	-
Short term debt principal repayment		-	(4,204,486)	(560,794)	-	-	-	-	-	-	-
Additions to Project Loan	6,918,194	-	-	-	-	879,193	-	-	-	-	-
Additions to Working Capital Loan	2,601,757	-	-	-	-	-	-	-	-	-	-
Issuance of shares	9,519,951	-	-	-	-	879,193	-	-	-	-	-
Purchase of (treasury) shares											
Cash provided by / (used for) financing activities	19,039,901	(3,648,366)	(5,397,620)	(1,920,967)	(1,550,597)	(9,294)	(133,007)	(151,629)	(172,857)	(197,056)	(224,644)
Investing activities											
Capital expenditure	(13,836,387)	-	-	-	-	(14,032,029)	-	-	-	-	-
Cash (used for) / provided by investing activities	(13,836,387)	-	-	-	-	(14,032,029)	-	-	-	-	-
NET CASH	500,000	(4,704,486)	(560,794)	4,913,399	7,360,243	708,785	13,708,727	14,611,758	15,540,232	16,483,006	54,105,595

# **13 KEY ASSUMPTIONS**

## 13.1 Operating Cost Assumptions

Description	Details
Administration Benefit Expenses	3% of Administration Cost
Office Expenses (Stationery, Entertainment etc)	7% of Administration expenses
Communication Expenses	7% of Administration Cost
Promotional Expenses	0.3% of Revenue
Professional Fee	0.05% of Revenues
Depreciation Method	Straight Line depreciation
Depreciation Rate	10% on Machinery 10% on Office Equipment 10% on Furniture & Fixture
Inflation Growth Rate	10%
Electricity Price Growth Rate	10%
Salaries Growth Rate	10%

## **13.2 Production Cost Assumptions**

Raw Material	Consumption / Piece	Rate (Rs.)
Fabric Basic (Meter)	1.30	250/M
Fabric Stretchable (Meter)	1.30	350/M
Pocket Lining (Meter)	0.2	100/M
Stitching Thread (Meter) (Basic and Stretchable)	350	0.03 and 0.04
Imported Button (Basic and Stretchable)	1	5 / Unit and 6 / Unit
4.5 YG Zip (Basic)	1	18
4.5 YG Zip (Export Quality)	1	25
Main Label (Basic and Stretchable)	1	5 / Unit and 7 / Unit
Care & Size Label	1	2 / Unit
Rewet Per Piece (Basic and Stretchable)	6	9 / Unit and 12 / Unit
Packing Cost (Basic and Stretchable)	1	15 / Piece and 18 /



		Piece
Tag (Basic and Stretchable)	1 and 3	12 / Piece and 15 / Piece

## 13.3 Revenue Assumptions

Description	Details
Growth in Sales Price	10%
Days Operational / Year	330
Maximum Operational Capacity (Per Year)	495,000
Production Capacity in First Year	70%
Percentage Increase in Production Capacity every Year	5%
Maximum Production Capacity	90%

# 13.4 Financial Assumptions

Description	Details
Debt	50%
Equity	50%
Interest Rate on Debt	14%
Debt Tenure	5 Years
Debt Payment / Year	1

