
Pre-Feasibility Study

LEATHER GARMENTS MANUFACTURING UNIT



Small and Medium Enterprises Development Authority

Ministry of Industries & Production

Government of Pakistan

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1 DISCLAIMER

This information memorandum is to introduce the subject matter and provide a general idea and information on the said matter. 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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2 EXECUTIVE SUMMARY

This proposed project presents details about the investment opportunity in the area of leather garments manufacturing. The product being focused is leather jackets, biker jackets and leather coats. This unit is also capable of manufacturing leather key rings, credit card holders, ladies bill folders and other small articles of leather without any addition of machinery. Quality hides & skins are available in the country and the tanning industry is well equipped to manufacture high quality finished leather.

USA, Germany, France, United Kingdom and Italy are the major importers of Leather Garments. These countries have imported 48% of Leather Garments from the world in 2015. Pakistan has contributed 9% to the world exports during the same year, which shows the potential and gap in the export market which can be attained by focusing on technology, skilled labour and compliance with international standards. Government is also providing rebate on the export of leather products.

Leather garments manufacturing business venture entails a total investment of about Rs. 24.29 million. This includes a capital investment of Rs. 22.22 million and a sum of Rs. 2.07 million as initial working capital. The project is financed through 50% debt and 50% equity. The Net Present Value (NPV) of the project is around Rs. 20.82 million with an Internal Rate of Return (IRR) of 33% and a payback period of 3.81 years. The project will generate direct employment opportunity for 20 persons and many others who will be on daily wages.

Higher return on investment and a steady growth of business is expected with the entrepreneur having some prior experience or education in the related field of business. This pre-feasibility encompasses essential information regarding various aspects of starting a Leather Garments Manufacturing Unit business in Pakistan.

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 **Leather Garments Manufacturing Unit** by providing them with a general understanding of the business with the intention of support 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 reveals 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.

5 BRIEF DESCRIPTION OF PROJECT & PRODUCT

The proposed project provides information on one of the sub sectors of leather manufacturing in Pakistan namely Leather Garments. This sub sector offers aspiring entrepreneurs a potent opportunity to establish their business in one of the top export oriented sectors of Pakistan. Easy and sustained access to high quality raw material coupled with availability of skilled labor presents this sub sector as an attractive opportunity for start-ups to venture into leather garments manufacturing in Pakistan.

This is not a seasonal business as the demand in international market is always there. However, during the winter season in Europe and other northern countries its demand increases. Other than that, the event of Eid-ul-Adha becomes the source for cheaper raw material as a large number of animals are slaughtered during this time.

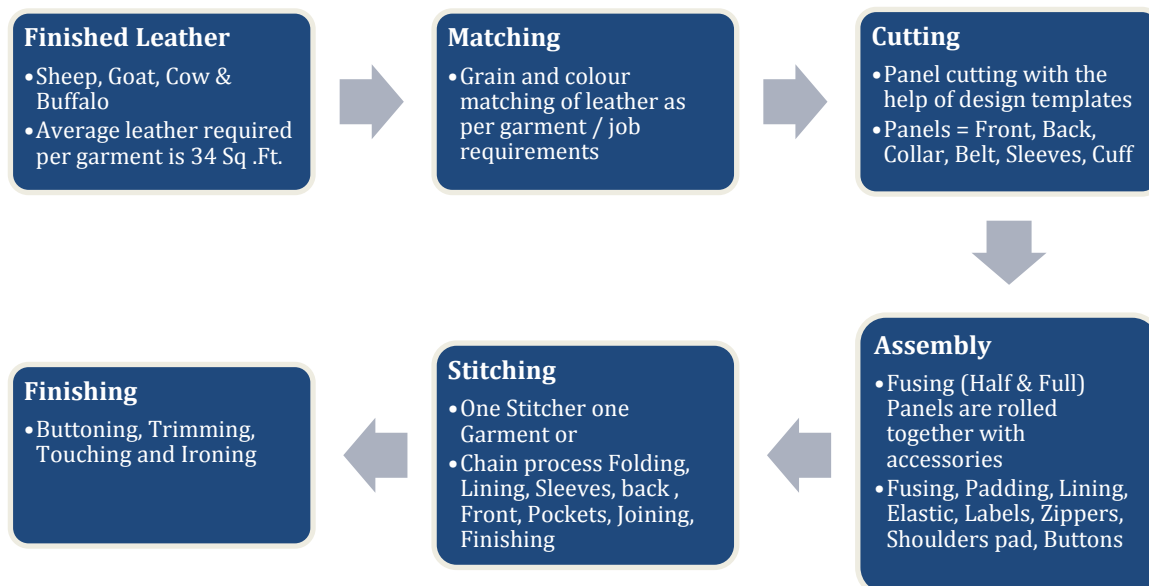
This proposed project provides details about investment opportunity in the area of leather garments manufacturing focusing on leather jackets, biker jackets and coats for men, women and children. This unit is also capable of manufacturing leather key rings, credit card holders, ladies bill folders and other small articles of leather without any additional machinery requirement. The leather garments manufacturing unit will primarily focus on exports, catering the international leather markets.

This pre-feasibility is based on a unit with 30 stitching machines with the capacity to manufacture / stitch 45 garments per day on 8 hours shift.

5.1 Production Process Flow

The process flow of proposed unit will be as follow:

Figure: Process Flow Diagram of Leather Garments Manufacturing



5.2 Installed and Operational Capacities

This pre-feasibility is based on 30 stitching machines with a capacity of manufacturing / stitching 45 garments per 8 hours shift. Total number of garments produced in year one would be 8,100 achieving 60% of the total installed capacity, while maximum capacity (90%) will be achieved with production reaching at 12,150 garments in Year 7.

6 CRITICAL FACTORS

The most critical considerations / factors for the success of this project are as follows:

- ⇒ Awareness about trends in international leather industry especially garments.
- ⇒ Higher return on investment and a steady growth of business is closely associated with continuous training and capacity building of the entrepreneur. Prior experience / education in the related field of business can be a big advantage.
- ⇒ Strict compliance regarding local and international environmental regulations.
- ⇒ Garments must be made from good quality leather conforming to the international standards like REACH (Registration, Evaluation, Authorization & Restriction of Chemical substances) and by use of efficient stitching machinery.
- ⇒ Ensuring availability of skilled labor and quality raw material.
- ⇒ Stringent supervision of the production process from procurement to cutting and stitching.
- ⇒ Ensuring continuous flow of export orders through aggressive marketing (website, social media) and international networking.

7 GEOGRAPHICAL POTENTIAL FOR INVESTMENT

Lahore, Karachi and Sialkot are three key clusters of leather manufacturing. Availability of skilled labor is important while selecting a location; all the above cities have adequate availability of skilled labor, raw material and support infrastructure. Leather Goods Manufacturing Unit can be established in the suburbs / periphery areas of these cities.

8 POTENTIAL TARGET CUSTOMERS / MARKETS

USA, Germany, France, United Kingdom and Italy are the major importers of Leather Garments. These countries have imported 1,687.90 million US dollars Leather Garments from the world in 2015 which is 48% of the world's imports of Leather Garments. Pakistan has exported 325.34 million US dollars Leather Garments in 2015 which is 9% of the world Leather Garments demand. This figure can be increased by focusing on technology, skilled labor and compliance with

international standards which ultimately increase the demand of Leather Garments from Pakistan.

Export market usual customers include chain stores and major leather product brands in Europe and USA.

9 PROJECT COST SUMMARY

A detailed financial model has been developed to analyze the commercial viability of Leather Garments Manufacturing Unit. Various cost 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.

9.1 Project Economics

The installed production capacity of the project is 13,500 leather garments per year. However, during first year of operations it will operate at 60% of the installed capacity, producing 60% leather garments.

The following table shows Internal Rate of Return, Payback Period and Net Present Value of the proposed venture.

Table 1: Project Economics

Description	Details
Internal Rate of Return (IRR)	33%
Payback Period (Yrs.)	3.81
Net Present Value (Rs.)	20,824,644

9.2 Project Financing

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

Table 2: Project Financing

Description	Details
Total Equity (50%)	Rs. 12,143,866
Bank Loan (50%)	Rs. 12,143,866
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 3: Project Cost

Description	Amount (Rs.)
Capital Cost	
Land	7,500,000
Building / Infrastructure	8,310,000
Machinery & Equipment	3,507,000
Furniture & Fixtures	788,000
Office Equipment	513,000
Pre-Operating Costs	1,602,717
Total Capital Costs	22,220,717
Working Capital	
Equipment Spare Part Inventory	98,886
Raw Material Inventory	1,668,129
Cash	300,000
Total Working Capital	2,067,015
Total Project Cost	24,287,731

9.4 Space Requirement

Approximately 1.50 kanal of land would be required for establishment of the proposed size unit. The area has been calculated on the basis of space required for production hall, management offices, storage and dispensary / health care facility for workers (in case of any medical emergency). However, units operating in the industry do not follow any set pattern. Following table shows calculations for project space requirement.

The cost of land is estimated at Rs. 5.00 million per kanal; hence total cost of required land is Rs. 7.50 million. The land could be purchased in any commercial / industrial area of Lahore, Karachi or Sialkot where its clusters exist; or in any other place where quality raw material (leather) and skilled labor are easily available. The cost of construction of building for the proposed facility is provided in the table below:

Table 4: Space Requirement

Description	Estimated Area (Sq. ft)	Unit Cost (Rs. / Sq.ft)	Total Cost (Rs.)
Management / Admin Offices	800	1,800	1,440,000
Factory Area	4,000	1,200	4,800,000
Store	1,000	1,500	1,500,000
Open Area / Drive Way	700	100	70,000
Public Health Facilities	250	2,000	500,000
Total	6,750		8,310,000

9.5 Machinery & Equipment Requirement

Plant, machinery and equipment required for the proposed project are stated below:

Table 5: Machinery & Equipment Requirement

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Lock Stitch Machine Single Needle	30	45,000	1,350,000
Lock Stitch Machine Double Needle	2	100,000	200,000
Fusing Machine	1	80,000	80,000
Skiving Machine	1	150,000	150,000
Cutting Tables	2	20,000	40,000
Electric Iron	4	3,000	12,000
Store Racks	10	15,000	150,000
Checking Tables	3	7,000	21,000
Snap Attachment Machine (Manual)	1	15,000	15,000
Strapping Machine	1	100,000	100,000
Tools, gauges, etc.	1	100,000	100,000
Over lock Machine (3 Threads)	1	25,000	25,000
Electrification	38	3,000	114,000
Generator (50KVA)	1	900,000	900,000
Weigh Scale (100 kg)	1	50,000	50,000
Miscellaneous	1	200,000	200,000
Total Machinery & Equipment			3,507,000

9.6 Furniture & Fixtures Requirement

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

Table 6: Furniture & Fixtures Requirement

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Office / Visitor chairs	10	6,000	60,000
Office tables	5	10,000	50,000
Factory Chairs	40	4,000	160,000
Machine base table	34	2,000	68,000
Ceiling Fans	20	3,000	60,000
AC 1.5 Tons	2	60,000	120,000
Industrial Air Coolers	2	40,000	80,000
Lights	1	40,000	40,000
Storage Racks, etc	1	100,000	100,000
Fire Fighting Equipment	1	50,000	50,000
Total Furniture & Fixtures			788,000

9.7 Office Equipment Requirement

Following office equipment will be required for the proposed unit:

Table 7: Office Equipment Requirement

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Computer Laptop	2	80,000	160,000
Computer Desktop	4	40,000	160,000
UPS	4	14,000	56,000
Computer Printer	3	15,000	45,000
Scanner Flat Bed	1	10,000	10,000
Telephone	6	2,000	12,000
Fax	1	20,000	20,000
Miscellaneous	1	50,000	50,000
Total Office Equipment			513,000

9.8 Raw Material Requirements

Leather garments are categorized according to the type of leather used. The different kinds of leather used are; cow, goat, buffalo and sheep leathers. The sale price of leather garments also depends on leather type. The garments made from cow and sheep leather are expensive as compared to garments from buffalo and goat leather.

On average, raw material required for a single leather garment is given in table below:

Table 8: Raw Material Requirements

Description	Requirement	Cost / Unit	Total Cost (Rs.)
Leather	34 Sq.ft.	110	3,740
Lining	2 Meter	70	158
Wadding	2 Meter	80	180
Accessories	1	200	200
Packing	1	50	50
Cutting	1	80	80
Stitching	1	750	750
Total Cost per Garment (Avg.)			5,158

9.9 Human Resource Requirement

Following table provides details of human resource required for this venture:

Table 9: Human Resource Requirement

Description	No. of Employees	Monthly Salary Per Person (Rs.)
Owner / Manager	1	100,000
Merchandiser	1	50,000
Production In charge	1	40,000
Pattern Master	1	30,000
Accountant	1	25,000
Store In charge	1	20,000
Purchaser	1	20,000
QC Inspectors	2	18,000
Mechanic	1	18,000
Export Documentation Officer	1	18,000
Semi-Skilled Workers	3	16,000
Security Guard	2	15,000
Packers	2	14,000
Sweeper	1	14,000
Office Boy	1	14,000
Total	20	

9.10 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. 1.54 million per annum. Furthermore, promotional expenses are estimated to be 1.0% of net revenue.

9.11 Revenue Generation

Based on the 60% capacity utilization, sales revenue during the first year of operations is estimated as under:

Table 10: Revenue Generation – Year 1

Description	Sales Price (Rs. / Unit)	First Year Production (Units)	First Year Sales Revenue (Rs.)
Leather Garments (Leather Jackets, Biker Jackets, Coats, etc.)	7,420	8,100	60,102,000
Less: Finished Goods Inventory	7,420	(338)	(2,504,250)
Total		7,763	57,597,750

10 CONTACT DETAILS

In order to facilitate potential investors, contact details of private sector Service Providers relevant to the proposed project are given as under:

10.1 Machinery Suppliers

Name of Supplier	Address	Contact Number
Rex Machinery (Pvt) Ltd	Rex market, 6 Allama Iqbal Road, Lahore	042-36375524
Al Mahmood Sewing Machine Company	7-Rex Market, 6-Allama Iqbal Road, Lahore	042-36311300
Inam Sewing Machine	Madina Market, Defense Road, Sialkot	0324-6131947

10.2 Leather and Accessories Suppliers

Name of Supplier	Address	Contact Number
F.K. Leather	Manga Mandi Road, Niaz Nagar, Kasur	049-2761413

Kasur Tanneries (Pvt) Ltd.	Inside Din Garh, Kasur.	049-2763535
Mehar Dhaga Store	Naseem Hayat Market, Sialkot	052-4582497

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
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 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
Punjab Small Industries Corporation	www.psic.gop.pk
Sindh Small Industries Corporation	www.ssic.gos.pk
Punjab Vocational Training Council (PVTC)	www.pvtc.gop.pk
Technical Education and Vocational Training Authority (TEVTA)	www.tevta.org
Punjab Industrial Estates (PIE)	www.pie.com.pk
Faisalabad Industrial Estate Development and Management Company (FIEDMC)	www.fiedmc.com.pk
Pakistan Leather Garments Manufacturers & Exporters Association	www.plgmea.pk
Pakistan Institute of Fashion Design.	www.pifd.edu.pk
Pakistan Tanners Association	www.pakistantanners.org

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	57,597,750	71,391,994	84,591,478	99,716,939	117,021,578	136,789,975	159,341,836	175,682,693	193,250,962	212,576,058	
Add: Rebate on Export	2,453,664	3,041,299	3,603,597	4,247,942	4,985,119	5,827,253	6,787,962	7,484,083	8,232,491	9,055,740	
Less: Turnover Tax	575,978	713,920	845,915	997,169	1,170,216	1,367,900	1,593,418	1,756,827	1,932,510	2,125,761	
Export Development Surcharge	143,994	178,480	211,479	249,292	292,554	341,975	398,355	439,207	483,127	531,440	
Net Revenue	59,331,442	73,540,893	87,137,682	102,718,419	120,543,928	140,907,354	164,138,025	180,970,742	199,067,816	218,974,598	
<i>Cost of sales</i>											
Raw Material Cost	40,035,094	49,623,209	58,797,918	69,311,336	81,339,460	95,080,094	110,755,461	122,113,678	134,325,045	147,757,550	
Operation costs 1 (direct labor)	2,530,000	2,894,692	3,184,893	3,504,079	3,855,158	4,241,325	4,666,095	5,144,613	5,659,074	6,224,982	
Operating costs 2 (machinery maintenance)	1,186,629	1,617,900	2,108,732	2,734,364	3,529,767	4,538,654	5,815,610	7,053,216	8,534,391	10,326,613	
Operating costs 3 (direct electricity)	1,182,577	1,465,796	1,736,803	2,047,354	2,402,647	2,808,525	3,271,552	3,607,057	3,967,762	4,364,539	
Total cost of sales	44,934,300	55,601,596	65,828,345	77,597,134	91,127,032	106,668,598	124,508,718	137,918,563	152,486,273	168,673,683	
Gross Profit	14,397,142	17,939,296	21,309,336	25,121,285	29,416,896	34,238,755	39,629,307	43,052,179	46,581,543	50,300,914	
<i>General administration & selling expenses</i>											
Administration expense	3,252,000	3,577,200	3,934,920	4,328,412	4,761,253	5,237,379	5,761,116	6,337,228	6,970,951	7,668,046	
Administration benefits expense	97,560	107,316	118,048	129,852	142,838	157,121	172,833	190,117	209,129	230,041	
Electricity expense	362,040	398,244	438,068	481,875	530,063	583,069	641,376	705,514	776,065	853,671	
Water expense	60,000	66,000	72,600	79,860	87,846	96,631	106,294	116,923	128,615	141,477	
Transportation Charges	822,825	927,169	998,719	1,070,269	1,141,819	1,213,369	1,284,919	1,287,900	1,287,900	1,287,900	
Travelling expense	650,400	715,440	786,984	865,682	952,251	1,047,476	1,152,223	1,267,446	1,394,190	1,533,609	
Communications expense (phone, fax, mail, internet, etc.)	162,600	178,860	196,746	216,421	238,063	261,869	288,056	316,861	348,548	383,402	
Office expenses (stationary, entertainment, janitorial services, etc)	97,560	107,316	118,048	129,852	142,838	157,121	172,833	190,117	209,129	230,041	
Promotional expense	593,314	735,409	871,377	1,027,184	1,205,439	1,409,074	1,641,380	1,809,707	1,990,678	2,189,746	
Professional fees (legal, audit, consultants, etc.)	296,657	367,704	435,688	513,592	602,720	704,537	820,690	904,854	995,339	1,094,873	
Depreciation expense	947,600	947,600	947,600	947,600	947,600	1,575,044	1,575,044	1,575,044	1,575,044	1,575,044	
Amortization of pre-operating costs	320,543	320,543	320,543	320,543	320,543	-	-	-	-	-	
Bad debt expense	593,314	735,409	871,377	1,027,184	1,205,439	1,409,074	1,641,380	1,809,707	1,990,678	2,189,746	
Subtotal	8,256,414	9,184,210	10,110,718	11,138,328	12,278,711	13,851,762	15,258,146	16,511,418	17,876,265	19,377,597	
Operating Income	6,140,728	8,755,086	11,198,618	13,982,958	17,138,185	20,386,993	24,371,162	26,540,761	28,705,278	30,923,317	
Gain / (loss) on sale of machinery & equipment	-	-	-	-	1,402,800	-	-	-	-	-	
Gain / (loss) on sale of office equipment	-	-	-	-	205,200	-	-	-	-	-	
Earnings Before Interest & Taxes	6,140,728	8,755,086	11,198,618	13,982,958	18,746,185	20,386,993	24,371,162	26,540,761	28,705,278	30,923,317	
Interest on short term debt	113,964	113,964	-	-	-	-	-	-	-	-	
Interest expense on long term debt (Project Loan)	1,471,005	1,226,715	946,387	624,704	255,566	-	-	-	-	-	
Interest expense on long term debt (Working Capital Loan)	91,987	-	-	-	-	-	-	-	-	-	
Subtotal	1,676,956	1,340,679	946,387	624,704	255,566	-	-	-	-	-	
Earnings Before Tax	4,463,773	7,414,407	10,252,231	13,358,254	18,490,619	20,386,993	24,371,162	26,540,761	28,705,278	30,923,317	
Tax	861,631	1,817,542	2,810,780	3,897,888	5,694,216	6,357,947	7,752,406	8,511,766	9,269,346	10,045,660	
NET PROFIT/(LOSS) AFTER TAX	3,602,141	5,596,865	7,441,451	9,460,366	12,796,403	14,029,046	16,618,756	18,028,995	19,435,931	20,877,657	

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											
<i>Current assets</i>											
Cash & Bank	300,000	-	2,723,634	7,587,108	13,895,494	16,265,391	28,987,296	44,178,393	60,365,539	77,683,953	114,337,771
Accounts receivable		4,876,557	5,460,507	6,603,229	7,802,306	9,175,165	10,744,573	12,536,111	14,182,552	15,618,023	17,179,825
Finished goods inventory		1,953,665	2,324,182	2,751,035	3,242,220	3,806,873	4,455,445	5,199,900	5,746,607	6,353,595	7,028,070
Equipment spare part inventory	98,886	148,307	212,630	303,287	430,661	609,129	858,559	1,145,393	1,524,519	2,029,134	-
Raw material inventory	1,668,129	2,274,397	2,964,395	3,843,891	4,962,046	6,380,310	8,175,419	9,915,209	11,997,403	14,516,857	-
Total Current Assets	2,067,015	9,252,927	13,685,349	21,088,550	30,332,727	36,236,869	53,221,293	72,975,006	93,816,619	116,201,563	138,545,666
<i>Fixed assets</i>											
Land	7,500,000	7,500,000	7,500,000	7,500,000	7,500,000	7,500,000	7,500,000	7,500,000	7,500,000	7,500,000	7,500,000
Building/Infrastructure	8,310,000	7,894,500	7,479,000	7,063,500	6,648,000	6,232,500	5,817,000	5,401,500	4,986,000	4,570,500	4,155,000
Machinery & equipment	3,507,000	3,156,300	2,805,600	2,454,900	2,104,200	1,749,500	1,398,800	1,048,100	697,400	346,700	-
Furniture & fixtures	788,000	709,200	630,400	551,600	472,800	394,000	315,200	236,400	157,600	78,800	-
Office equipment	513,000	410,400	307,800	205,200	102,600	826,192	660,953	495,715	330,477	165,238	-
Total Fixed Assets	20,618,000	19,670,400	18,722,800	17,775,200	16,827,600	22,354,250	20,779,206	19,204,162	17,629,118	16,054,073	14,479,029
<i>Intangible assets</i>											
Pre-operation costs	1,602,717	1,282,173	961,630	641,087	320,543	-	-	-	-	-	-
Total Intangible Assets	1,602,717	1,282,173	961,630	641,087	320,543	-	-	-	-	-	-
TOTAL ASSETS	24,287,731	30,205,500	33,369,779	39,504,837	47,480,870	58,591,119	74,000,499	92,179,168	111,445,737	132,255,636	153,024,695
Liabilities & Shareholders' Equity											
<i>Current liabilities</i>											
Accounts payable		3,587,213	4,472,723	5,346,890	6,364,801	7,550,027	8,930,361	10,490,275	11,727,848	13,101,816	12,993,219
Short term debt	-	1,417,864	-	-	-	-	-	-	-	-	-
Total Current Liabilities	-	5,005,077	4,472,723	5,346,890	6,364,801	7,550,027	8,930,361	10,490,275	11,727,848	13,101,816	12,993,219
<i>Other liabilities</i>											
Long term debt (Project Loan)	11,110,358	9,454,416	7,554,184	5,373,624	2,871,381	-	-	-	-	-	-
Long term debt (Working Capital Loan)	1,033,507	-	-	-	-	-	-	-	-	-	-
Total Long Term Liabilities	12,143,866	9,454,416	7,554,184	5,373,624	2,871,381	-	-	-	-	-	-
<i>Shareholders' equity</i>											
Paid-up capital	12,143,866	12,143,866	12,143,866	12,143,866	12,143,866	12,143,866	12,143,866	12,143,866	12,143,866	12,143,866	12,143,866
Retained earnings		3,602,141	9,199,006	16,640,457	26,100,823	38,897,226	52,926,272	69,545,028	87,574,023	107,009,954	127,887,611
Total Equity	12,143,866	15,746,007	21,342,872	28,784,323	38,244,688	51,041,092	65,070,138	81,688,894	99,717,889	119,153,820	140,031,477
TOTAL CAPITAL AND LIABILITIES	24,287,731	30,205,500	33,369,779	39,504,837	47,480,870	58,591,119	74,000,499	92,179,168	111,445,737	132,255,636	153,024,695

12.3 Cash Flow Statement

Calculations											SMEDA
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		3,602,141	5,596,865	7,441,451	9,460,366	12,796,403	14,029,046	16,618,756	18,028,995	19,435,931	20,877,657
Add: depreciation expense		947,600	947,600	947,600	947,600	947,600	1,575,044	1,575,044	1,575,044	1,575,044	1,575,044
amortization of pre-operating costs		320,543	320,543	320,543	320,543	320,543	-	-	-	-	-
Accounts receivable		(4,876,557)	(583,950)	(1,142,722)	(1,199,076)	(1,372,859)	(1,569,408)	(1,791,538)	(1,646,441)	(1,435,471)	(1,561,802)
Finished goods inventory		(1,953,665)	(370,517)	(426,853)	(491,185)	(564,653)	(648,572)	(744,455)	(546,707)	(606,988)	(674,475)
Equipment inventory	(98,886)	(49,422)	(64,323)	(90,656)	(127,374)	(178,468)	(249,430)	(286,834)	(379,125)	(504,616)	2,029,134
Raw material inventory	(1,668,129)	(606,268)	(689,998)	(879,496)	(1,118,155)	(1,418,264)	(1,795,109)	(1,739,790)	(2,082,194)	(2,519,455)	14,516,857
Accounts payable		3,587,213	885,510	874,167	1,017,911	1,185,227	1,380,334	1,559,914	1,237,573	1,373,968	(108,597)
Other liabilities		-	-	-	-	-	-	-	-	-	-
Cash provided by operations	(1,767,015)	971,586	6,041,730	7,044,034	8,810,629	11,715,528	12,721,905	15,191,096	16,187,146	17,318,415	36,653,818
<i>Financing activities</i>											
Project Loan - principal repayment		(1,655,942)	(1,900,232)	(2,180,560)	(2,502,243)	(2,871,381)	-	-	-	-	-
Working Capital Loan - principal repayment		(1,033,507)	-	-	-	-	-	-	-	-	-
Short term debt principal repayment		-	(1,417,864)	-	-	-	-	-	-	-	-
Additions to Project Loan	11,110,358	-	-	-	-	-	-	-	-	-	-
Additions to Working Capital Loan	1,033,507	-	-	-	-	-	-	-	-	-	-
Issuance of shares	12,143,866	-	-	-	-	-	-	-	-	-	-
Cash provided by / (used for) financing activities	24,287,731	(2,689,450)	(3,318,096)	(2,180,560)	(2,502,243)	(2,871,381)	-	-	-	-	-
<i>Investing activities</i>											
Capital expenditure	(22,220,717)	-	-	-	-	(6,474,250)	-	-	-	-	-
Acquisitions											
Cash (used for) / provided by investing activities	(22,220,717)	-	-	-	-	(6,474,250)	-	-	-	-	-
NET CASH	300,000	(1,717,864)	2,723,634	4,863,474	6,308,386	2,369,897	12,721,905	15,191,096	16,187,146	17,318,415	36,653,818

13 KEY ASSUMPTIONS

13.1 Operating Cost Assumptions

Description	Details
Machine Maintenance (% Of Net Revenue)	2%
Communication Expense (% of Admin Expenses)	5%
Electricity Price Growth Rate	10%
Salaries Growth Rate	10%
Bad Debt Expense (%age of Net Revenue)	1%

13.2 Production Assumptions

Description	Details
Number of Machines Installed	30
Capacity Utilization (Year 1)	60%
Maximum Capacity Utilization	90%
Total Production Per 8 Hour Shift (Units)	45
Annual Production Capacity (Units)	13,500
Hours Operational Per Day	8
Days Operational Per Year	300
Turnover Tax (%age of FoB Value)	1%
Export Development Surcharge (%age of FoB Value)	0.25%

13.3 Revenue Assumptions

Description	Details
Sales Price Growth Rate	10%
Rebate on Export (%age of FoB Value)	4.26%