
Pre-Feasibility Study

Denim and Leather Hand Embroidered Accessories and Apparel Unit



Small and Medium Enterprises Development Authority

Ministry of Industries & Production

Government of Pakistan

www.smeda.org.pk

HEAD OFFICE

4th Floor, Building No. 3, Aiwan-e-Iqbal Complex, Egerton Road,
Lahore
Tel: (92 42) 111 111 456, Fax: (92 42) 36304926-7
helpdesk@smeda.org.pk

REGIONAL OFFICE PUNJAB	REGIONAL OFFICE SINDH	REGIONAL OFFICE KPK	REGIONAL OFFICE BALOCHISTAN
3 rd Floor, Building No. 3, Aiwan-e-Iqbal Complex, Egerton Road Lahore, Tel: (042) 111-111-456 Fax: (042) 36304926-7 helpdesk.punjab@smeda.org.pk	5 TH Floor, Bahria Complex II, M.T. Khan Road, Karachi. Tel: (021) 111-111-456 Fax: (021) 5610572 helpdesk-khi@smeda.org.pk	Ground Floor State Life Building The Mall, Peshawar. Tel: (091) 9213046-47 Fax: (091) 286908 helpdesk-pew@smeda.org.pk	Bungalow No. 15-A Chaman Housing Scheme Airport Road, Quetta. Tel: (081) 831623, 831702 Fax: (081) 831922 helpdesk-qta@smeda.org.pk

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1 DISCLAIMER

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2 EXECUTIVE SUMMARY

Handmade embroidery has been in vogue in apparels and accessories because of its appeal, aesthetics and uniqueness as well as its intricate designs native to the area it is made in. A variety of needlework designing, sold in expensive boutiques and crafts shops, show sale value in national and international markets mainly because they are carefully hand crafted over a period of significant amount of time. Being hand crafted in a automated world of production and time taking as well as painstaking process make handmade embroidered apparel and accessories sought after items. Part of the demand for such products arise in the religious and cultural festivals and wedding season in Pakistan as the colours in hand made embroidery as well as design give a festive touch to apparel and accessories. Ethnic fashion fused with western trends has a huge demand in women fashion. Although there are a number of local manufacturers producing embroidered apparel and accessories but still a huge demand exists for potential investment in the embroidered apparel and accessories business in Pakistan. A successful entry in this part of cultural industry would be to exploit the trend of Ethnic fashion fused with western trend by producing embroidered denim, leather and apparel with western design touches.

This particular pre-feasibility study is for setting up a Denim and Leather Embroidered Accessories and Apparel Unit for women. The focus of the business would be to provide quality products like embroidered denim pants, leather clutches, wallets, small and large hand bags and apparel. All these products are proposed to be sold at the unit's outlet. The proposed business venture should preferably be located in any of the major urban cities of Pakistan.

The proposed business venture entails a total investment of about Rs. 26.26 million. This includes a capital investment of Rs. 20.45 million and a sum of Rs. 5.81 million as working capital. Projected IRR, NPV and Payback period of the proposed project are 41%, Rs. 40.48 million and 3.13 years respectively. Higher return on investment and a steady growth of business is expected with the entrepreneur having some prior experience in the related field of business. The project will generate direct employment opportunity for 16 persons. The legal business status of this project is proposed as "sole proprietorship" or partnership.

The proposed unit can produce 71213 units yearly with 8 Machines on 12 operational hours per day, however, initial operational capacity utilization is assumed at 75%, whereas, maximum operational capacity utilization is at 90%.

The most critical considerations or factors for success of the project are proper advertisement of the products as well as the quality of the product, designs and colours of the embroidered patches. The unit can sell the products on its physical outlet as well as on the social media.

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 and Leather Embroidered Accessories and Apparel 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 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 is designed as a small scale commercial embroidered accessories and apparel unit. This unit will be capable producing embroidered denim pants, clutches, wallets, small and large hand bags as well as embroidered cotton Kurtas and scarves. The unit is capable of getting its own designed embroidered patterns made by artisans .The Patches are then sewn into different accessories and apparels designed specifically for each.

This sort of project is quite flexible in a way that there is no processing of raw materials required and each machine is independent in its working. The project can be started even with a single machine. Initially a few designs of each product would be a good market strategy but further market penetration and customer retention would depend on hiring a good designer and introduction of new design lines multiples times a year. The embroidered unit will sell its products on through its physical outlet as well as sell its items via social media.

The proposed business venture should preferably be located in any of the major urban cities of Pakistan. This unit will be capable of producing embroidered denim pants, clutches, wallets, small and large hand bags as well as embroidered cotton tunics (Kurtas) and scarves.

In addition to local markets in Karachi, Lahore and Islamabad, Peshawar and Quetta, an enormous export market for the product of the embroidered accessories and apparels units exists in USA,UK, Europe ,Canada, Gulf countries as well as in neighbouring countries of Iran, India and Afghanistan.

The proposed project will provide direct to 16 people. Financial analysis shows the unit shall be profitable from the very first year of operation

5.1 Production Process Flow

The production process starts with the receipt of the raw material and its inspection. The cotton fabric then is sent for cutting, tracing of patterns and designing after which it will get sent to the workshop for handmade embroidery. In the meanwhile the process of cutting denim, leather and clothing is done. Once enough patches are received by the factory, the embroidered patches are sewn into their purposed items and stitched. Embroidered denim pants and the embroidered apparel are then ironed. Finished Units are then packaged and sent to the warehouse or outlet for sale.

5.2 Installed and Operational Capacities

The pre-feasibility study is based on eight (8) machines. Two single needle lock stitching machines, two (2) over-lock machines, two (2) single flat bed Machines, one (1) skiving machines. The whole proposed unit can produce 71213 units yearly with these 8 Machines on 12 operational hours per day, however, initial operational capacity utilization is assumed at 75% (53409) units, whereas, maximum operational capacity utilization is at 90% and capacity utilization growth rate is 5%

The boutique business's installed capacity will largely depend on the market size it will operate in and the potential clientele. Out of 53409 dresses produced will be sold by the boutique outlet whereas rest of 182 dresses will be considered as finished goods inventory.

The unit will produce apparel and accessories utilizing leather, Denim and cotton. The break of the different units produced of each material is given below;

Table 1: Category of Units

Product Mix	Installed Stitching Capacity	Production Percentage
Denim Jeans Stitching		
Jeans stitching Capacity	21,600	30%
Leather Bags and Wallets Stitching		

Clutches	2,700	4%
Small Hand Bags	675	1%
Large Hand Bags	338	0.5%
Wallets	2,700	4%
Apparels Stitching		
Kurta Plain	14,400	20%
Luxury Embroided Kurta with pants	7,200	10%
Dupata / Scarfs	21,600	30%
Total	71,213	100.00%

6 CRITICAL FACTORS

- Following critical factors will play a important role in the success of the business:
- The design of the embroidered patches and their color combinations must be selected considering current trends in view.
- Emphasis on the quality of the finished products especially bags.
- Employing and retaining skilled designers and Tailors.
- Quality management of the embroidered work of the artisans.
- Timely Incorporation of newest trends in the design of product mix.
- Reaching target audience through small scale advertisement through cable, social media and especially national handicrafts exhibitions.
- Selection of suppliers.
- Gradual diversification of the product mix.

7 GEOGRAPHICAL POTENTIAL FOR INVESTMENT

The recommended location for setting up the unit and outlet will be a semi elite area of the city as the product mix is equally attracts middle as well as the upper income classes. It is recommended to construct the whole factory and the workshop area.

Considering to that, major cities for instance Karachi, Lahore, Peshawar, Quetta, Rawalpindi, Islamabad, Multan, Sialkot, Faisalabad, Hyderabad and etc., with large urban sbase would be the potential investment areas for the proposed business.

8 POTENTIAL TARGET CUSTOMERS / MARKETS

There is a huge demand for hand embroidered accessories in the local as well as the international market. The target market for hand embroidered accessories would be females of age group 18 and above belonging to middle and upper income groups. Any embroidered items purchased by this income group will be considered a prized possession hence when provided of right quality and design hence making it possible to sell the items at prices that are high enough to provide good profit margins.

9 PROJECT COST SUMMARY

9.1 Project Economics

All the figures in this financial model have been calculated for estimated sales of Rs. 78,287,344 million in the year one. The capacity utilization during year one is worked out at 75% with 5% increase in subsequent years up to the maximum capacity utilization of 90%.

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)	41%
Payback Period (yrs.)	3.13%
Net Present Value (Rs.)	40.48 Million

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.2.0 Million
Bank Loan (50%)	Rs. 24.260 Million
Markup to the Borrower (%age / annum)	8%
Tenure of the Loan (Years)	8

9.3 Project Cost

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

Table 4: Project Cost

Capital Investment	Amount in Rs.
Land	7,560,000
Building/Infrastructure	9,320,000
Machinery & equipment	1,003,825
Furniture & fixtures	1,423,000
Office vehicles	353,500
Office equipment	238,000
Pre-operating costs	550,000
Total Capital Costs	20,448,325
Working Capital	
Equipment spare part inventory	163,195
Raw material inventory	4,352,816
Upfront insurance payment	17,675
Cash	1,278,369
Total Working Capital	5,812,055
Total Investment	26,260,380

9.4 Space Requirement

The space requirement for the proposed Denim and Leather Hand Embroidered and apparel Unit is estimated considering various facilities including management office, production hall, storage, open space, etc. Details of space requirement and cost related to land & building is given below;

Table 5: Space Requirement

Description	Estimated Area (Sq. ft)	Unit Cost (Rs.)	Total Cost (Rs.)
Management Building	600	2,500	1,500,000
Factory / Workshop Area	600	2,000	1,200,000
Outlet / Shop Area	800	3,500	2,800,000
Artisan Embroidery Hall	400	2,500	1,000,000
Worker Restrooms	300	1,500	450,000
Stock Warehouse	600	2,000	1,200,000
Parking Area	600	1,200	720,000
Total Infrastructure	4,200		9,320,000

9.5 Machinery & Equipment Requirement

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

Table 6: Machinery & Equipment

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Single Needle Lock Stitching Machine	2	40,000	80,000
Over Lock Machine	2	55,000	110,000

Single Needle Flat Bed Machine	1	55,000	55,000
Skiving Machine	1	120,000	120,000
Creasing Tools	1	20,000	20,000
Denim Cutting Machine (Automatic)	1	50,000	50,000
Denim Stitching Machine	1	50,000	50,000
Generator for Workshop 10 KVA*	1	350,000	350,000
Generator for Outlet (2.5 KVA)	1	90,000	90,000
Scissors	5	500	2,500
Tools and Knives,	1	35,000	35,000
Pattern and Guages	1	40,000	40,000
Chalks (Pack)	4	150	600
Cutting Scales	4	150	600
Measuring scales	5	25	125
Total Machinery & Equipment			1,003,825

9.6 Furniture & Fixtures Requirement

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

Table 7: Furniture & Fixture

Description	Quantity/Area	Cost/Rate	Amount
Furniture and Fixture for Workshop/Stitching Unit			207,500
Office Tables 2.5x4	1	20,000	20,000
Office Chairs	2	7,000	14,000

Visitors Chairs	2	5,000	10,000
Work Shop Chairs	13	3,500	45,500
Tables for Machines	4	6,000	24,000
Hanging Units and Storage Cabinets	6	10,000	60,000
Cutting Tables at Work shop	4	6,000	24,000
Iron Table	2	5,000	10,000
Furniture for Outlet			71,000
Grace Office Chair	1	6,000	6,000
Visitors Chairs	4	5,000	20,000
Mannequin	5	5,000	25,000
Hanging Units and Storage Cabinets	2	10,000	20,000
Interior Decoration Expenses of Outlet			792,800
Marble Flooring	800	650	520,000
False Ceiling	800	75	60,000
Wall Papers for Outlet	800	66	52,800
Main door	1	25,000	25,000
Shop Facia	1	55,000	55,000
Lighting for Outlet	1	20,000	20,000
Glass Racks for bag Display	1	50,000	50,000
Try Room decoration etc	1	10,000	10,000
Airconditioners (1.5 ton Split) for Outlet	4	60,000	240,000

Total Energy Savers, Fans, Electric Irons			111,700
Energy Savers	60	195	11,700
Pedastal Fans for Embroidery Area	10	4,500	45,000
Fans For mangement Building	6	3,000	18,000
Industrial Exhaust Fans for Factory	4	7,000	28,000
Electric Iron	3	3,000	9,000
Total Furniture & Fixtures			1,423,000

9.7 Office Equipment Requirement

Following office equipment will be required for the Denim and Leather Hand Embroidered Accessories and Apparel Unit.

Table 8: Office Equipment

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Laptop (Used/New)	3	60000	180000
Desktop Computers with UPS	2	25000	50000
Printer	4	2000	8000
Total			238000

9.8 Raw Material Cost Calculations.

Following table shows raw material requirements for Denim and Leather Hand Embroidered Accessories and Apparel Unit with per unit cost.

Table 9: Raw Material Cost Calculations:

Description	Cost / Piece (Rs.)
Denim Jeans Stitching	
Fabric	113.0
Pocket Lining	5
4.5 YG Zip (Basic)	18
Main Label (Basic and Stretchable)	2

Care & Size Label	5
Packing Cost (Basic and Stretchable)	15
Embroidery Cost (Thread and Cotton Fabric)	220
Embroidery Artist Wage	225.00
Total	603
Leather Bags and Wallets Stitching	
Clutches	
Leather	240
Lining	160
Zip	10
Misc. (Buttons, Matels, Tassels, etc.)	25
Embriodary Artist Wage	540
Total	975
Wallets	
Leather	60
Lining	40
Metal Corners and Metal Hooks	7
Zip	10
Embriodary Artist Wage	113
Total	230
Small Hand Bags	
Leather	450
Lining	300
Zip	36
Misc. (Tassels, Metal Buttons, etc.)	30
Embroidery Artist Wage	1,200
Total	2,016
Large Hand Bags	
Leather	660
Lining	440
Zip	20
Misc. (Tassels, Metal Buttons, etc.)	50
Embriodary Artist Wage	2,640
Total	3,810

Apparels Stitching	
Kurta Plain	
Fabric	320
Accessories	40
Thread	7
Buttons	5
Embroidery Artist Wage	160
Total	532
Luxury Embroidered Kurta with pants	
Fabric	400
Accessories	40
Thread	20
Buttons	10
Embroidery Artist Wage	5,760
Total	6,230
Dupata / Scarfs	
Fabric	120
Accessories (Mirrors, etc)	15
Embroidery Artist Wage	75
Total	210

The raw material requirement in subsequent years will be determined according the capacity utilization of the unit. The purchasing cost of raw material is assumed to increase at annually. However, it is only estimated, as the market price of fabric and other accessories may change.

Table 10: Fabric/Material used per unit

Description	Fabric used Per piece (Meters)	Cost of Fabric Per unit (Meters)
Denim	1.30	113.00
Leather Bags and Wallets		
Clutches	2.00	120.00
Wallets	0.50	60.00

Small Hand Bags	3.75	120.00
Large Hand Bags	5.50	120.00
Apparel		
Kurta	2.00	160.00
Luxury Embroidered Kurta	2.00	200.00
Duppatas	1.50	80.00

9.9 Human Resource Requirement

In order to run operations of *Denim and Leather Hand Embroidered Accessories and Apparel Unit* smoothly, details of human resources required along with number of employees and monthly salary are recommended as under;

Table 9: Human Resource Requirement

Description	No. of Employees	Monthly Salary per person (Rs.)
Owner/Manager	1	60000
Production Manager	1	40000
Designer	1	50000
Master Tailor	1	25000
Stichers	5	20000
Press/Iron man	2	18000
Skiver	1	20000
Over lock machine Operator	2	18000
Guard	2	18000
Total	16	

9.10 Utilities and other costs

An essential cost to be borne by the project is the cost of electricity and gas. The electricity expenses are estimated to be around Rs. 362,882 per month,

Furthermore, promotional expense being essential for marketing are estimated as 0.5 % of revenue.

9.11 Revenue Generation

Following tables provide assumption for revenues of the proposed boutique venture during first year of operation:

Table 10: Revenue Generation – Year 1

Product Mix	Sale Price per Unit (Rs.)	Weighted Avg. Sale Price (Rs.)
Denim Jeans Stitching		
Jeans stitching Capacity	725	219.91
Leather Bags and Wallets Stitching		
Clutches	1,400	53.08
Small Hand Bags	2,500	23.70
Large Hand Bags	6,000	28.44
Wallets	800	30.33
Apparels Stitching		
Kurta Plain	1,500	303.32
Luxury Embroided Kurta with pants	7,500	758.29
Dupata / Scarfs	600	181.99
Total		1,599

Table 11: Revenue Generation in First Year @ 75% Operational Capacity

Category of Units	No. of Units Dresses	Weighted Avg. Price	Revenues (Rs.)
Total Units	71,213		
First Year Production	53,409		
Finished Dresses Inventory	4451		
Dresses Sold during First Year	48,959	1,599	78,287,344

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 Machinery Suppliers

Name of Supplier	Address	Phone	Fax	E-mail	Website
Dastageer Engineering	12 A Lahore Rd, Saddar, Lahore, Punjab	0320- 7889734			

10.2 Technical Experts / Consultants

Name of Expert/Organization	Address	Phone	Fax	E-mail	Website
Doch Fashion House		0333 7865124			
Ahan Balochistan	Office No.05, Gulshan-e- Afrasiyab, IT University Road, Jinnah Town, Quetta.	081- 2302407, 9203820			

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 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 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
Pakistan Horticulture Development and Export Company (PHDEC)	www.phdec.org.pk
Punjab Vocational Training Council (PVTC)	www.pvtc.gop.pk
Technical Education and Vocational Training Authority (TEVTA)	www.tevta.org
Pakistan Readymade Garment Technical Training Institute	www.prgmea.org/prgtti/
Livestock & Dairy Development Department, Government of Punjab.	www.livestockpunjab.gov.pk
Punjab Industrial Estates (PIE)	www.pie.com.pk
Faisalabad Industrial Estate Development and Management Company (FIEDMC)	www.fiedmc.com.pk

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	78,287,344	99,685,884	116,543,759	135,776,350	150,048,655	165,053,520	181,558,872	199,714,759	219,686,235	241,654,859	
<i>Cost of sales</i>											
Material Cost of Dresses	52,233,792	66,511,029	77,758,705	90,590,807	100,113,375	110,124,713	121,137,184	133,250,903	146,575,993	161,233,592	
Cost of goods sold 2	-	-	-	-	-	-	-	-	-	-	
Operation costs 1 (direct labor)	5,654,000	6,749,463	7,426,695	8,171,601	9,030,569	9,933,626	10,926,988	12,019,687	13,221,656	14,543,821	
Operating costs 2 (machinery maintenance)	979,172	1,246,812	1,457,661	1,698,210	1,876,720	2,064,392	2,270,831	2,497,914	2,747,706	3,022,476	
Operating costs 3 (direct electricity)	343,986	438,009	512,081	596,586	659,297	725,227	797,750	877,525	965,277	1,061,805	
Total cost of sales	59,210,950	74,945,312	87,155,142	101,057,204	111,679,962	122,847,958	135,132,754	148,646,029	163,510,632	179,861,695	
Gross Profit	19,076,394	24,740,572	29,388,617	34,719,146	38,368,693	42,205,562	46,426,118	51,068,730	56,175,603	61,793,164	
<i>General administration & selling expenses</i>											
Administration expense	4,080,000	4,488,000	4,936,800	5,430,480	5,973,528	6,570,881	7,227,969	7,950,766	8,745,842	9,620,427	
Administration benefits expense	122,400	134,640	148,104	162,914	179,206	197,126	216,839	238,523	262,375	288,613	
Building rental expense	-	-	-	-	-	-	-	-	-	-	
Electricity expense	362,882	399,171	439,088	482,997	531,296	584,426	642,868	707,155	777,871	855,658	
Travelling expense	1,565,747	1,993,718	2,330,875	2,715,527	3,000,973	3,301,070	3,631,177	3,994,295	4,393,725	4,833,097	
Communications expense (phone, fax, mail, internet, etc.)	81,600	89,760	98,736	108,610	119,471	131,418	144,559	159,015	174,917	192,409	
Office expenses (stationary, entertainment, janitorial services, etc.)	81,600	89,760	98,736	108,610	119,471	131,418	144,559	159,015	174,917	192,409	
Promotional expense	391,437	498,429	582,719	678,882	750,243	825,268	907,794	998,574	1,098,431	1,208,274	
Depreciation expense	826,983	826,983	826,983	826,983	826,983	1,290,048	1,290,048	1,290,048	1,290,048	1,290,048	
Amortization of pre-operating costs	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	
Subtotal	7,585,324	8,589,600	9,527,645	10,577,071	11,559,705	13,115,120	14,283,588	15,569,472	16,984,513	18,541,627	
Operating Income	11,491,070	16,150,972	19,860,972	24,142,074	26,808,988	29,090,442	32,142,530	35,499,259	39,191,091	43,251,536	
Gain / (loss) on sale of machinery & equipment	-	-	-	-	401,530	-	-	-	-	-	
Gain / (loss) on sale of office equipment	-	-	-	-	47,600	-	-	-	-	-	
Gain / (loss) on sale of Furniture & Fixtures	-	-	-	-	284,600	-	-	-	-	-	
Earnings Before Interest & Taxes	11,491,070	16,150,972	19,860,972	24,142,074	27,684,118	29,090,442	32,142,530	35,499,259	39,191,091	43,251,536	
Interest expense on long term debt (Project Loan)	101,250	96,973	84,561	71,521	57,821	43,427	28,304	12,416	-	-	
Interest expense on long term debt (Working Capital Loan)	-	-	-	-	-	-	-	-	-	-	
Subtotal	101,250	96,973	84,561	71,521	57,821	43,427	28,304	12,416	-	-	
Earnings Before Tax	11,389,820	16,053,999	19,776,411	24,070,553	27,626,297	29,047,015	32,114,226	35,486,843	39,191,091	43,251,536	
Tax	3,208,936	4,841,399	6,144,243	7,647,193	8,891,703	9,388,955	10,462,479	11,642,894	12,939,381	14,360,537	
NET PROFIT/(LOSS) AFTER TAX	8,180,884	11,212,600	13,632,168	16,423,360	18,734,594	19,658,060	21,651,748	23,843,949	26,251,710	28,890,999	
Balance brought forward		8,180,884	19,393,484	33,025,651	49,449,012	68,183,605	87,841,666	109,493,414	133,337,362	159,589,072	
Total profit available for appropriation	8,180,884	19,393,484	33,025,651	49,449,012	68,183,605	87,841,666	109,493,414	133,337,362	159,589,072	188,480,071	
Dividend	-	-	-	-	-	-	-	-	-	-	
Balance carried forward	8,180,884	19,393,484	33,025,651	49,449,012	68,183,605	87,841,666	109,493,414	133,337,362	159,589,072	188,480,071	

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	1,278,369	4,097,923	13,713,229	24,860,816	38,772,843	49,898,571	66,728,606	84,816,207	104,209,032	125,294,845	185,904,195
Accounts receivable	1,501,401	1,706,593	2,073,435	2,419,508	2,740,788	3,021,528	3,323,680	3,656,049	4,021,653	4,423,819	4,423,819
Finished goods inventory		5,382,814	6,278,141	7,298,706	8,460,603	9,306,663	10,237,330	11,261,063	12,387,169	13,625,886	14,988,475
Equipment spare part inventory	163,195	228,582	293,962	376,720	457,951	554,121	670,486	811,288	981,659	1,187,807	-
Raw material inventory	4,352,816	6,096,844	7,840,669	10,048,030	12,214,666	14,779,746	17,883,493	21,639,026	26,183,222	31,681,698	-
Pre-paid building rent	-	-	-	-	-	-	-	-	-	-	-
Total Current Assets	5,812,055	17,321,704	29,843,199	44,664,778	62,329,106	77,308,355	98,564,215	121,868,344	147,428,516	175,817,583	205,316,488
<i>Fixed assets</i>											
Machinery & equipment	1,003,825	903,443	803,060	702,678	602,295	2,118,583	1,856,533	1,594,484	1,332,434	1,070,385	808,335
Furniture & fixtures	1,423,000	1,280,700	1,138,400	996,100	853,800	3,003,256	2,631,780	2,260,305	1,888,829	1,517,353	1,145,878
Office equipment	238,000	190,400	142,800	95,200	47,600	383,301	306,641	229,981	153,321	76,660	-
Total Fixed Assets	19,898,325	19,071,343	18,244,360	17,417,378	16,590,395	20,624,455	19,334,407	18,044,358	16,754,310	15,464,261	14,174,213
<i>Intangible assets</i>											
Pre-operation costs	550,000	495,000	440,000	385,000	330,000	275,000	220,000	165,000	110,000	55,000	-
Total Intangible Assets	550,000	495,000	440,000	385,000	330,000	275,000	220,000	165,000	110,000	55,000	-
TOTAL ASSETS	26,260,380	36,888,047	48,527,559	62,467,155	79,249,501	98,207,810	118,118,622	140,077,702	164,292,826	191,336,844	219,490,701
Liabilities & Shareholders' Equity											
<i>Current liabilities</i>											
Accounts payable		2,446,783	3,118,869	3,683,881	4,313,492	4,821,533	5,373,003	5,994,178	6,695,083	7,487,392	6,750,249
Total Current Liabilities	-	2,446,783	3,118,869	3,683,881	4,313,492	4,821,533	5,373,003	5,994,178	6,695,083	7,487,392	6,750,249
<i>Other liabilities</i>											
Long term debt (Project Loan)	2,000,000	2,000,000	1,754,827	1,497,242	1,226,617	942,292	643,572	329,730	-	-	-
Long term debt (Working Capital Loan)	-	-	-	-	-	-	-	-	-	-	-
Total Long Term Liabilities	2,000,000	2,000,000	1,754,827	1,497,242	1,226,617	942,292	643,572	329,730	-	-	-
<i>Shareholders' equity</i>											
Paid-up capital	24,260,380	24,260,380	24,260,380	24,260,380	24,260,380	24,260,380	24,260,380	24,260,380	24,260,380	24,260,380	24,260,380
Retained earnings		8,180,884	19,393,484	33,025,651	49,449,012	68,183,605	87,841,666	109,493,414	133,337,362	159,589,072	188,480,071
Total Equity	24,260,380	32,441,264	43,653,864	57,286,031	73,709,392	92,443,985	112,102,046	133,753,794	157,597,742	183,849,452	212,740,451
TOTAL CAPITAL AND LIABILITIES	26,260,380	36,888,047	48,527,559	62,467,155	79,249,501	98,207,810	118,118,622	140,077,702	164,292,826	191,336,844	219,490,701

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		8,180,884	11,212,600	13,632,168	16,423,360	18,734,594	19,658,060	21,651,748	23,843,949	26,251,710	28,890,999
Add: depreciation expense		826,983	826,983	826,983	826,983	826,983	1,290,048	1,290,048	1,290,048	1,290,048	1,290,048
amortization of pre-operating costs		55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000	55,000
Accounts receivable		(1,501,401)	(205,191)	(366,842)	(346,073)	(321,280)	(280,740)	(302,153)	(332,368)	(365,605)	(402,165)
Finished goods inventory		(5,382,814)	(895,328)	(1,020,565)	(1,161,897)	(846,060)	(930,666)	(1,023,733)	(1,126,106)	(1,238,717)	(1,362,589)
Equipment inventory	(163,195)	(65,387)	(65,379)	(82,758)	(81,231)	(96,170)	(116,365)	(140,802)	(170,370)	(206,148)	1,187,807
Raw material inventory	(4,352,816)	(1,744,028)	(1,743,825)	(2,207,361)	(2,166,636)	(2,565,080)	(3,103,747)	(3,755,533)	(4,544,195)	(5,498,477)	31,681,698
Pre-paid building rent	-	-	-	-	-	-	-	-	-	-	-
Accounts payable		2,446,783	672,086	565,013	629,610	508,041	551,471	621,174	700,906	792,308	(737,143)
Cash provided by operations	(4,533,686)	2,819,554	9,860,479	11,405,172	14,182,651	16,271,097	17,128,754	18,401,443	19,722,555	21,085,813	60,609,349
<i>Financing activities</i>											
Project Loan - principal repayment		-	(245,173)	(257,585)	(270,625)	(284,325)	(298,719)	(313,842)	(329,730)	-	-
Working Capital Loan - principal repayment		-	-	-	-	-	-	-	-	-	-
Additions to Project Loan	2,000,000	-	-	-	-	-	-	-	-	-	-
Additions to Working Capital Loan	-	-	-	-	-	-	-	-	-	-	-
Issuance of shares	24,260,380	-	-	-	-	-	-	-	-	-	-
Purchase of (treasury) shares	-	-	-	-	-	-	-	-	-	-	-
Cash provided by / (used for) financing activities	26,260,380	-	(245,173)	(257,585)	(270,625)	(284,325)	(298,719)	(313,842)	(329,730)	-	-
<i>Investing activities</i>											
Capital expenditure	(20,448,325)	-	-	-	-	(4,861,043)	-	-	-	-	-
Acquisitions	-	-	-	-	-	-	-	-	-	-	-
Cash (used for) / provided by investing activities	(20,448,325)	-	-	-	-	(4,861,043)	-	-	-	-	-
NET CASH	1,278,369	2,819,554	9,615,306	11,147,587	13,912,026	11,125,729	16,830,035	18,087,601	19,392,825	21,085,813	60,609,349
Cash balance brought forward		1,278,369	4,097,923	13,713,229	24,860,816	38,772,843	49,898,571	66,728,606	84,816,207	104,209,032	125,294,845
Cash available for appropriation	1,278,369	4,097,923	13,713,229	24,860,816	38,772,843	49,898,571	66,728,606	84,816,207	104,209,032	125,294,845	185,904,195
Dividend		-	-	-	-	-	-	-	-	-	-
Cash balance	1,278,369	4,097,923	13,713,229	24,860,816	38,772,843	49,898,571	66,728,606	84,816,207	104,209,032	125,294,845	185,904,195
Cash carried forward	1,278,369	4,097,923	13,713,229	24,860,816	38,772,843	49,898,571	66,728,606	84,816,207	104,209,032	125,294,845	185,904,195

13 KEY ASSUMPTIONS

Particular	Assumptions
Sales Price Growth Rate	10 % per year
Capacity Utilization Growth Rate	5 % per year
Increase in utilities	10 % per year
Depreciation Rate	
Machinery	10 % per year
Office Furniture & Equipment	10 % per year
Loan Period	5 Years
Loan installments	Monthly
Financial Charges (Loan Rate)	16 % per year