
Pre-Feasibility Study

ABSORBENT COTTON MANUFACTURING UNIT



Small and Medium Enterprises Development Authority

Ministry of Industries & Production

Government of Pakistan

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1 DISCLAIMER

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2 EXECUTIVE SUMMARY

Cotton is a fiber being widely accepted by consumers, not least because many products consisting of cotton have been made and used by man for a long time. Loose cotton has been used for a long time by the sanitary and pharmaceutical industry as so-called cotton wool, cotton wool tips and cotton balls. The raw cotton is processed by series of steps which render the cotton hydro-phillic in character and free from external impurities needed to be fit for use in surgical dressings and personal hygiene. With the development of medical facilities and growing awareness towards personal hygiene, the absorbent cotton industry registered steady growth rate in the past and is picking up pace with the spread of education and upward economic growth of towns and villages.

Demand for absorbent cotton depends on various factors. The demand of this product is directly related with the increase in population and expansion of Public Health Services. The consumption of surgical cotton or cotton wool increases with the increase in population and number of hospitals, dispensaries, health care centers, nursing homes etc. Govt. hospitals and big nursing homes are the largest consumers for cotton wool. Cotton is a highly absorbent fiber and therefore suited very well for absorption of body fluids such as urine, blood and other fluids. It is used for bandages and wound dressings, absorbent pads (demake-up), tampons, sponges, swabs. Cotton also offers the positive property of being a naturally breathing fiber, i.e. it largely prevents the passage of fluids, but lets gas and water vapor pass. With this property cotton is also predestined for surgical gowns and drapes.

The estimated total cost of the proposed absorbent cotton manufacturing unit is Rs. 77.06 million out of which Rs. 67.85 million is the capital cost and Rs. 9.22 million is for working capital. The project is to be financed through 50% debt and 50% equity. The project NPV is around Rs. 104.52 million, with an IRR of 36% and Payback Period of 3.55 years. The project will provide employment opportunities to 42 people at maximum capacity utilization. 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 **Absorbent Cotton Manufacturing Unit** by providing them with a general understanding of the business with the intention of supporting potential investors in crucial investment decisions.

The need to come up with pre-feasibility reports for undocumented or minimally documented sectors attains greater 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, which form basis of any investment decision.

5 BRIEF DESCRIPTION OF PROJECT & PRODUCT

Absorbent Cotton also known as Surgical Cotton or Cotton Wool is mainly used for medical purposes in hospitals, nursing homes, dispensaries etc. Because of high fluid absorbency power, it is better known as absorbent cotton.

The absorbent cotton should be chemically inert and soft to give maximum protection and should not cause irritation. These properties can be achieved by manufacturing the product as per standard method of manufacture. The raw cotton

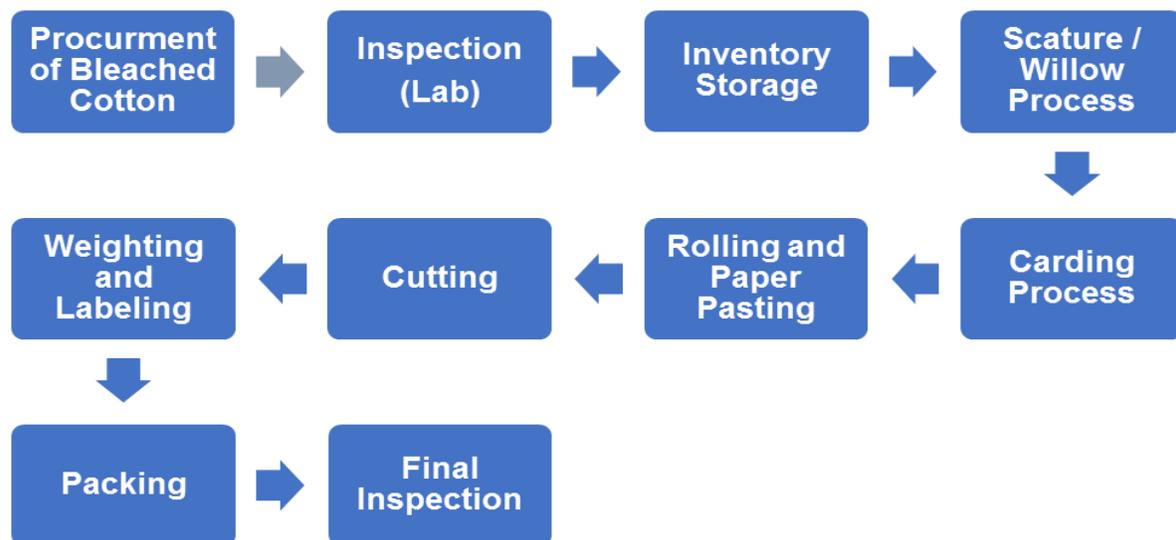
is processed by series of steps which render the cotton hydro-phillic in character and free from external impurities needed to be fit for use in surgical dressings and personal hygiene. Absorbent Cotton is also used for making conventional type of sanitary napkins or pads besides medical purposes. And fairly good quality of cotton wool is consumed in beauty parlors for removing make up and dirt etc.

With the development of medical facilities and growing awareness towards personal hygiene, the absorbent cotton industry registered steady growth rate in the past and is picking up pace with the spread of education and upward economic growth of towns and villages. It is important to note that this unit should initially cater to the local market and finally export absorbent cotton because the demand in the export market is increasing at a higher rate.

As processing the raw cotton into absorbent cotton requires a high cost of plant and machinery, therefore, proposed project will purchase bleached cotton from different suppliers and process that in absorbent cotton in the sizes of 100 Grams, 200 Grams and 500 Grams. The proposed project will be financed through both debt and equity and the ratio would be 50:50.

5.1 Production Process Flow

Process of manufacturing of absorbent cotton starts from procurement of bleached cotton from different suppliers. Sample of raw material purchased will be tested in the lab to check the quality of the raw material. If quality is as per requirement, raw material shall be shifted in inventory storage area. Production starts with the process of Sketcher / Willow Section which leads towards carding process. Once the carding of bleached cotton is done, rolling and paper pasting starts. After rolling, cutting process starts as per the requirement of client. Once cutting is complete, weighting & labeling process initiates which leads to packing process. Final inspection is carried out after packing to check the quality of finished goods.



5.2 Installed And Operational Capacities

The project will have a capacity to produce 3,200 kg per day on 8-hour shift and 330 working days per year. The surgical cotton rolls would be manufactured in the sizes of 100 grams to 1,000 grams, depending on the client's requirement. Mostly clients demand the size between 100 grams to 500 grams only.

6 CRITICAL FACTORS

Following are the factors critical for the success of this business venture:

- ⇒ Technical know-how, relevant expertise and experience of entrepreneur.
- ⇒ Selection of high quality bleached cotton as raw material in economical price as well.
- ⇒ Production quality assurance of the product is very critical as product is associated with health sector.
- ⇒ Sales and marketing management is very critical for the success of any business.
- ⇒ Time management is very important in absorbent cotton manufacturing business. Delay in order delivery can cause a loss of millions along with future orders,
- ⇒ The entrepreneur should be aware of the supply and demand conditions of the market,
- ⇒ As plant and machinery used in this sector is mostly second hand, entrepreneur should remain very conscious while procuring it as a wrong decision can cause huge loss.
- ⇒ Higher return on investment and a steady growth of business is closely associated with regular trainings and capacity building of the entrepreneur and employees.

7 GEOGRAPHICAL POTENTIAL FOR INVESTMENT

The proposed project could be set up in Karachi, Lahore, Rawalpindi, Peshawar, Multan, Rahim Yar Khan and Faisalabad as raw material for absorbent cotton is easily available in these cities. Beside this all major hospitals & health sector,

government offices along with beauty parlors are in these metropolitan cities. Therefore, it will be convenient for entrepreneur to target the market.

8 POTENTIAL TARGET CUSTOMERS / MARKETS

Absorbent cotton is mostly used in beauty parlors and health sectors. So, government health department and private hospitals are the major consumers of absorbent cotton. Besides this, different pharmacy chains and departmental stores are also lucrative customers as all these institutions place bulk orders on monthly or quarterly basis. Absorbent cotton can be sold in open market in small departmental stores and pharmacies through sales team on regular basis.

9 PROJECT COST SUMMARY

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

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

9.1 Project Economics

All the figures in this financial model have been calculated for estimated sales of Rs. 257.86 Million in the year one. Manufacturing unit will start its operations with 65% production capacity in year one. Production capacity will increase with the passage of time. Maximum capacity utilization of this unit is estimated at 95% in year seven.

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)	36%
Payback Period (Yrs.)	3.55
Net Present Value (Rs.)	104,517,029

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. 38,531,988
Bank Loan (50%)	Rs. 38,531,988
Markup to the Borrower (%age / annum)	14%
Tenure of the Loan (Years)	05 Years

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	24,796,787
Machinery and Equipment	23,935,000
Furniture and Fixtures	4,060,000
Office Vehicles	1,640,000
Office Equipment	532,500
Pre Operating Cost	5,381,428
Total Capital Cost	67,845,715
Working Capital	
Equipment Spare Parts Inventory	173,988
Raw Material Inventory	8,544,274
Cash	500,000
Total Working Capital	9,218,262
Total Project Cost	77,063,977

9.4 Space Requirement

6 kanals of land would be required for setting up the proposed absorbent cotton manufacturing unit. It is suggested to purchase the required land instead off rental or leased land. Entrepreneur can be more risk free on purchased land because of

making heavy investment on building and infrastructure. The cost of land is estimated at Rs. 7.5 million.

The infrastructural requirements of the project mainly comprise of the construction of management office, plant and machinery section, laboratory, storage, open space and other facilities. Details of space requirement and cost of construction of building and infrastructure for the proposed unit is provided in the table below:

Table 4: Space Requirement

Description	Estimated Area (Sq ft)	Unit Cost (Rs.)	Total Cost (Rs.)
Management Office	1,000	2,500	2,500,000
Raw Material Storage	3,000	1,600	4,800,000
Willow Section	2,000	1,600	3,200,000
Carding Section	2,500	1,600	4,000,000
Rolling Section	1,000	1,600	1,600,000
Cutting Section	1,400	1,600	2,240,000
Packing Area	1,000	1,600	1,600,000
Finished Goods Storage	1,000	1,800	1,800,000
Laboratory	400	3,000	1,200,000
Labor Changing Room	500	1,000	500,000
Pavement / Drive Way	4,830	125	603,750
Grounds	8,370	35	292,950
Boundary Wall	329	1,400	460,087
Total			24,796,787

Decisions about setting up an absorbent cotton manufacturing unit needs to be well thought out, right from the selection of the site to the final stages. The unit should be located at a place where transportation of raw material & finished goods can be handled easily.

The entrepreneur should make sure that the following things are available at the unit site before setting up the unit:

- i. Electricity Connection
- ii. Clean Water Supply

9.5 Machinery & Equipment Requirement

Absorbent cotton manufacturing unit is a plant and machinery intensive setup. List of plant & machinery required for the proposed project are stated below:

Table 5: Plant & Machinery Requirement

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Sketcher / Willow Machine	1	5,000,000	5,000,000
Card Machine	12	1,000,000	12,000,000
Weighting Scale	1	35,000	35,000
Rolling Machine	2	200,000	400,000
Cutting Machine	1	200,000	200,000
Packing and Labeling Machine	1	1,500,000	1,500,000
Laboratory Equipment	1	2,000,000	2,000,000
Generator (150 KVA)	1	2,800,000	2,800,000
Total			23,935,000

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.)
Furniture Set for Office and Factory	1	1,800,000	1,800,000
Air Conditioners (1.5 Ton Split)	4	65,000	260,000
Electric wiring & lighting, fans, etc.	1	2,000,000	2,000,000
Total			4,060,000

9.7 Office Equipment Requirement

Following office equipment will be required for absorbent Cotton manufacturing unit;

Table 7: Office Equipment Requirement

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Laptop	2	100,000	200,000
Computers	5	50,000	250,000

Computer Printers	3	20,000	60,000
Telephones Set	5	500	2,500
Fax Machine	1	20,000	20,000
Total			532,500

9.8 Raw Material Requirement

Major raw material required for this unit is bleached cotton which is easily available from different units in all big cities mentioned earlier. Beside that few chemicals are required for processing and packing material is required for packing the final product.

9.9 Human Resource Requirement

In order to run operations of absorbent cotton manufacturing unit smoothly, details of human resources required in first year of operation along with monthly salary are recommended as under:

Table 8: Human Resource Requirement (Year 1)

Description	No. of Employees	Monthly Salary per person (Rs.)
CEO	1	100,000
Operation Manager	1	50,000
Procurement Manager	1	35,000
Accountant	1	25,000
Lab In-Charge	1	35,000
Marketing Executive	1	30,000
Sale Person	2	18,000
Carding Master	1	22,000
Willow Master	1	22,000
Rolling Master	1	22,000
Cutting Master	1	22,000
Helpers	17	15,000
Drivers	2	15,000
Office Boy	3	15,000
Security Guard	3	16,000

Storage Area Worker	4	15,000
Electrician	1	22,000
Total	42	

Number of employees will increase with the increase in production in coming years.

9.10 Utilities and Other Costs

An essential cost to be borne by the project is the cost of electricity which is estimated to be Rs. 400,856 per month in the first year of operations. The promotional expense being essential for marketing of 'Absorbent Cotton' is estimated as 0.5% of total revenue i.e. Rs. 1,289,288. Furthermore, travelling expenses are assumed to be Rs. 974,400 for first year of operations.

9.11 Revenue Generation

Sales revenue during the first year of operations are estimated as under;

Table 9: Revenue Generation – Year 1

Description	Installed Capacity	Operational Capacity - Year 1 (65%)	Finished Goods Inventory	Sale During Year 1	Sale Price (Rs.)	Revenue (Rs.)
100 Gram Packing	4,857,600	3,157,440	(131,560)	3,025,880	43	128,928,800
250 Gram Packing	1,457,280	947,232	(39,468)	907,764	85	77,357,280
500 Gram Packing	388,608	252,595	(10,525)	242,070	213	51,571,520
Total	6,703,488	4,357,267	(181,553)	4,175,714		257,857,600

10 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 Baluchistan	www.balochistan.gov.pk
Government of Gilgit Baltistan	www.gilgitbaltistan.gov.pk
Government of Azad Jammu Kashmir	www.ajk.gov.pk
Trade Development Authority of Pakistan (TDAP)	www.tdap.gov.pk
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
University of Engineering and Technology (UET)	http://www.uet.edu.pk/
Agriculture University of Faisalabad	https://www.uaf.edu.pk/

11 ANNEXURE

11.1 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	257,857,600	317,794,400	374,617,936	439,628,235	513,894,415	598,617,548	695,146,364	766,341,574	842,975,731	927,273,304
<i>Cost of sales</i>										
Raw Material Cost	184,184,000	226,996,000	267,584,240	314,020,168	367,067,439	427,583,963	496,533,117	547,386,839	602,125,522	662,338,075
Packing Cost	20,878,572	25,731,618	30,332,585	35,596,429	41,609,716	48,469,696	56,285,575	62,050,208	68,255,229	75,080,752
Operation costs 1 (direct labor)	5,209,500	5,961,804	6,559,289	7,216,474	7,939,341	8,734,467	9,609,087	10,593,226	11,652,549	12,817,804
Operating costs 2 (machinery maintenance)	2,087,857	2,573,162	3,033,258	3,559,643	4,160,972	4,846,970	5,628,558	6,205,021	6,825,523	7,508,075
Operating costs 3 (direct electricity)	2,822,307	3,478,328	4,100,274	4,811,826	5,624,686	6,551,999	7,608,527	8,387,774	9,226,552	10,149,207
Total cost of sales	215,182,236	264,740,912	311,609,647	365,204,540	426,402,153	496,187,094	575,664,864	634,623,068	698,085,375	767,893,912
Gross Profit	42,675,364	53,053,488	63,008,289	74,423,695	87,492,262	102,430,454	119,481,500	131,718,506	144,890,357	159,379,392
<i>General administration & selling expenses</i>										
Administration expense	4,872,000	5,359,200	5,895,120	6,484,632	7,133,095	7,846,405	8,631,045	9,494,150	10,443,565	11,487,921
Administration benefits expense	146,160	160,776	176,854	194,539	213,993	235,392	258,931	284,824	313,307	344,638
Electricity expense	1,987,960	2,186,756	2,405,431	2,645,974	2,910,572	3,201,629	3,521,792	3,873,971	4,261,368	4,687,505
Travelling expense	974,400	1,071,840	1,179,024	1,296,926	1,426,619	1,569,281	1,726,209	1,898,830	2,088,713	2,297,584
Communications expense (phone, fax, mail, internet, etc.)	487,200	535,920	589,512	648,463	713,310	784,640	863,105	949,415	1,044,356	1,148,792
Office vehicles running expense	656,000	721,600	793,760	873,136	960,450	1,056,495	1,162,144	1,278,358	1,406,194	1,546,814
Office expenses (stationary, entertainment, janitorial services, etc.)	487,200	535,920	589,512	648,463	713,310	784,640	863,105	949,415	1,044,356	1,148,792
Promotional expense	1,289,288	1,588,972	1,873,090	2,198,141	2,569,472	2,993,088	3,475,732	3,831,708	4,214,879	4,636,367
Professional fees (legal, audit, consultants, etc.)	1,289,288	1,588,972	1,873,090	2,198,141	2,569,472	2,993,088	3,475,732	3,831,708	4,214,879	4,636,367
Depreciation expense	4,420,589	4,420,589	4,420,589	4,420,589	4,420,589	4,620,837	4,620,837	4,620,837	4,620,837	4,620,837
Amortization of pre-operating costs	1,076,286	1,076,286	1,076,286	1,076,286	1,076,286	-	-	-	-	-
Bad debt expense	1,289,288	1,588,972	1,873,090	2,198,141	2,569,472	2,993,088	3,475,732	3,831,708	4,214,879	4,636,367
Subtotal	18,975,659	20,835,803	22,745,357	24,883,433	27,276,639	29,078,582	32,074,363	34,844,924	37,867,333	41,191,982
Operating Income	23,699,705	32,217,685	40,262,932	49,540,262	60,215,623	73,351,872	87,407,137	96,873,582	107,023,024	118,187,410
Gain / (loss) on sale of office vehicles	-	-	-	-	656,000	-	-	-	-	-
Earnings Before Interest & Taxes	23,699,705	32,217,685	40,262,932	49,540,262	60,871,623	73,351,872	87,407,137	96,873,582	107,023,024	118,187,410
Interest on short term debt	98,414	98,414	-	-	-	-	-	-	-	-
Interest expense on long term debt (Project Loan)	4,749,200	4,030,724	3,211,662	2,277,931	1,213,477	-	-	-	-	-
Interest expense on long term debt (Working Capital Loan)	602,460	500,236	382,745	247,708	92,505	-	-	-	-	-
Subtotal	5,450,073	4,629,373	3,594,407	2,525,639	1,305,982	-	-	-	-	-
Earnings Before Tax	18,249,631	27,588,312	36,668,525	47,014,623	59,565,641	73,351,872	87,407,137	96,873,582	107,023,024	118,187,410
Tax	5,609,870	8,878,409	12,056,483	15,677,617	20,070,474	24,895,654	29,814,997	33,128,253	36,680,558	40,588,093
NET PROFIT/(LOSS) AFTER TAX	12,639,761	18,709,904	24,612,042	31,337,006	39,495,167	48,456,217	57,592,140	63,745,329	70,342,466	77,599,317

11.2 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	500,000	-	12,037,648	27,841,877	48,050,451	70,759,020	111,849,022	161,791,990	216,585,604	276,214,992	425,405,819
Accounts receivable		10,596,888	11,828,466	14,227,651	16,731,086	19,592,931	22,859,835	26,584,190	30,030,574	33,068,164	36,374,980
Finished goods inventory		9,355,749	11,063,799	13,019,902	15,256,587	17,810,409	20,722,431	24,038,753	26,442,628	29,086,891	31,995,580
Equipment spare part inventory	173,988	225,152	278,681	343,394	421,474	515,508	628,567	727,591	840,367	970,624	-
Raw material inventory	8,544,274	11,583,349	15,019,973	19,389,154	24,931,009	31,945,382	40,806,335	49,484,183	59,875,862	72,449,792	-
Total Current Assets	9,218,262	31,761,138	50,228,567	74,821,977	105,390,606	140,623,252	196,866,189	262,626,707	333,775,034	411,790,463	493,776,379
<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	24,796,787	23,556,948	22,317,108	21,077,269	19,837,430	18,597,590	17,357,751	16,117,912	14,878,072	13,638,233	12,398,393
Machinery & equipment	23,935,000	21,541,500	19,148,000	16,754,500	14,361,000	11,967,500	9,574,000	7,180,500	4,787,000	2,393,500	-
Furniture & fixtures	4,060,000	3,654,000	3,248,000	2,842,000	2,436,000	2,030,000	1,624,000	1,218,000	812,000	406,000	-
Office vehicles	1,640,000	1,312,000	984,000	656,000	328,000	2,641,236	2,112,989	1,584,742	1,056,495	528,247	-
Office equipment	532,500	479,250	426,000	372,750	319,500	266,250	213,000	159,750	106,500	53,250	-
Total Fixed Assets	62,464,287	58,043,698	53,623,108	49,202,519	44,781,930	43,002,577	38,381,740	33,760,903	29,140,067	24,519,230	19,898,393
<i>Intangible assets</i>											
Pre-operation costs	5,381,428	4,305,142	3,228,857	2,152,571	1,076,286	-	-	-	-	-	-
Total Intangible Assets	5,381,428	4,305,142	3,228,857	2,152,571	1,076,286	-	-	-	-	-	-
TOTAL ASSETS	77,063,977	94,109,978	107,080,532	126,177,067	151,248,821	183,625,828	235,247,929	296,387,610	362,915,101	436,309,693	513,674,772
Liabilities & Shareholders' Equity											
<i>Current liabilities</i>											
Accounts payable		8,998,312	11,120,525	13,178,738	15,555,975	18,299,960	21,465,844	25,013,385	27,795,546	30,847,672	30,613,434
Short term debt	-	1,224,395	-	-	-	-	-	-	-	-	-
Other liabilities											
Total Current Liabilities	-	10,222,707	11,120,525	13,178,738	15,555,975	18,299,960	21,465,844	25,013,385	27,795,546	30,847,672	30,613,434
<i>Other liabilities</i>											
Long term debt (Project Loan)	33,922,857	28,790,887	22,940,441	16,270,933	8,667,693	-	-	-	-	-	-
Long term debt (Working Capital Loan)	4,609,131	3,924,634	3,137,913	2,233,701	1,194,452	-	-	-	-	-	-
Total Long Term Liabilities	38,531,988	32,715,521	26,078,354	18,504,634	9,862,145	-	-	-	-	-	-
<i>Shareholders' equity</i>											
Paid-up capital	38,531,988	38,531,988	38,531,988	38,531,988	38,531,988	38,531,988	38,531,988	38,531,988	38,531,988	38,531,988	38,531,988
Retained earnings		12,639,761	31,349,665	55,961,707	87,298,713	126,793,880	175,250,097	232,842,237	296,587,566	366,930,032	444,529,349
Total Equity	38,531,988	51,171,750	69,881,653	94,493,695	125,830,701	165,325,868	213,782,086	271,374,225	335,119,554	405,462,021	483,061,338
TOTAL CAPITAL AND LIABILITIES	77,063,977	94,109,978	107,080,532	126,177,067	151,248,821	183,625,828	235,247,929	296,387,610	362,915,101	436,309,693	513,674,772

11.3 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		12,639,761	18,709,904	24,612,042	31,337,006	39,495,167	48,456,217	57,592,140	63,745,329	70,342,466	77,599,317
Add: depreciation expense		4,420,589	4,420,589	4,420,589	4,420,589	4,420,589	4,620,837	4,620,837	4,620,837	4,620,837	4,620,837
amortization of pre-operating costs		1,076,286	1,076,286	1,076,286	1,076,286	1,076,286	-	-	-	-	-
Accounts receivable		(10,596,888)	(1,231,578)	(2,399,185)	(2,503,435)	(2,861,845)	(3,266,904)	(3,724,355)	(3,446,384)	(3,037,590)	(3,306,816)
Finished goods inventory		(9,355,749)	(1,708,050)	(1,956,102)	(2,236,685)	(2,553,823)	(2,912,022)	(3,316,322)	(2,403,875)	(2,644,263)	(2,908,689)
Equipment inventory	(173,988)	(51,164)	(53,529)	(64,714)	(78,080)	(94,034)	(113,059)	(99,023)	(112,777)	(130,257)	970,624
Raw material inventory	(8,544,274)	(3,039,075)	(3,436,624)	(4,369,181)	(5,541,856)	(7,014,373)	(8,860,952)	(8,677,848)	(10,391,678)	(12,573,931)	72,449,792
Accounts payable		8,998,312	2,122,212	2,058,214	2,377,237	2,743,985	3,165,884	3,547,541	2,782,162	3,052,126	(234,238)
Cash provided by operations	(8,718,262)	4,092,072	19,899,210	23,377,949	28,851,063	35,211,951	41,090,001	49,942,969	54,793,613	59,629,388	149,190,827
<i>Financing activities</i>											
Project Loan - principal repayment		(5,131,970)	(5,850,446)	(6,669,508)	(7,603,240)	(8,667,693)	-	-	-	-	-
Working Capital Loan - principal repayment		(684,497)	(786,721)	(904,212)	(1,039,249)	(1,194,452)	-	-	-	-	-
Short term debt principal repayment		-	(1,224,395)	-	-	-	-	-	-	-	-
Additions to Project Loan	33,922,857	-	-	-	-	-	-	-	-	-	-
Additions to Working Capital Loan	4,609,131	-	-	-	-	-	-	-	-	-	-
Issuance of shares	38,531,988	-	-	-	-	-	-	-	-	-	-
Purchase of (treasury) shares											
Cash provided by / (used for) financing activities	77,063,977	(5,816,467)	(7,861,562)	(7,573,720)	(8,642,488)	(9,862,145)	-	-	-	-	-
<i>Investing activities</i>											
Capital expenditure	(67,845,715)	-	-	-	-	(2,641,236)	-	-	-	-	-
Acquisitions											
Cash (used for) / provided by investing activities	(67,845,715)	-	-	-	-	(2,641,236)	-	-	-	-	-
NET CASH	500,000	(1,724,395)	12,037,648	15,804,229	20,208,574	22,708,570	41,090,001	49,942,969	54,793,613	59,629,388	149,190,827

12 KEY ASSUMPTIONS

12.1 Operating Cost Assumptions

Description	Details
Administration Benefit Expenses	03% of Administration Cost
Office Expenses (Stationery, Entertainment etc.)	10% of Administration expenses
Communication Expenses	10% of Administration Cost
Promotional Expenses	0.5% of Revenues
Professional Fee	0.5% of Revenue
Vehicle Running Expense	40% of vehicle cost

12.2 Production Cost Assumptions

Description	Details
Bleached Cotton Price Per Kg	280/-
Cost of Goods sold Growth Rate	10% per year
Wastage during Process	8%

12.3 Revenue Assumptions

Description	Details
Growth in Sales Price	10%
Days Operational / Year	330
Production Capacity in Year 1	65%
Maximum Production Capacity	95%

12.4 Financial Assumptions

Description	Details
Debt	50%
Equity	50%
Interest Rate on Debt	14%
Debt Tenure	05 Years

Debt Payments / Year	1
Inflation Growth Rate	10%
Electricity Price Growth Rate	10%
Salaries Growth Rate	10%