



Pre-feasibility Study

PRE-CAST CONCRETE POLES MANUFACTURING UNIT

March 2023

“The figures and financial projections are approximate due to fluctuations in exchange rates, energy costs, and fuel prices etc. Users are advised to focus on understanding essential elements such as production processes and capacities, space, machinery, human resources, and raw material etc. requirements. Project investment, operating costs, and revenues can change daily. For accurate financial calculations, utilize financial calculators on SMEDA's website and consult financial experts to stay current with market conditions.”

Small and Medium Enterprises Development Authority
Ministry of Industries and Production
Government of Pakistan

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1 DISCLAIMER

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2 EXECUTIVE SUMMARY

Concrete poles were first used over 60 years ago and were then made of normal reinforced concrete. As technology improved, production and use of concrete poles gradually increased. Pre-cast concrete poles are highly durable and strong. PCC Poles are fabricated from excellent quality concrete material. These poles are used extensively in electrical industry, for establishing electrical connections and fittings. The poles are ecofriendly and require very low maintenance. The PCC poles have consistent material properties throughout their length. PCC poles are not susceptible to rot and decay. The PCC pole has the same strength throughout its service life. PCC poles are not susceptible to insect and animal attack. The demand for Pre-(Pre-cast/Reinforced) concrete-cement (PCC) poles directly depends on the growth of electric power sector. The growth in generation and supply of electric energy gives rise to demand for PCC poles. A large network of electricity distribution for rural electrifications, agricultural & irrigational consumptions can be catered only by establishing an efficient generation & distribution standards. These factors are essentially going to raise the demand for not only electrical equipment's but also distribution materials including poles.

The concept of production of PCC poles is rather not new in Pakistan; however production in accordance with international standards seems very keen to make it popular in the market, which surely will be a huge success.

Pre-cast Concrete poles manufacturing Unit is proposed to be located at any industrial zone throughout Pakistan adjacent to metro-Politian cities with higher population density and higher concentration of construction work going on in the area for instance the same production plant may developed in cities like Quetta, Karachi, Lahore, Peshawar and Multan.

The finished Product would include High transmission poles (HT) and light transmission poles(LT) which are mainly sold to energy companies through bidding process therefore it is compulsory for the company to maintain competitive edge over other companies participating in bidding.

The installed unit would have the Capacity to produce **23,725unit** of the product and will initially operate at **75%** capacity utilization.

Total Cost Estimates is **Rs. 229,251,922** with fixed investment **Rs. 197,820,858** and working capital **Rs. 31,431,064**.

Given the cost assumptions IRR and payback are **53%** and **2.61 years** respectively

The most critical considerations or factors for success of the project are:

- The product should be produced in accordance with International standards and quality
- Location of the unit would play vital role in this projects success.
- Contacts with energy supply companies would play vital role in the project's success.
- Marketing through proper channels could attract more customers likewise developers, moreover awareness about the product should be taken into consideration while marketing the product.
- Procurement of raw material from trusted suppliers and below market rates.
- Human resource would play vital role in manufacturing henceforth well trained staff would be required to run the project successfully.
- Market research should be done to identify market gaps moreover most recent trends may be identified and product may be reshaped or improved in accordance with demand.

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 'sectorial 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 **Pre-cast Concrete poles 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 on, which form basis of any Investment Decision.

5 BRIEF DESCRIPTION OF PROJECT & PRODUCT

Following key parameters must be addressed as per pre-feasibility study under preparation

- **Technology:** The proposed manufacturing unit is likely to be equipped with modern machinery including crane, spinning machine with foundation wheels, mixture machine, generator, molds and sand washer. However constant efforts may be made for up gradation of the machinery.
- **Location:** The production unit is proposed to be located adjacent to metro-Politian cities like Karachi, Lahore, Peshawar, and Quetta and at location where population density is high and more of construction work is going on.
- **Product:** The unit would produce pre-cast concrete poles (HT) and (LT).
- **Target Market:** In addition to local markets in Karachi, Lahore, Quetta and Islamabad an enormous export market for the Pakistani products exists in Afghanistan and other neighbouring countries.
- **Employment Generation:** The proposed project will provide employment opportunity to 72 people. Financial analysis shows the unit would be profitable from the very first year of operation.

5.1 Production Process Flow

Three methods are generally used to manufacture prestressed concrete poles and they are

1. Centrifugal Casting Method
2. Long Line Method
3. Mensel's Method

1. Centrifugal casting method

Centrifugal casting method is also called as spin casting method which will be used in our case, is used to manufacture hollow and tapered pre-cast concrete poles. In this method, concrete is partially filled in a steel forms and they are placed in spinning machine. The concrete in the forms is consolidated by the centrifugal force created by spinning machine which will rotate for several minutes. While spinning, the concrete squeeze out water from it and this excess water is poured from the hollow cavity created in the center of the pole. Finally, the form is exposed to steam for curing for a period until the strength of concrete reaches 3500 psi. After that pre-stressed wire is released and allowed for air curing for a period of 28 days. Finally hollow pre-cast concrete pole is obtained.

2. Long Line Method

Long line method is most commonly used method for making solid pre-stressed concrete poles. In this method, molding forms are positioned end to end on casting bed. These forms are placed up to a length of 400 feet. The molding forms contain bulkheads at its ends and holes are provided to these bulkheads using which pre-stressing wires are threaded. These wires are pre-tensioned against abutments at each end of line of forms. This pre-tensioning is done once at a time for multiple poles. Now Molding forms are filled with concrete which was vibrated externally. Using this method, many shapes of solid poles such as square, rectangular, I shaped, Y shape etc. can be manufactured. This method can be done at any precast site or yard.

3. Mensel's Method

Mensel's method of pre stressed poles making is more mechanized process. In this, poles are made on a production line which consists of horizontal molds of light weight. These molds will move from one station to other in production line. The concrete is poured in these molds and a block out is provided in the middle of mold while pouring concrete to make hollow concrete poles. The concrete in the molds is consolidated by vibration. When the concrete is begun to harden, block out in the middle is rotated and removed at fully hardened stage. These poles are heated to a temperature of 73oC for 24 hours and cooled down to room temperature.

5.2 Installed And Operational Capacities

The proposed production unit is set to operate at 75% at capacity utilization initially and shall increase its production by 5% yearly. The proposed manufacturing unit is set to

provide much needed poles to the energy companies and will produce around 60 units per day.

6 CRITICAL FACTORS

- Trained and specialized human resource should be hired which would play vital role in project's success.
- Continuous efforts should be made to upgrade technology.
- Price may be adjusted in accordance to the segment targeted moreover price would play vital role in success of the project.
- The product may be produced in different shapes based on market demand and developments of new trends.
- Product should be manufactured in accordance with international standards.
- Purchase of raw material from trusted suppliers and below market prices would play a vital role in projects success and may provide competitive advantage over competitors
- Location of the unit would play a vital role in projects success.
- In future the products may enhanced or modified in accordance to market demand therefore special attention should be paid to market developments.

7 GEOGRAPHICAL POTENTIAL FOR INVESTMENT

Big cities with growing middle income group such as Karachi, Islamabad, Quetta, Lahore, Sukkur and Hyderabad are some of the prospective cities for setting up this business. Cities like Lahore and Karachi with high population and development of new residential area is going on are more favorable for this project.

8 POTENTIAL TARGET CUSTOMERS / MARKETS

The demand for pre-cast concrete electric pole directly depends on electric/power sector. The power sector is one of the crucial inputs to the growth of other industrial sectors and overall economic growth of Pakistan. Therefore initially local market may be targeted however with maturity the product may be exported to neighboring country likewise Afghanistan.

9 PROJECT COST SUMMARY

9.1 Project Economics

All the figures in this financial model have been calculated for estimated sales of Rs. 486.844 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 95%.

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)	53%
Payback Period (yrs.)	2.61
Net Present Value (Rs.)	610,831,851

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. 114,625,961
Bank Loan (50%)	Rs. 114,625,961
Markup to the Borrower (%age / annum)	20%
Tenure of the Loan (Years)	10

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	12,516,759
Building/Infrastructure	101,090,000
Plant and Machinery	75,300,000
Furniture & Fixture	1,501,500
Office Equipment	457,000
Vehicle (Tractor)	2,222,000
Pre-operating Cost	4,733,599
Total Capital Cost	197,820,858
Working Capital	
Equipment spare part inventory	710,514
Raw Material Inventory	26,344,450
Upfront insurance payment	3,876,100
Cash	500,000
Total Working Capital	31,431,064
Total Project Cost	229,251,922

9.4 Space Requirement

The space requirement for the proposed **Pre-cast Concrete poles manufacturing 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 4: Space Requirement

Description	Estimated Area (Sq.ft)	Unit Cost (Rs.)	Total Cost (Rs.)
kitchen/canteen	6,000	12,00	7,200,000
Office	500	1,500	750,000
room	400	1,600	640,000
labor resting space	8,500	1,300	11,050,000
cement yard (SHED)	8,000	600	4,800,000
Open space for stocking inventory	75,000	-	-
molds storage space (SHED)	10,000	800	8,000,000
work shop	8,200	1,500	12,300,000
crane space/track	49,000	600	29,400,000
crushed stone sand storage space (open)	15,000	-	-
sand washer space (open)	10,000	-	-
generator room	500	1200	600,000
pavement driveway	5,000	220	1,100,000
laboratory	300	1,500	450,000
guard room	500	1,200	600,000
Mosque	800	1,800	1,440,000
washroom/bathrooms	2,400	1,400	3,360,000
boundary wall	-	-	5,000,000
Total	218,100		101,090,000

9.5 Machinery & Equipment Requirement

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

Table 5: Machinery & Equipment

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Crane with BOOM	1	10,000,000	10,000,000
crane without boom	1	7,000,000	7,000,000
spinning machine with foundation wheels	1	3,000,000	3,000,000
Boiler	1	3,000,000	3,000,000
mixture machine	1	500,000	500,000
Generator	1	2,000,000	2,000,000
farmey/molds for machine	60	800,000	48,000,000
sand washer	1	800,000	800,000
kherad machine	1	1,000,000	1,000,000
Total			75,300,000

9.6 Furniture & Fixtures Requirement

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

Table 6: Furniture & Fixture

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Furniture(lump sum)	1	700,000	700,000
Carpeting	900	35	31,500
Electric wiring & lighting(lump sum)	1	500,000	500,000
Air conditioners.(1.5 ton)	1	120,000	120,000
Air conditioners. (2 ton)	1	150,000	150,000
Total			1,501,500

9.7 Office Equipment Requirement

Following office equipment will be required for **Pre-cast Concrete poles manufacturing Unit**;

Table 7: Office Equipment

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Laptops	2	125,000	250,000
Computers	3	50,000	150,000
Printer with scanner	1	50,000	50,000
Telephone set	1	7,000	7,000
Total			457,000

9.8 Human Resource Requirement

In order to run operations of **Pre-cast Concrete poles manufacturing Unit** smoothly, details of human resources required along with number of employees and monthly salary are recommended as under;

Table 8: Human Resource Requirement

Description	No. of Employees	Monthly Salary per person (Rs.)
Operations manager	1	45,000
accountant	1	40,000
labor	60	26,000
guards	4	25,000
crane operator	1	27,000
boiler operator	1	27,000
spinning machine operator	1	27,000
mixture machine operator	1	27,000
generator operator	1	25,000
Total	71	

9.9 other costs

The promotional expense being essential for marketing of Pre-cast Concrete poles manufacturing Unit is estimated as 1% of revenue expenses which is estimated to be Rs. 4,868,444 in first year of operations.

9.10 Revenue Generation

Based on the capacity utilization of 75%, respectively, sales revenue during the first year of operations is estimated as under;

Table 9: Revenue Generation – Year 1

Description	No. of Units Produced (No.)	Finished Goods Inventory (No.)	Units available for Sale (No.)	Sale Price / unit (Rs.)	Sales Revenue (Rs.)
Pre-cast cement poles	17,794	741	17,052	28,550	
Total					486,844,414

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	E-mail	Website
Shandong Shengya Machinery Co., Ltd. Custom manufacturer	Industrial Park, South Xinwang Village, Shengli Town, Linyi, Shandong, China	+865396732999	Brick@sdshengya.com	http://www.sdshengya.com http://www.aliexpress.com/store/818735
Taizhou Amity Care Co., Ltd	Room 1818, Building 1, No. 399, Nantong Road, Taizhou, Jiangsu, China	+86-523-86608111	amity@amitycare.cn	tza cm.en.alibaba.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 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

Statement Summaries										SMEDA
Income Statement										
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
	Rs. in actuals									
Revenue	486,844,414	594,514,642	694,945,706	809,517,836	940,054,935	1,036,333,089	1,139,966,397	1,253,963,037	1,379,359,341	1,517,295,275
Cost of goods sold	343,841,573	400,347,723	446,306,353	495,909,018	549,410,042	579,523,090	610,007,762	642,163,539	676,088,276	711,886,113
Gross Profit	143,002,841	194,166,920	248,639,353	313,608,818	390,644,893	456,809,998	529,958,635	611,799,498	703,271,065	805,409,162
<i>General administration & selling expenses</i>										
Administration expense	2,595,600	2,848,311	3,125,627	3,429,942	3,763,886	4,130,344	4,532,480	4,973,768	5,458,022	5,989,422
Rental expense	-	-	-	-	-	-	-	-	-	-
Utilities expense	-	-	-	-	-	-	-	-	-	-
Travelling & Comm. expense (phone, fax, etc.)	50,400	55,307	60,692	66,601	73,085	80,201	88,009	96,578	105,981	116,299
Office vehicles running expense	66,660	73,326	80,659	88,724	97,597	107,357	118,092	129,901	142,892	157,181
Office expenses (stationary, etc.)	25,200	27,654	30,346	33,300	36,543	40,100	44,005	48,289	52,991	58,150
Promotional expense	4,868,444	5,945,146	6,949,457	8,095,178	9,400,549	10,363,331	11,399,664	12,539,630	13,793,593	15,172,953
Insurance expense	3,876,100	3,477,380	3,078,660	2,679,940	2,281,220	2,061,428	1,649,142	1,236,857	824,571	412,286
Professional fees (legal, audit, etc.)	2,434,222	2,972,573	3,474,729	4,047,589	4,700,275	5,181,665	5,699,832	6,269,815	6,896,797	7,586,476
Depreciation expense	13,224,750	13,224,750	13,224,750	13,224,750	13,224,750	13,496,061	13,496,061	13,496,061	13,496,061	13,496,061
Amortization expense	946,720	946,720	946,720	946,720	946,720	-	-	-	-	-
Property tax expense	-	-	-	-	-	-	-	-	-	-
Miscellaneous expense	14,605,332	17,835,439	20,848,371	24,285,535	28,201,648	31,089,993	34,198,992	37,618,891	41,380,780	45,518,858
Subtotal	42,693,428	47,406,607	51,820,010	56,898,280	62,726,273	66,550,479	71,226,277	76,409,791	82,151,687	88,507,686
Operating Income	100,309,413	146,760,313	196,819,343	256,710,538	327,918,620	390,259,520	458,732,359	535,389,707	621,119,378	716,901,476
Other income	319,648	3,545,964	9,201,493	14,739,985	20,679,371	26,558,267	32,284,911	38,081,024	43,913,608	58,803,783
Gain / (loss) on sale of assets	-	-	-	-	888,800	-	-	-	-	-
Earnings Before Interest & Taxes	100,629,061	150,306,277	206,020,837	271,450,523	349,486,791	416,817,787	491,017,270	573,470,731	665,032,986	775,705,260
Interest expense	21,536,160	19,020,025	18,105,553	17,008,186	15,691,345	14,111,137	12,214,886	9,939,386	7,208,785	3,932,065
Earnings Before Tax	79,092,900	131,286,252	187,915,284	254,442,337	333,795,446	402,706,650	478,802,384	563,531,345	657,824,201	771,773,195
Tax	32,428,089	53,827,363	77,045,266	104,321,358	136,856,133	165,109,727	196,308,977	231,047,851	269,707,922	316,427,010
NET PROFIT/(LOSS) AFTER TAX	46,664,811	77,458,889	110,870,017	150,120,979	196,939,313	237,596,924	282,493,406	332,483,494	388,116,279	455,346,185
Balance brought forward		23,332,406	50,395,647	80,632,832	115,376,906	156,158,109	196,877,517	239,685,461	286,084,477	337,100,378
Total profit available for appropriation	46,664,811	100,791,294	161,265,665	230,753,811	312,316,219	393,755,033	479,370,923	572,168,955	674,200,756	792,446,563
Dividend	23,332,406	50,395,647	80,632,832	115,376,906	156,158,109	196,877,517	239,685,461	286,084,477	337,100,378	396,223,282
Balance carried forward	23,332,406	50,395,647	80,632,832	115,376,906	156,158,109	196,877,517	239,685,461	286,084,477	337,100,378	396,223,282

12.2 Balance Sheet

Statement Summaries Balance Sheet										
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9
Assets										
<i>Current assets</i>										
Cash & Bank	500,000	2,696,477	32,763,165	59,251,769	88,148,082	118,645,629	146,937,043	175,912,069	204,898,168	234,237,916
Accounts receivable	-	40,014,609	44,439,413	52,991,521	61,827,269	71,900,251	81,221,426	89,436,965	98,380,662	108,218,728
Finished goods inventory	-	14,949,634	16,724,709	18,641,789	20,710,817	22,942,397	24,146,795	25,416,990	26,756,814	28,170,345
Equipment spare part inventory	710,514	869,623	1,018,838	1,189,506	1,384,457	1,529,719	1,686,515	1,859,383	2,049,969	2,260,091
Raw material inventory	26,344,450	32,243,889	37,776,494	44,104,521	51,332,904	56,718,910	62,532,598	68,942,189	76,008,764	83,799,662
Pre-paid annual land lease	-	-	-	-	-	-	-	-	-	-
Pre-paid building rent	-	-	-	-	-	-	-	-	-	-
Pre-paid lease interest	-	-	-	-	-	-	-	-	-	-
Pre-paid insurance	3,876,100	3,477,380	3,078,660	2,679,940	2,281,220	2,061,428	1,649,142	1,236,857	824,571	412,286
Total Current Assets	31,431,064	94,251,612	135,801,280	178,859,046	225,684,749	273,798,334	318,173,519	362,804,453	408,918,948	457,099,028
<i>Fixed assets</i>										
Land	12,516,759	12,516,759	12,516,759	12,516,759	12,516,759	12,516,759	12,516,759	12,516,759	12,516,759	12,516,759
Building/Infrastructure	101,090,000	96,035,500	90,981,000	85,926,500	80,872,000	75,817,500	70,763,000	65,708,500	60,654,000	55,599,500
Machinery & equipment	75,300,000	67,770,000	60,240,000	52,710,000	45,180,000	37,650,000	30,120,000	22,590,000	15,060,000	7,530,000
Furniture & fixtures	1,501,500	1,351,350	1,201,200	1,051,050	900,900	750,750	600,600	450,450	300,300	150,150
Office vehicles	2,222,000	1,777,600	1,333,200	888,800	444,400	3,578,553	2,862,843	2,147,132	1,431,421	715,711
Office equipment	457,000	411,300	365,600	319,900	274,200	228,500	182,800	137,100	91,400	45,700
Total Fixed Assets	193,087,259	179,862,509	166,637,759	153,413,009	140,188,259	130,542,062	117,046,002	103,549,941	90,053,880	76,557,820
<i>Intangible assets</i>										
Pre-operation costs	4,733,599	3,786,879	2,840,159	1,893,440	946,720	-	-	-	-	-
Legal, licensing, & training costs	-	-	-	-	-	-	-	-	-	-
Total Intangible Assets	4,733,599	3,786,879	2,840,159	1,893,440	946,720	-	-	-	-	-
TOTAL ASSETS	229,251,922	277,901,000	305,279,198	334,165,494	366,819,728	404,340,396	435,219,520	466,354,394	498,972,828	533,656,848
Liabilities & Shareholders' Equity										
<i>Current liabilities</i>										
Accounts payable	-	29,406,007	34,293,326	38,429,272	42,923,635	47,564,143	50,292,412	53,084,142	56,043,863	59,182,885
Export re-finance facility	-	-	-	-	-	-	-	-	-	-
Short term debt	-	-	-	-	-	-	-	-	-	-
Other liabilities	-	-	-	-	-	-	-	-	-	-
Total Current Liabilities	-	29,406,007	34,293,326	38,429,272	42,923,635	47,564,143	50,292,412	53,084,142	56,043,863	59,182,885
<i>Other liabilities</i>										
Lease payable	-	-	-	-	-	-	-	-	-	-
Deferred tax	-	15,436,500	15,436,500	15,436,500	15,436,500	15,436,500	12,349,200	9,261,900	6,174,600	3,087,300
Long term debt	114,625,961	95,100,127	90,527,764	85,040,928	78,456,726	70,555,683	61,074,431	49,696,929	36,043,926	19,660,324
Total Long Term Liabilities	114,625,961	110,536,627	105,964,264	100,477,428	93,893,226	85,992,183	73,423,631	58,958,829	42,218,526	22,747,624
<i>Shareholders' equity</i>										
Paid-up capital	114,625,961	114,625,961	114,625,961	114,625,961	114,625,961	114,625,961	114,625,961	114,625,961	114,625,961	114,625,961
Retained earnings	-	23,332,406	50,395,647	80,632,832	115,376,906	156,158,109	196,877,517	239,685,461	286,084,477	337,100,378
Total Equity	114,625,961	137,958,367	165,021,608	195,258,794	230,002,867	270,784,071	311,503,478	354,311,423	400,710,439	451,726,339
TOTAL CAPITAL AND LIABILITY	229,251,922	277,901,000	305,279,198	334,165,494	366,819,728	404,340,396	435,219,520	466,354,394	498,972,828	533,656,848

12.3 Cash Flow Statement

Statement Summaries											SMEDA
Cash Flow Statement											
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Rs. in actuals Year 10
Operating activities											
Net profit	-	46,664,811	77,458,889	110,870,017	150,120,979	196,939,313	237,596,924	282,493,406	332,483,494	388,116,279	455,346,185
Add: depreciation expense	-	13,224,750	13,224,750	13,224,750	13,224,750	13,224,750	13,496,061	13,496,061	13,496,061	13,496,061	13,496,061
amortization expense	-	946,720	946,720	946,720	946,720	946,720	-	-	-	-	-
Deferred income tax	-	15,436,500	-	-	-	-	(3,087,300)	(3,087,300)	(3,087,300)	(3,087,300)	(3,087,300)
Accounts receivable	-	(40,014,609)	(4,424,804)	(8,552,108)	(8,835,748)	(10,072,982)	(9,321,175)	(8,215,540)	(8,943,697)	(9,838,066)	(10,821,873)
Finished good inventory	-	(14,949,634)	(1,775,075)	(1,917,080)	(2,069,029)	(2,231,580)	(1,204,398)	(1,270,195)	(1,339,824)	(1,413,531)	(1,491,577)
Equipment inventory	(710,514)	(159,109)	(149,215)	(170,668)	(194,951)	(145,262)	(156,796)	(172,868)	(190,587)	(210,122)	2,260,091
Raw material inventory	(26,344,450)	(5,899,439)	(5,532,605)	(6,328,027)	(7,228,383)	(5,386,006)	(5,813,688)	(6,409,591)	(7,066,574)	(7,790,898)	83,799,662
Pre-paid building rent	-	-	-	-	-	-	-	-	-	-	-
Pre-paid lease interest	-	-	-	-	-	-	-	-	-	-	-
Advance insurance premium	(3,876,100)	398,720	398,720	398,720	398,720	219,792	412,286	412,286	412,286	412,286	412,286
Accounts payable	-	29,406,007	4,887,319	4,135,946	4,494,363	4,640,507	2,728,269	2,791,730	2,959,721	3,139,022	(4,467,930)
Other liabilities	-	-	-	-	-	-	-	-	-	-	-
Cash provided by operations	(30,931,064)	45,054,717	85,034,698	112,608,271	150,857,422	198,135,253	234,650,182	280,037,990	328,723,579	382,823,730	535,445,605
Financing activities											
Change in long term debt	114,625,961	(19,525,835)	(4,572,363)	(5,486,835)	(6,584,203)	(7,901,043)	(9,481,252)	(11,377,502)	(13,653,002)	(16,383,603)	(19,660,324)
Change in short term debt	-	-	-	-	-	-	-	-	-	-	-
Change in export re-finance facility	-	-	-	-	-	-	-	-	-	-	-
Add: land lease expense	-	-	-	-	-	-	-	-	-	-	-
Land lease payment	-	-	-	-	-	-	-	-	-	-	-
Change in lease financing	-	-	-	-	-	-	-	-	-	-	-
Issuance of shares	114,625,961	-	-	-	-	-	-	-	-	-	-
Purchase of (treasury) shares	-	-	-	-	-	-	-	-	-	-	-
Cash provided by / (used for) financ	229,251,922	(19,525,835)	(4,572,363)	(5,486,835)	(6,584,203)	(7,901,043)	(9,481,252)	(11,377,502)	(13,653,002)	(16,383,603)	(19,660,324)
Investing activities											
Capital expenditure	(197,820,858)	-	-	-	-	(3,578,553)	-	-	-	-	-
Acquisitions	-	-	-	-	-	-	-	-	-	-	-
Cash (used for) / provided by invest	(197,820,858)	-	-	-	-	(3,578,553)	-	-	-	-	-
NET CASH	500,000	25,528,883	80,462,335	107,121,436	144,273,219	186,655,657	225,168,930	268,660,488	315,070,576	366,440,127	515,785,281
Cash balance brought forward		500,000	2,696,477	32,763,165	59,251,769	88,148,082	118,645,629	146,937,043	175,912,069	204,898,168	234,237,916
Cash available for appropriation	500,000	26,028,883	83,158,812	139,884,601	203,524,988	274,803,739	343,814,559	415,597,530	490,982,645	571,338,294	750,023,198
Dividend	-	23,332,406	50,395,647	80,632,832	115,376,906	156,158,109	196,877,517	239,685,461	286,084,477	337,100,378	396,223,282
Cash carried forward	500,000	2,696,477	32,763,165	59,251,769	88,148,082	118,645,629	146,937,043	175,912,069	204,898,168	234,237,916	353,799,916

13 KEY ASSUMPTIONS

13.1 Operating Cost Assumptions

Description	Details
Operational days per year	330
Operational hours per day	8
Shifts per day	1

13.2 Production Cost Assumptions

Description	Details
Production capacity utilization in year 1	75%
Production capacity growth rate	5%
Maximum capacity utilization	95%

13.3 Revenue Assumptions

Description	Details
Production Units Year 1	17,794
Sale price per unit	28,550
COGs	18,539

13.4 Financial Assumptions

Description	Details
Interest rate	20%
Debt : Equity Ratio	50:50
Project Life (Years)	10

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