



## Pre-feasibility Study

# GRAVURE PRINTING UNIT

June 2021

“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

This information memorandum is to introduce the subject matter and provide a general idea and information on the said matter. Although, the material included in this document is based on data/information gathered from various reliable sources; however, it is based upon certain assumptions, which may differ from case to case. The information has been provided on as is where is basis without any warranties or assertions as to the correctness or soundness thereof. Although, due care and diligence has been taken to compile this document, the contained information may vary due to any change in any of the concerned factors, and the actual results may differ substantially from the presented information. SMEDA, its employees or agents do not assume any liability for any financial or other loss resulting from this memorandum in consequence of undertaking this activity. The contained information does not preclude any further professional advice. The prospective user of this memorandum is encouraged to carry out additional diligence and gather any information which is necessary for making an informed decision; including taking professional advice from a qualified consultant/technical expert before taking any decision to act upon the information.

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### ***Document Control***

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## 2 EXECUTIVE SUMMARY

The proposed project is about establishing a **Gravure Printing unit**. The subject project is strongly recommended to be established in the adjoining of the major cities or urban areas. The prevalence of such facility would add economic benefits in the country and would number of direct and indirect employment. Moreover, features like low cost & less complexity associated with installation of **Gravure Printing unit** make it more attractive project. Currently the project is being designed / proposed for major cities with potential industrial FMCG growth but the same can be proposed for other cities which can fulfill input and logistic requirements of the project.

Initially project focus would be on customers from neighboring communities, whereas at maturity domestic market would be preferred. The main feature of the project would include hygienically produced Printed Package for FMCGs and Other products, processed according to international quality and standards.

The Gravure printing unit has the capacity of producing approximately **2,375,000 kgs** annually and will be operational for **330 days** a year and **24 hours** in 3 shifts a day. Initially the Gravure printing unit will be operated at **50%** of capital utilization and will increase it by **5%** annually. The Maximum capacity utilization will be **95%**.

The total project investment is **Rs. 505,081,110/-** with an Internal Rate of Return (IRR) of **35%** and Net Present Value (NPV) of **Rs 619,569,991/-**. The total project investment would be paid back in **3.85** years.

### 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 **Gravure Printing 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

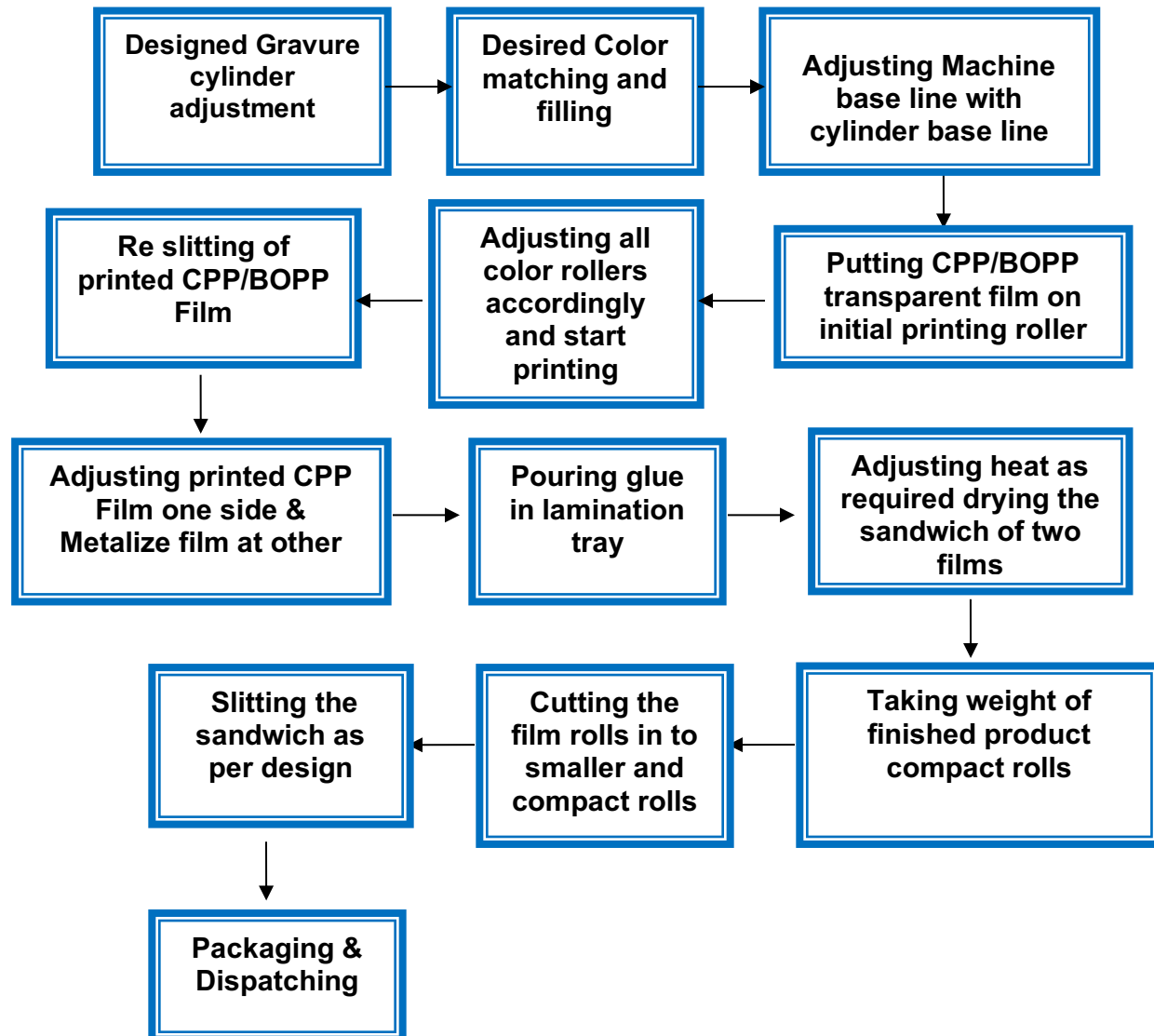
Following key parameters must be addressed as per pre-feasibility study under preparation

- **Technology:** This proposed unit with modern production plant includes 8 colour printing Gravure complete line, from roller bodies, lamination machines, Slitting Machine, and a generator that will set up a Gravure Printing unit.
- **Location:** The subject project is strongly recommended to be established in the adjoining of the major cities or urban areas with high potentials of FMCG production unit available.
- **Product:** Keeping in view the market demand and characteristics “only properly slitted and well protected packed product” is recommended to be the final product of the proposed prefeasibility.
- **Target Market:** The target customers for the proposed product would primarily be FMCGs companies, small production units & individuals having unique selling product that they want to be properly named and packaged, confectionary items.
- **Employment Generation:** The proposed project will provide direct employment to 26 people.

## 6 PRODUCTION PROCESS

The cycle of processing printed packaging film rolls mainly subjected to machine/method used particular to the desired output product. Following is the process flow of a Printed packaging film rolls:

### 6.1 Printing and lamination Process Flow:



However a brief summary of the general operations in any particular production line can be illustrated under the following headings:



### **6.1.1 CPP Transparent slitting.**

Cast Polypropylene Film (CPP) transparent it's a bundle like rolled plastic film with a weight of 500 to 1000 kg max, is used to make a printing packaging this is the first step as it require properly slitted CPP Roll to be printed.

### **6.1.2 Colour Matching.**

Colour matching is one of hardest and technical work in this process as it requires expert person to understand the theme of colour, fill all due try with match and required colour theme.

### **6.1.3 Drum /Cylinder Adjustment.**

The third step which required adjusting drum or cylinder that contain picture/design mark on them it may be 6 cylinder or 2 cylinder depend on job to job.

### **6.1.4 CPP Transparent printing.**

When Cylinder got properly installed and fix with the edge of machine initially slowly start printing of CPP Transparent film and see if that shows right result speed it up as per its max limit

### **6.1.5 Printed CPP Slitting process.**

Once the 1st roll of CPP film gets printed take it out from the roller and start slitting it on slitting machine to be properly rolled with its edges.

### **6.1.6 Printed CPP and metalize CPP lamination.**

The Rolled printed Film roll know need to be joint with metalize Cast Polypropylene Film on lamination machine with glue, pour the lamination try with glue place Printed Film at upper end of the lamination roller and metalize film at lower end of lamination roller start the machine check the temperature to extend that can dry the glue and make a sandwich of these two films

### **6.1.7 Slitting rolls.**

Once the two sheets got lamented and dried, take the joint film and slit it properly as it must be properly matched with its layer edges, Make rolls of 500 kg.

### **6.1.8 Cutting rolls in design/ size.**

Take the laminated roll of 500 kg and make small rolls out of it as per customer requirement.

### **6.1.9 Cutting waste.**

Cut the waste and damage material from the rolls to make it properly and well-furnished finish product

### **6.1.10 weightage of finished goods.**

Take the weight of finished product make an invoice according to that weight.

### **6.1.11 Packaging & Dispatching.**

Properly pack the finished product in standard bags and dispatch it to the customer or forward it to finished product warehouse

## **7 INSTALLED AND OPERATIONAL CAPACITIES**

The Gravure printing unit has the capacity of producing approximately 2,376,000 kgs annually and will be operational for 330 days a year and 24 hours a day in 3 shifts. Initially the printing unit will be operated at 75% of capital utilization and will increase it by 5% annually. The Maximum capacity utilization will be 95%.

## **8 CRITICAL FACTORS**

- Selection of proper location, equipment and staff would be required to run project successfully.
- Utmost care should be taken while selecting raw material sheets should be made of virgin plastic or should be from a good vender. Only the best quality CPP films should be used.
- Continuous efforts should be made for up-gradation of the processing techniques.
- To attract large number of customers the product must be processed on quality standards.

- Government rule and policies
- Availability of skilled workers
- Natural Disasters
- High competition

## 9 GEOGRAPHICAL POTENTIAL FOR INVESTMENT

Now a day's packaging is become one of the core element for every product it is an important part for developing a brand while number of FMCGS are focusing in gaining more and more market share for them self in this sense packaging has become very important and keen aspect to achieve companies desire.

In Pakistan almost every sector has a requirement of developing brand and for development of brand there is a requirement of developing its packaging currently Pakistan's most of

## 10 POTENTIAL TARGET CUSTOMERS / MARKETS

The target customers for the proposed product would primarily be FMCG companies, confectionary making factories Food chains, and any tangible product provider or manufacturer. Initially the project will be focusing on neighboring communities, and opportunity for expansion could be capitalize depending successful marketing of product.

## 11 PROJECT COST SUMMARY

### 11.1 Project Economics

All the figures in this financial model have been calculated for estimated sales of **Rs. 93,000,000/-** in the year one. The capacity utilization during year one is worked out at **50%** 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)	35%
Payback Period (yrs.)	3.85
Net Present Value (Rs.)	619,569,991

## 11.2 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. 252,540,555
Bank Loan (50%)	Rs. 252,540,555
Markup to the Borrower (%age / annum)	16 %
Tenure of the Loan (Years)	10

## 11.3 Project Cost

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

**Table 3: Project Cost**

Capital Investment	Rs. in actuals
Land	7,486,000
Building/Infrastructure	17,884,000
Machinery & equipment	428,575,000
Furniture & fixtures	1,795,000
Office vehicles	-
Office equipment	217,000
Pre-operating costs	4,260,360

Training costs	-
<b>Total Capital Costs</b>	<b>460,217,360</b>

<b>Working Capital</b>	<b>Rs. in actuals</b>
Equipment spare part inventory	-
Raw material inventory	22,935,000
Upfront land lease rental	-
Upfront building rent	-
Upfront machinery & equipment lease rental *	-
Upfront office equipment lease rental *	-
Upfront office vehicles lease rental *	-
Upfront insurance payment	21,428,750
Cash	500,000
<b>Total Working Capital</b>	<b>44,863,750</b>

<b>Total Investment</b>	<b>505,081,110</b>
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## 11.4 Space Requirement

The space requirement for the proposed Gravure printing machine is estimated considering various facilities including management office, Machinery processing area, warehouse and open space, etc. Details of space requirement and cost related to land & building is given below;

**Table 4: Space Requirement**

<b>Description</b>	<b>Estimated Area (Sq Ft)</b>	<b>Unit Cost (Rs.)</b>	<b>Total Cost (Rs.)</b>
Area for Plant	4800	2000	1,344,000
Management Office	672	1800	8,640,000
Prayer area	500	1800	100,000
Warehouse	5000	1800	9,000,000
Pavement/Driveway	4000	500	2,000,000
<b>Total</b>			<b>21,084,000</b>

## 11.5 Machinery & Equipment Requirement

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

**Table 5: Machinery & Equipment**

Description	Price	Qty	Total
Gravuyer Machine	187,550,000	1	187,550,000
Lamination Machine	77,500,000	2	155,000,000
Slitting machine	28,675,000	3	86,025,000
<b>Total Cost</b>			<b>428,575,000</b>

### 11.6 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.)
Office chairs	6	25,000	150,000
Office tables	6	50,000	100,000
Plastic chairs	23	2,200	50,000
Generator (500 KVA)	1	4,000,000	4,000,000
Air conditioners (2 ton split)	1	95,000	95,000
Electric wiring etc.	1	1,000,000	1,000,000
<b>Total</b>			<b>17,95,000/-</b>

### 11.7 Office Equipment Requirement

Following office equipment will be required for Graver Printing unit.

**Table 7: Office Equipment**

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Laptops	2	75,000	150,000
3-in-1 printer	1	50,000	50,000
Telephones	1	7,000	70,000
<b>Total</b>			<b>270,000/-</b>

### 11.8 Human Resource Requirement

In order to run operations of gravure printing 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.)
Manager	1	50,000
Accountant	1	30,000
Gravure machine operator	3	90,000
Gravure Machine Assistant	3	57,000
Washing man (wheat)	2	25,000
Lamination Machine Operator	2	50,000
Lamination Machine Assistant	3	57,000
Slitting machine operator	3	75,000
Warehouse in charge	1	30,000
Sweepers	2	37,000
Office boy & support Services	3	45,500
Guards	2	37,000
<b>Total</b>	<b>25</b>	<b>583,500/-</b>

### 11.9 Utilities and other costs

An essential cost to be borne by the project is the cost of utilities. The administrative expenses are Rs. 50,000 per month which includes the utilities. Furthermore, promotional expense being essential for marketing of Gravure printing unit is estimated as 1% of Revenue that for year 1.

### 11.10 Revenue Generation

Based on the capacity utilization of **50%**, sales revenue during the first year of operations is estimated as under;

Table 9: Revenue Generation – Year 1

Description	No. of Kgs Produced (No.)	Finished Goods Inventory (No.)	Units available for Sale (No.)	Sale Price / unit (Rs.)	Sales Revenue (Rs.)
All-purpose Printing	1,188,679	1,188,679	1,188,679	583	693,000,000 /-

## 12 CONTACT DETAILS

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

### 12.1 Machinery Suppliers

Name of Supplier	Address	Phone	Fax	E-mail	Website
BD TECH CHINA Zheren Printing machinery	Nanyu Country, Shangwang, Ruian City, Zhejiang Province, China	0086-577-66862980		<a href="mailto:lily@chinaprintingmachines.com">lily@chinaprintingmachines.com</a>	<a href="https://www.chinaprintingmachines.com/contactus.htm">https://www.chinaprintingmachines.com/contactus.htm</a>
Zubair Machinery Company Pakistan	p-952, Street#02, Near Madni Masjid/Rehmania Service station Raja Ghulam rasool Nagar, Faisalabad	0092418721573	0086-372-5951936	<a href="mailto:ZMCpakistan@gmail.com">ZMCpakistan@gmail.com</a>	<a href="http://www.zmcpakistan.com/www.abcmach.com">http://www.zmcpakistan.com/www.abcmach.com</a>



## 13 USEFUL WEB LINKS

Small & Medium Enterprises Development Authority (SMEDA)	<a href="http://www.smeda.org.pk">www.smeda.org.pk</a>
Government of Pakistan	<a href="http://www.pakistan.gov.pk">www.pakistan.gov.pk</a>
Ministry of Industries & Production	<a href="http://www.moip.gov.pk">www.moip.gov.pk</a>
Ministry of Education, Training & Standards in Higher Education	<a href="http://moptt.gov.pk">http://moptt.gov.pk</a>
Government of Punjab	<a href="http://www.punjab.gov.pk">www.punjab.gov.pk</a>
Government of Sindh	<a href="http://www.sindh.gov.pk">www.sindh.gov.pk</a>
Government of Khyber Pakhtunkhwa	<a href="http://www.khyberpakhtunkhwa.gov.pk">www.khyberpakhtunkhwa.gov.pk</a>
Government of Balochistan	<a href="http://www.balochistan.gov.pk">www.balochistan.gov.pk</a>
Government of Gilgit Baltistan	<a href="http://www.gilgitbaltistan.gov.pk">www.gilgitbaltistan.gov.pk</a>
Government of Azad Jamu Kashmir	<a href="http://www.ajk.gov.pk">www.ajk.gov.pk</a>
Trade Development Authority of Pakistan (TDAP)	<a href="http://www.tdap.gov.pk">www.tdap.gov.pk</a>
Security Commission of Pakistan (SECP)	<a href="http://www.secp.gov.pk">www.secp.gov.pk</a>
Federation of Pakistan Chambers of Commerce and Industry (FPCCI)	<a href="http://www.fpcci.com.pk">www.fpcci.com.pk</a>
State Bank of Pakistan (SBP)	<a href="http://www.sbp.org.pk">www.sbp.org.pk</a>
Punjab Small Industries Corporation	<a href="http://www.psic.gop.pk">www.psic.gop.pk</a>
Sindh Small Industries Corporation	<a href="http://www.ssic.gos.pk">www.ssic.gos.pk</a>
Pakistan Horticulture Development and Export Company (PHDEC)	<a href="http://www.phdec.org.pk">www.phdec.org.pk</a>
Punjab Vocational Training Council (PVTC)	<a href="http://www.pvtc.gop.pk">www.pvtc.gop.pk</a>
Technical Education and Vocational Training Authority (TEVTA)	<a href="http://www.tevta.org">www.tevta.org</a>
Pakistan Readymade Garment Technical Training Institute	<a href="http://www.prgmea.org/prgtti/">www.prgmea.org/prgtti/</a>
Livestock & Dairy Development Department, Government of Punjab.	<a href="http://www.livestockpunjab.gov.pk">www.livestockpunjab.gov.pk</a>
Punjab Industrial Estates (PIE)	<a href="http://www.pie.com.pk">www.pie.com.pk</a>
Faisalabad Industrial Estate Development and Management Company (FIEDMC)	<a href="http://www.fiedmc.com.pk">www.fiedmc.com.pk</a>

## 14 ANNEXURES

### 14.1 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	Rs. in actuals Year 10
Revenue	693,000,000	838,530,000	1,006,236,000	1,199,097,900	1,420,469,820	1,674,125,145	1,964,306,837	2,295,783,616	2,673,912,682	3,104,709,725
Cost of goods sold	583,272,000	673,124,916	770,712,322	884,408,724	999,983,432	1,125,209,518	1,260,797,815	1,418,823,415	1,578,577,188	1,751,253,141
Gross Profit	109,728,000	165,405,084	235,523,678	314,689,176	420,486,388	548,915,627	703,509,022	876,960,201	1,095,335,494	1,353,456,584
General administration & selling expenses										
Administration expense	10,623,420	11,657,731	12,792,744	18,080,696	19,841,058	21,772,812	23,892,643	32,080,806	35,204,239	38,631,773
Rental expense	-	-	-	-	-	-	-	-	-	-
Utilities expense	60,000	66,000	72,600	79,860	87,846	96,631	106,294	116,923	128,615	141,477
Travelling & Comm. expense (phone, fax, etc.)	412,560	452,727	496,806	702,163	770,527	845,546	927,870	1,245,857	1,367,155	1,500,263
Office vehicles running expense	-	-	-	-	-	-	-	-	-	-
Office expenses (stationary, etc.)	515,700	565,909	621,007	877,704	963,158	1,056,933	1,159,837	1,557,321	1,708,944	1,875,329
Promotional expense	1,386,000	1,677,060	2,012,472	2,398,196	2,840,940	3,348,250	3,928,614	4,591,567	5,347,825	6,209,419
Insurance expense	21,428,750	19,285,875	17,143,000	15,000,125	12,857,250	10,714,375	8,571,500	6,428,625	4,285,750	2,142,875
Professional fees (legal, audit, etc.)	3,465,000	4,192,650	5,031,180	5,995,490	7,102,349	8,370,626	9,821,534	11,478,918	13,369,563	15,523,549
Depreciation expense	43,952,900	43,952,900	43,952,900	43,952,900	43,952,900	43,952,900	43,952,900	43,952,900	43,952,900	43,952,900
Amortization expense	852,072	852,072	852,072	852,072	852,072	-	-	-	-	-
Property tax expense	-	-	-	-	-	-	-	-	-	-
Miscellaneous expense	20,790,000	25,155,900	30,187,080	35,972,937	42,614,095	50,223,754	58,929,205	68,873,508	80,217,380	93,141,292
Subtotal	103,486,402	107,858,825	113,161,861	123,912,142	131,882,194	140,381,826	151,290,397	170,326,425	185,582,372	203,118,877
Operating Income	6,241,598	57,546,259	122,361,817	190,777,034	288,604,194	408,533,801	552,218,625	706,633,775	909,753,122	1,150,337,707
Other income	306,242	3,577,771	11,733,815	22,645,872	32,175,245	39,157,865	46,010,894	53,476,551	61,800,114	77,122,833
Gain / (loss) on sale of assets	-	-	-	-	-	-	-	-	-	-
Earnings Before Interest & Taxes	6,547,840	61,124,029	134,095,632	213,422,905	320,779,439	447,691,666	598,229,519	760,110,327	971,553,236	1,227,460,540
Interest expense	38,808,673	35,090,613	33,087,554	30,764,005	28,068,688	24,942,121	21,315,302	17,108,193	12,227,946	6,566,860
Earnings Before Tax	(32,260,833)	26,033,416	101,008,078	182,658,901	292,710,751	422,749,546	576,914,217	743,002,134	959,325,290	1,220,893,680
Tax	-	-	38,860,071	74,890,149	120,011,408	173,327,314	236,534,829	304,630,875	393,323,369	500,566,409
NET PROFIT/(LOSS) AFTER TAX	(32,260,833)	26,033,416	62,148,007	107,768,751	172,699,343	249,422,232	340,379,388	438,371,259	566,001,921	720,327,271
Balance brought forward		(32,260,833)	(6,227,417)	27,960,295	67,864,523	120,281,933	184,852,082	262,615,735	350,493,497	458,247,709
Total profit available for appropriation	(32,260,833)	(6,227,417)	55,920,590	135,729,046	240,563,866	369,704,165	525,231,470	700,986,994	916,495,418	1,178,574,980
Dividend	-	-	27,960,295	67,864,523	120,281,933	184,852,082	262,615,735	350,493,497	458,247,709	589,287,490
Balance carried forward	(32,260,833)	(6,227,417)	27,960,295	67,864,523	120,281,933	184,852,082	262,615,735	350,493,497	458,247,709	589,287,490

## 14.2 Balance Sheet

Statement Summaries											SMEDA
Balance Sheet											Rs. in actuals
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
<b>Assets</b>											
<i>Current assets</i>											
Cash & Bank	500,000	5,624,830	65,930,581	168,745,712	284,171,723	359,333,173	423,824,134	496,393,748	573,137,275	662,865,008	879,591,647
Accounts receivable	-	18,986,301	20,979,863	25,270,767	30,210,053	35,884,489	42,391,712	49,841,534	58,357,403	68,078,031	79,159,211
Finished goods inventory	-	-	-	-	-	-	-	-	-	-	-
Equipment spare part inventory	-	-	-	-	-	-	-	-	-	-	-
Raw material inventory	22,935,000	27,814,421	33,453,163	39,955,622	47,439,617	56,038,047	65,900,744	77,196,543	90,115,612	104,872,043	-
Pre-paid annual land lease	-	-	-	-	-	-	-	-	-	-	-
Pre-paid building rent	-	-	-	-	-	-	-	-	-	-	-
Pre-paid lease interest	-	-	-	-	-	-	-	-	-	-	-
Pre-paid insurance	21,428,750	19,285,875	17,143,000	15,000,125	12,857,250	10,714,375	8,571,500	6,428,625	4,285,750	2,142,875	-
<b>Total Current Assets</b>	<b>44,863,750</b>	<b>71,711,428</b>	<b>137,506,607</b>	<b>248,972,226</b>	<b>374,678,643</b>	<b>461,970,084</b>	<b>540,688,089</b>	<b>629,860,450</b>	<b>725,896,040</b>	<b>837,957,957</b>	<b>958,750,858</b>
<i>Fixed assets</i>											
Land	7,486,000	7,486,000	7,486,000	7,486,000	7,486,000	7,486,000	7,486,000	7,486,000	7,486,000	7,486,000	7,486,000
Building/Infrastructure	17,884,000	16,989,800	16,095,600	15,201,400	14,307,200	13,413,000	12,518,800	11,624,600	10,730,400	9,836,200	8,942,000
Machinery & equipment	428,575,000	385,717,500	342,860,000	300,002,500	257,145,000	214,287,500	171,430,000	128,572,500	85,715,000	42,857,500	-
Furniture & fixtures	1,795,000	1,615,500	1,436,000	1,256,500	1,077,000	897,500	718,000	538,500	359,000	179,500	-
Office vehicles	-	-	-	-	-	-	-	-	-	-	-
Office equipment	217,000	195,300	173,600	151,900	130,200	108,500	86,800	65,100	43,400	21,700	-
<b>Total Fixed Assets</b>	<b>455,957,000</b>	<b>412,004,100</b>	<b>368,051,200</b>	<b>324,098,300</b>	<b>280,145,400</b>	<b>236,192,500</b>	<b>192,239,600</b>	<b>148,286,700</b>	<b>104,333,800</b>	<b>60,380,900</b>	<b>16,428,000</b>
<i>Intangible assets</i>											
Pre-operation costs	4,260,360	3,408,288	2,556,216	1,704,144	852,072	-	-	-	-	-	-
Legal, licensing, & training costs	-	-	-	-	-	-	-	-	-	-	-
<b>Total Intangible Assets</b>	<b>4,260,360</b>	<b>3,408,288</b>	<b>2,556,216</b>	<b>1,704,144</b>	<b>852,072</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>TOTAL ASSETS</b>	<b>505,081,110</b>	<b>487,123,816</b>	<b>508,114,023</b>	<b>574,774,670</b>	<b>655,676,115</b>	<b>698,162,584</b>	<b>732,927,689</b>	<b>778,147,150</b>	<b>830,229,840</b>	<b>898,338,857</b>	<b>975,178,858</b>
<b>Liabilities &amp; Shareholders' Equity</b>											
<i>Current liabilities</i>											
Accounts payable	-	47,527,761	55,003,674	63,138,718	71,983,862	81,593,968	92,028,113	103,349,929	115,627,974	128,936,143	133,350,813
Export re-finance facility	-	-	-	-	-	-	-	-	-	-	-
Short term debt	-	-	-	-	-	-	-	-	-	-	-
Other liabilities	-	-	-	-	-	-	-	-	-	-	-
<b>Total Current Liabilities</b>	<b>-</b>	<b>47,527,761</b>	<b>55,003,674</b>	<b>63,138,718</b>	<b>71,983,862</b>	<b>81,593,968</b>	<b>92,028,113</b>	<b>103,349,929</b>	<b>115,627,974</b>	<b>128,936,143</b>	<b>133,350,813</b>
<i>Other liabilities</i>											
Lease payable	-	-	-	-	-	-	-	-	-	-	-
Deferred tax	-	-	-	38,860,071	87,857,875	87,857,875	70,286,300	52,714,725	35,143,150	17,571,575	(U)
Long term debt	252,540,555	219,316,333	206,797,212	192,275,031	175,429,300	155,888,253	133,220,639	106,926,206	76,424,664	41,042,875	-
<b>Total Long Term Liabilities</b>	<b>252,540,555</b>	<b>219,316,333</b>	<b>206,797,212</b>	<b>231,135,102</b>	<b>263,287,175</b>	<b>243,746,128</b>	<b>203,506,939</b>	<b>159,640,931</b>	<b>111,567,814</b>	<b>58,614,450</b>	<b>(U)</b>
<i>Shareholders' equity</i>											
Paid-up capital	252,540,555	252,540,555	252,540,555	252,540,555	252,540,555	252,540,555	252,540,555	252,540,555	252,540,555	252,540,555	252,540,555
Retained earnings	-	(32,260,833)	(6,227,417)	27,960,295	67,864,523	120,281,933	184,852,082	262,615,735	350,493,497	458,247,709	589,287,490
<b>Total Equity</b>	<b>252,540,555</b>	<b>220,279,722</b>	<b>246,313,138</b>	<b>280,500,850</b>	<b>320,405,078</b>	<b>372,822,488</b>	<b>437,392,637</b>	<b>515,156,290</b>	<b>603,034,052</b>	<b>710,788,264</b>	<b>841,828,045</b>
<b>TOTAL CAPITAL AND LIABILITY</b>	<b>505,081,110</b>	<b>487,123,816</b>	<b>508,114,023</b>	<b>574,774,670</b>	<b>655,676,115</b>	<b>698,162,584</b>	<b>732,927,689</b>	<b>778,147,150</b>	<b>830,229,840</b>	<b>898,338,857</b>	<b>975,178,858</b>
Note: Total assets value will differ from project cost due to first installment of leases paid at the start of year 0											

## 14.3 Cash Flow Statement

Statement Summaries											SMEDA
Cash Flow Statement											Rs. in actuals
	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	-	(32,260,833)	26,033,416	62,148,007	107,768,751	172,699,343	249,422,232	340,379,388	438,371,259	566,001,921	720,327,271
Add: depreciation expense	-	43,952,900	43,952,900	43,952,900	43,952,900	43,952,900	43,952,900	43,952,900	43,952,900	43,952,900	43,952,900
amortization expense	-	852,072	852,072	852,072	852,072	852,072	-	-	-	-	-
Deferred income tax	-	-	-	38,860,071	48,997,804	-	(17,571,575)	(17,571,575)	(17,571,575)	(17,571,575)	(17,571,575)
Accounts receivable	-	(18,986,301)	(1,993,562)	(4,290,904)	(4,939,286)	(5,674,436)	(6,507,223)	(7,449,822)	(8,515,869)	(9,720,628)	(11,081,180)
Finished good inventory	-	-	-	-	-	-	-	-	-	-	-
Equipment inventory	-	-	-	-	-	-	-	-	-	-	-
Raw material inventory	(22,935,000)	(4,879,421)	(5,638,742)	(6,502,459)	(7,483,995)	(8,598,431)	(9,862,696)	(11,295,799)	(12,919,069)	(14,756,431)	104,872,043
Pre-paid building rent	-	-	-	-	-	-	-	-	-	-	-
Pre-paid lease interest	-	-	-	-	-	-	-	-	-	-	-
Advance insurance premium	(21,428,750)	2,142,875	2,142,875	2,142,875	2,142,875	2,142,875	2,142,875	2,142,875	2,142,875	2,142,875	2,142,875
Accounts payable	-	47,527,761	7,475,913	8,135,045	8,845,143	9,610,106	10,434,145	11,321,816	12,278,045	13,308,169	4,414,670
Other liabilities	-	-	-	-	-	-	-	-	-	-	-
Cash provided by operations	(44,363,750)	38,349,052	72,824,873	145,297,607	200,136,264	214,984,430	272,010,658	361,479,782	457,738,566	583,357,231	847,057,005
<i>Financing activities</i>											
Change in long term debt	252,540,555	(33,224,221)	(12,519,122)	(14,522,181)	(16,845,730)	(19,541,047)	(22,667,615)	(26,294,433)	(30,501,542)	(35,381,789)	(41,042,875)
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	252,540,555	-	-	-	-	-	-	-	-	-	-
Purchase of (treasury) shares	-	-	-	-	-	-	-	-	-	-	-
Cash provided by / (used for) financ	505,081,110	(33,224,221)	(12,519,122)	(14,522,181)	(16,845,730)	(19,541,047)	(22,667,615)	(26,294,433)	(30,501,542)	(35,381,789)	(41,042,875)
<i>Investing activities</i>											
Capital expenditure	(460,217,360)	-	-	-	-	-	-	-	-	-	-
Acquisitions	-	-	-	-	-	-	-	-	-	-	-
Cash (used for) / provided by invest	(460,217,360)	-	-	-	-	-	-	-	-	-	-
NET CASH	500,000	5,124,830	60,305,751	130,775,426	183,290,534	195,443,383	249,343,044	335,185,349	427,237,024	547,975,442	806,014,129
Cash balance brought forward		500,000	5,624,830	65,930,581	168,745,712	284,171,723	359,333,173	423,824,134	496,393,748	573,137,275	662,865,008
Cash available for appropriation	500,000	5,624,830	65,930,581	196,706,007	352,036,246	479,615,106	608,676,216	759,009,483	923,630,772	1,121,112,717	1,468,879,137
Dividend	-	-	-	27,960,295	67,864,523	120,281,933	184,852,082	262,615,735	350,493,497	458,247,709	589,287,490
Cash carried forward	500,000	5,624,830	65,930,581	168,745,712	284,171,723	359,333,173	423,824,134	496,393,748	573,137,275	662,865,008	879,591,647

## 15 KEY ASSUMPTIONS

### 15.1 Operating Cost Assumptions

Description	Details
Operational Days/ year	330
Hours operational/ days	24
Shift Length (Hours)	8

### 15.2 Production Cost Assumptions

Description	Details
Initial Capital utilization	50%
Annual Capital Utilization Growth	5%
Maximum Capital Utilization	95%

### 15.3 Revenue Assumptions

Description	Details
Revenue	693,000,000
Cost of goods sold per unit	463
Sale Price/kg	583
Production per year (Kg) installed capacity	2,376,000
Production Quantity sold (Kg)	2,376,000

### 15.4 Financial Assumptions

Description	Details
Interest Rate	16%
Debt: Equity Ratio	50:50
Debt Tenure	10 Years

# Small and Medium Enterprises Development Authority

## HEAD OFFICE

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