

Pre-Feasibility Study

MELAMINE TABLEWARE MANUFACTURING UNIT



Small and Medium Enterprises Development Authority

Ministry of Industries & Production

Government of Pakistan

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1 DISCLAIMER

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

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2 EXECUTIVE SUMMARY

This pre-feasibility study is for setting up a semi-mechanized Melamine Tableware Manufacturing facility exclusively for the dinner set.

The demand for melamine tableware is constantly rising and there are a number of local manufacturers producing good quality melamine tableware and selling to wholesalers / retailers all across Pakistan. Durability and precious look of melamine tableware at nominal prices are the key factors for customer's attraction, resultantly leading towards the strong growth of melamine manufacturing and retailing in Pakistan.

The prime focus of the proposed business venture would be to manufacture 72 piece melamine dinner sets including bowl, plates, pots etc. at affordable prices and to be sold to the wholesalers or retail outlets.

Proposed Melamine Tableware Manufacturing Unit should preferably be located at Gujranwala, Lahore, Karachi, Rawalpindi and Lalamusa as required raw material and labor is easily accessible in these cities.

Total capacity of the unit will be to manufacture 80 melamine dinner sets per day and initial capacity utilization will be 70% in first year.

Total project cost is estimated as Rs. 7.05 million with capital investment of Rs. 5.37 million and working capital of Rs. 1.68 million. Given the cost assumptions IRR, payback and NPV are 40%, 3.41 years and Rs. 9.26 million, respectively.

The project will provide direct employment opportunities to 6 people including owner / manager. The legal business status of this venture 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 **Melamine Tableware Manufacturing** 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

This document provides details of setting up a Melamine dinner set manufacturing unit. The unit will have the capacity to produce approximately 80 melamine dinner sets per day on single shift basis. For achieving quality and consistency in the production, hydraulic presses, grinding and buffing machines will be used. This machinery will be purchased from local machinery suppliers. The proposed unit will manufacture 72 piece melamine dinner set, having 10 kgs weight. Each dinner set will be packed in printed corrugated box. Financial analysis shows the unit shall be profitable from the very first year of operation.

The composition of 72 pieces would be as follows: Bowls & Dishes, Buffet Trays, Platters, Presentation Boards, Serving Bowl / Dish / Plates, Cups, Sharing Platters, etc.

5.1 Production Process Flow:

The production process flow of melamine tableware manufacturing unit is as follows:-

Melamine Moulding Compound: For melamine table manufacturing, the major raw material is melamine moulding compound. It comes in white color and exists in fine powder form, which is odourless and tasteless and is non-toxic. It should be kept in clean and dry place.

Initial Compression Moulding: Compression moulding is an old and widely used moulding process for melamine tableware manufacturing. In this process a precise amount of melamine moulding compound is manually loaded into the bottom half of a heated mould. Then the mould halves are brought together to compress the charge, forcing it to flow and conform to the shape of the cavity; after heating, the mould halves are opened manually by the operator and the piece is removed from the cavity. In first compression, the piece is 70-80% cured (complete curing shall be avoided). At this stage, surface of the article shows no sign of brightness and is soft in nature.

Overlay Printed Paper and Glazing: After the first compression moulding the decorated paper is placed on plain pieces and then the surface of the piece is evenly sprinkled with the glazing powder. The powder should not scatter, otherwise it will affect the product colour. Printed paper is used for decorative design & enhances the appearance of dinner set and glazing powder is used for brightness.

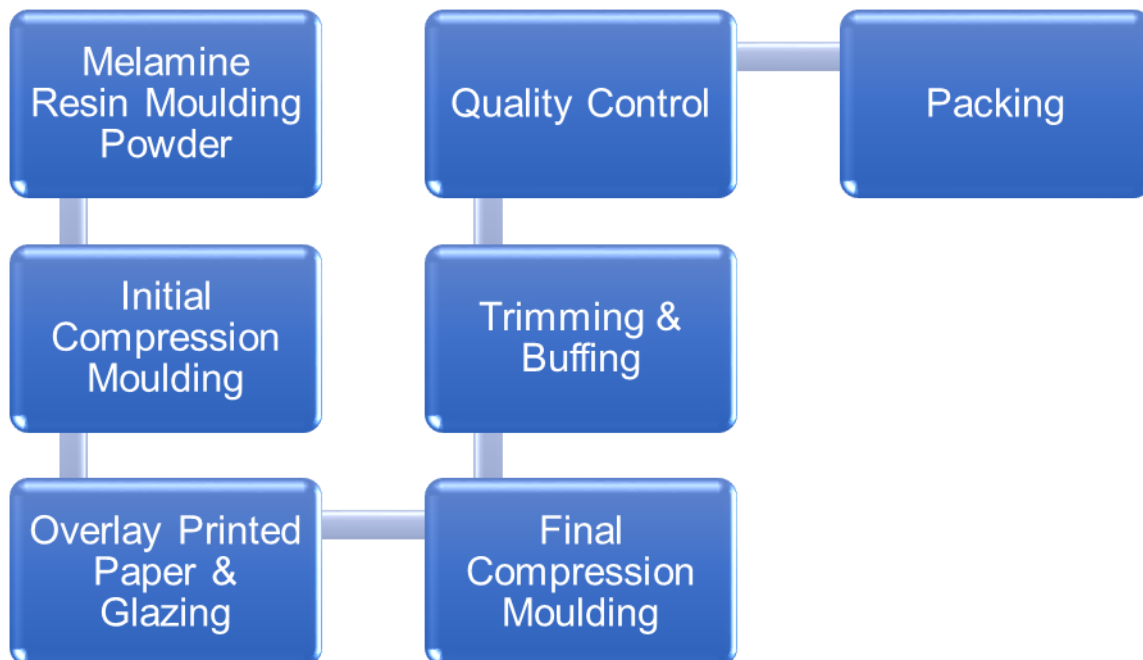
Final Compression Moulding: After overlay paper and glazing powder, the machine operator presses the mould for final compression. Special attention shall

be paid at this stage. After final compression dinner set pieces need trimming and buffing.

Trimming & Buffing: Trimming process is the shearing of excess material from the dinner set pieces to obtain the final design. Trimming and buffing is essential to remove the products burr, making the product look more beautiful & smooth edged. Suitable exhaust system should be provided in the area where grinding is handled for dust removal.

Inspection & Packing: In order to ensure the quality of products, strict quality inspection clearance should be done to pick out the unqualified products, and then sent for packing. Some common faults are bad attachment & breakage of overlay paper and improper cure. Each set of final dinner set is packed into a printed corrugated box.

Table 1: Process Flow Chart for Melamine Tableware Manufacturing



5.2 Installed and Operational Capacities

The installed and operational capacities of Melamine Tableware Manufacturing Unit mainly depends on the installed machinery. This pre-feasibility study is based on Hydraulic presses 20", 22", 24", 26", 28" along with grinding and buffing machines.

The proposed unit will operate in one shift of 8 hours basis with 300 operational days. Total capacity of the unit will be to manufacture 80 Melamine dinner set

(Weight = 10 kgs each set) per day; in first year, the unit will operate at 70% capacity by producing 16,800 sets in first year.

Capacity utilization growth rate of 5% is considered for subsequently years, while maximum capacity utilization (i.e. 95%) will be achieved during the 6th year of operation. This production capacity is estimated to be economically viable and justifies the capital as well as operational costs of the project.

It is pertinent to mention that, all the manufactured sets would not meet the quality standards and therefore will be categorized as "A Grade" and "B Grade".

6 CRITICAL FACTORS

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

- Selection of appropriate plant, machinery / mould.
- Relevant management experience.
- Availability of electricity.
- Induction of skilled labor for getting quality production.
- Efficient marketing.
- Strong linkages with wholesaler / retailers for selling of product.

7 GEOGRAPHICAL POTENTIAL FOR INVESTMENT

The major melamine tableware manufacturing units are established in Gujranwala, Lahore, Karachi, Rawalpindi and Lalamusa. Therefore, any of the above cities would be suitable for setting up a melamine tableware manufacturing unit. Raw material and labor is also easily accessible in these cities.

8 POTENTIAL TARGET CUSTOMERS / MARKETS

Overall local production of uniquely designed high end melamine dinnerware is currently in good demand. At present melamine dinnerware is favored for casual dining and outdoor eating parties. It is also used in catering, fast food chains, hotels, enterprises' and institutions' canteens and as gifts. Global market demand is favorable with increasing demand from Afghanistan and India etc.

Potential target customers are middle and lower income groups. The unit would be located in any city where access to raw material and labor is easy like Lahore, Gujranwala and Karachi etc. In addition to the local markets, an enormous export market for the Pakistani melamine products exists in Afghanistan, India and Middle East, etc.

9 PROJECT COST SUMMARY

9.1 Project Economics

All the figures in this financial model have been calculated for estimated sales of Rs. 32.5 million in the year one. The capacity utilization during year one is worked out at 70% 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 2: Project Economics

Description	Details
Internal Rate of Return (IRR)	40%
Payback Period (years)	3.41
Net Present Value (Rs.)	9,264,930

9.2 Project Financing

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

Table 3: Project Financing

Description	Details
Total Equity (50%)	Rs.3,523,494
Bank Loan (50%)	Rs.3,523,494
Markup to the Borrower (%age / annum)	16%
Tenure of the Loan (Years)	5 Years

9.3 Project Cost

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

Table 4: Project Cost

Description	Amount Rs.
Capital Cost	
Plant and Machinery	4,816,000
Furniture & Fixture	225,000

Office Equipment	127,000
Legal, Licensing & Training Cost	14,000
Pre-operating Cost	184,247
Total Capital Cost	5,366,247
Working Capital	
Raw Material Inventory	976,733
Up-front Building Rent	180,000
Cash	497,174
Equipment Spare parts Inventory	26,833
Total Working Capital	1,680,741
Total Project Cost	7,046,988

9.4 Space Requirement

In order to reduce the initial capital expenditure, the proposed melamine tableware manufacturing unit will be established in a rental premises. Therefore, space may be acquired in the industrial state or in outskirts of identified cities where skilled workers are available. The rent of the building will depend on the area and geographical location of the unit. An estimated area of 1 Kanal (4,500 sq. ft.) will be required for the proposed venture.

The space requirement for the proposed melamine tableware manufacturing unit is estimated considering various facilities including management office, production hall, storage, open space, etc. However, the units operating in the industry do not follow any set pattern.

Details of space requirement and cost related to land & building is given below;

Table 5: Space Requirement

Description	Estimated Area (Sq.ft)
Management Building	1,700
Factory Area	2,100
Store	700
Open Space	800
Total	4,500

Estimated rent of the building is assumed as Rs. 60,000 per month with a 10% increase annually.

9.5 Machinery & Equipment Requirement

Following tables provides list of machinery and office equipment required for an average size Melamine Tableware Manufacturing Unit.

Table 6: Machinery & Equipment

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Hydraulic Press 20"	2	200,000	400,000
Hydraulic Press 22"	2	240,000	480,000
Hydraulic Press 24"	2	350,000	700,000
Hydraulic Press 26"	2	425,000	850,000
Hydraulic Press 28"	2	550,000	1,100,000
Grinding & Buffing Machine	2	28,000	56,000
Compressor (2 HP motor)	4	20,000	80,000
Dies (Set)	2	300,000	600,000
Machinery Installation Charges	1	50,000	50,000
Generator	1	500,000	500,000
Total			4,816,000

9.6 Furniture & Fixtures Requirement

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

Table 7: Furniture & Fixture

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Executive Table & Chair	1	25,000	25,000
Computer Table	1	10,000	10,000
Sofa	1	18,000	18,000
Chairs	15	2,200	33,000
Fans, Lights & Wiring	1	50,000	50,000

Carpets, Curtains, etc	1	15,000	15,000
Fire extinguisher	5	2,800	14,000
Air Conditioner	1	60,000	60,000
Total			225,000

9.7 Office Equipment Requirement

Following office equipment will be required for melamine tableware manufacturing unit:

Table 8: Office Equipment Requirement

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Desktop Computers with UPS	2	28,500	57,000
Printer	1	10,000	10,000
UPS for Office	1	40,000	40,000
File Cabinet	2	8,000	16,000
Calculator	2	1,000	2,000
Telephone Sets	2	1,000	2,000
Total			127,000

9.8 Human Resource Requirement

In order to run operations of the unit smoothly, details of human resources required along with number of employees and monthly salary are recommended as under:

Table 9: Human Resource Requirement

Description	No. of Employees	Monthly Salary per person (Rs.)
CEO	1	40,000
Accountant	1	18,000
Buffing man	1	20,000
Grinding man	1	15,000
Packing man	1	15,000
Helper	1	12,000

Total	6	120,000
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In addition to above staff, Pressmen will be on per piece contract basis.

9.9 Utilities and Other Costs

An essential cost to be borne by the project is the cost of electricity. The direct and indirect electricity expenses are estimated to be approximately Rs. 150,000 per month. Furthermore, promotional expense being essential for marketing of melamine tableware manufacturing unit is estimated as 5% of revenue.

9.10 Revenue Generation

Based on the capacity utilization of 70% for melamine dinner set, sales revenue during the first year of operations is estimated as under:

Table 10: 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.)
Melamine Dinner Set – A Grade	13,440	560	12,880	2,250	28,980,000
Melamine Dinner Set – B Grade	3,360	140	3,220	1,100	3,542,000
Total					32,522,000

10 CONTACT DETAILS

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

10.1 Machinery Suppliers

Name of Supplier	Address	Phone
Mr. Haji Muhammad Iqbal	Sialkot road, Near masjid Bilal Gujranwala	0300-8641595
Mr. Nazir Hussain	Jinnah Road, Near Al Arain Hospital, Gujranwala	0300-7447245

11 USEFUL WEB LINKS

Following are some useful web links of Federal & Provincial Government, Semi Government and other Development organizations:

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
Min. 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
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
Institute of Ceramics, Gujrat	www.ilmkidunya.com/colleges/institute-of-ceramics-gujrat.aspx
Technology Upgradation & Skill Development Company (TUSDEC)	www.tusdec.org.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	32,522,000	39,884,900	46,806,430	54,713,417	63,733,737	74,010,987	81,591,013	89,750,115	98,725,126	108,597,639
Cost of goods sold	26,051,645	31,681,698	36,940,392	42,928,656	49,740,880	57,483,033	63,165,277	69,280,138	76,006,486	83,405,469
Gross Profit	6,470,355	8,203,203	9,866,039	11,784,761	13,992,857	16,527,954	18,425,737	20,469,976	22,718,640	25,192,170
<i>General administration & selling expenses</i>										
Administration expense	800,400	880,440	968,484	1,065,332	1,171,866	1,289,052	1,417,957	1,559,753	1,715,728	1,887,301
Rental expense	720,000	792,000	871,200	958,320	1,054,152	1,159,567	1,275,524	1,403,076	1,543,384	1,697,722
Utilities expense	408,000	448,800	493,680	543,048	597,353	657,088	722,797	795,077	874,584	962,043
Travelling & Comm. expense (phone, fax, etc.)	120,000	132,000	145,200	159,720	175,692	193,261	212,587	233,846	257,231	282,954
Office vehicles running expense	-	-	-	-	-	-	-	-	-	-
Office expenses (stationary, etc.)	104,400	114,840	126,324	138,956	152,852	168,137	184,951	203,446	223,791	246,170
Promotional expense	1,626,100	1,994,245	2,340,322	2,735,671	3,186,687	3,700,549	4,079,551	4,487,506	4,936,256	5,429,882
Insurance expense	-	-	-	-	-	-	-	-	-	-
Professional fees (legal, audit, etc.)	325,220	398,849	468,064	547,134	637,337	740,110	815,910	897,501	987,251	1,085,976
Depreciation expense	47,900	47,900	47,900	47,900	47,900	63,407	63,407	63,407	63,407	63,407
Amortization expense	39,649	39,649	39,649	39,649	39,649	-	-	-	-	-
Property tax expense	-	-	-	-	-	-	-	-	-	-
Miscellaneous expense	-	-	-	-	-	-	-	-	-	-
Subtotal	4,191,669	4,848,723	5,500,823	6,235,731	7,063,488	7,971,172	8,772,684	9,643,612	10,601,633	11,655,455
Operating Income	2,278,686	3,354,479	4,365,215	5,549,030	6,929,369	8,556,782	9,653,052	10,826,364	12,117,007	13,536,715
Other income	-	-	-	-	-	-	-	-	-	-
Gain / (loss) on sale of assets	-	-	-	-	50,800	-	18,000	-	-	-
Earnings Before Interest & Taxes	2,278,686	3,354,479	4,365,215	5,549,030	6,980,169	8,556,782	9,671,052	10,826,364	12,117,007	13,536,715
Interest expense	549,648	464,301	349,404	232,600	95,955	-	-	-	-	-
Earnings Before Tax	1,729,037	2,890,179	4,015,812	5,316,430	6,884,214	8,556,782	9,671,052	10,826,364	12,117,007	13,536,715
Tax	193,307	445,044	727,243	1,117,429	1,631,974	2,217,373	2,607,368	3,011,727	3,463,452	3,960,350
NET PROFIT/(LOSS) AFTER TAX	1,535,730	2,445,134	3,288,568	4,199,001	5,252,240	6,339,409	7,063,685	7,814,638	8,653,556	f

12.2 Balance Sheet

Statement Summaries											SMEDA
Balance Sheet											
	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
Assets											
<i>Current assets</i>											
Cash & Bank	497,174	-	1,238,902	3,121,463	5,656,179	8,696,891	13,909,711	19,735,928	26,158,914	33,159,442	50,401,557
Accounts receivable	-	1,336,521	1,487,813	1,781,329	2,086,024	2,433,846	2,830,371	3,197,301	3,520,708	3,872,779	4,260,057
Finished goods inventory	-	1,132,680	1,323,748	1,543,202	1,793,089	2,077,345	2,400,390	2,631,887	2,886,672	3,166,937	3,475,228
Equipment spare part inventory	26,833	36,199	46,729	60,085	76,991	98,346	119,260	144,305	174,609	211,277	-
Raw material inventory	976,733	1,317,650	1,700,943	2,187,110	2,802,457	3,579,797	4,341,074	5,252,700	6,355,767	7,690,478	-
Pre-paid annual land lease	-	-	-	-	-	-	-	-	-	-	-
Pre-paid building rent	180,000	198,000	217,800	239,580	263,538	289,892	318,881	350,769	385,846	424,431	-
Pre-paid lease interest	-	-	-	-	-	-	-	-	-	-	-
Pre-paid insurance	-	-	-	-	-	-	-	-	-	-	-
Total Current Assets	1,680,741	4,021,050	6,015,935	8,932,769	12,678,277	17,176,117	23,919,688	31,312,889	39,482,516	48,525,343	58,136,842
<i>Fixed assets</i>											
Land	-	-	-	-	-	-	-	-	-	-	-
Building/Infrastructure	-	-	-	-	-	-	-	-	-	-	-
Machinery & equipment	4,816,000	4,816,000	4,816,000	4,816,000	4,816,000	4,816,000	4,816,000	4,816,000	4,816,000	4,816,000	4,816,000
Furniture & fixtures	225,000	202,500	180,000	157,500	135,000	112,500	90,000	67,500	45,000	22,500	-
Office vehicles	-	-	-	-	-	-	-	-	-	-	-
Office equipment	127,000	101,600	76,200	50,800	25,400	204,535	163,628	122,721	81,814	40,907	-
Total Fixed Assets	5,168,000	5,120,100	5,072,200	5,024,300	4,976,400	5,133,035	5,069,628	5,006,221	4,942,814	4,879,407	4,816,000
<i>Intangible assets</i>											
Pre-operation costs	184,247	147,397	110,548	73,699	36,849	-	-	-	-	-	-
Legal, licensing, & training costs	14,000	11,200	8,400	5,600	2,800	-	-	-	-	-	-
Total Intangible Assets	198,247	158,597	118,948	79,299	39,649	-	-	-	-	-	-
TOTAL ASSETS	7,046,988	9,299,747	11,207,083	14,036,367	17,694,327	22,309,152	28,989,316	36,319,110	44,425,330	53,404,750	62,952,842

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	Year 10
	Rs. in actuals										
<i>Operating activities</i>											
Net profit	-	1,535,730	2,445,134	3,288,568	4,199,001	5,252,240	6,339,409	7,063,685	7,814,638	8,653,556	9,576,365
Add: depreciation expense	-	47,900	47,900	47,900	47,900	47,900	63,407	63,407	63,407	63,407	63,407
amortization expense	-	39,649	39,649	39,649	39,649	39,649	-	-	-	-	-
Deferred income tax	-	-	-	-	-	-	-	-	-	-	-
Accounts receivable	-	(1,336,521)	(151,292)	(293,516)	(304,696)	(347,821)	(396,525)	(366,930)	(323,407)	(352,071)	(387,278)
Finished good inventory	-	(1,132,680)	(191,068)	(219,454)	(249,887)	(284,257)	(323,045)	(231,496)	(254,786)	(280,264)	(308,291)
Equipment inventory	(26,833)	(9,366)	(10,530)	(13,356)	(16,905)	(21,356)	(20,914)	(25,045)	(30,304)	(36,668)	211,277
Raw material inventory	(976,733)	(340,916)	(383,293)	(486,168)	(615,346)	(777,340)	(761,277)	(911,626)	(1,103,067)	(1,334,711)	7,690,478
Pre-paid building rent	(180,000)	(18,000)	(19,800)	(21,780)	(23,958)	(26,354)	(28,989)	(31,888)	(35,077)	(38,585)	424,431
Pre-paid lease interest	-	-	-	-	-	-	-	-	-	-	-
Advance insurance premium	-	-	-	-	-	-	-	-	-	-	-
Accounts payable	-	1,032,224	237,281	228,371	263,418	303,690	340,755	266,110	291,582	325,864	(28,273)
Other liabilities	-	-	-	-	-	-	-	-	-	-	-
Cash provided by operations	(1,183,567)	(181,980)	2,013,982	2,570,216	3,339,176	4,186,351	5,212,820	5,826,217	6,422,986	7,000,528	17,242,116
<i>Financing activities</i>											
Change in long term debt	3,523,494	(502,463)	(587,811)	(687,656)	(804,460)	(941,104)	-	-	-	-	-
Change in short term debt	-	187,268	(187,268)	-	-	-	-	-	-	-	-
Change in export re-finance facility	-	-	-	-	-	-	-	-	-	-	-
Add: land lease expense	-	-	-	-	-	-	-	-	-	-	-
Land lease payment	-	-	-	-	-	-	-	-	-	-	-
Change in lease financing	-	-	-	-	-	-	-	-	-	-	-
Issuance of shares	3,523,494	-	-	-	-	-	-	-	-	-	-
Purchase of (treasury) shares	-	-	-	-	-	-	-	-	-	-	-
Cash provided by / (used for) financing act	7,046,988	(315,195)	(775,079)	(687,656)	(804,460)	(941,104)	-	-	-	-	-
<i>Investing activities</i>											
Capital expenditure	(5,366,247)	-	-	-	-	(204,535)	-	-	-	-	-
Acquisitions	-	-	-	-	-	-	-	-	-	-	-
Cash (used for) / provided by investing act	(5,366,247)	-	-	-	-	(204,535)	-	-	-	-	-
NET CASH	497,174	(497,174)	1,238,902	1,882,560	2,534,717	3,040,712	5,212,820	5,826,217	6,422,986	7,000,528	17,242,116

13 KEY ASSUMPTIONS

13.1 Production Cost Assumptions

Description	Details
Account Receivable Cycle	15 days
Account Payable Cycle	15 days
Raw material Inventory	15 days
Finished goods Inventory	15 days

13.2 Production Cost Assumptions

Description	Details
Raw Material Cost Per Set	Rs. 1,695.00
Melamine Moulding Compound Per Kg	Rs. 129.00
Glaze Per Kg	Rs. 16.00
Paper Sheets Per Kg	Rs. 8.00
Packing Per Kg	Rs. 16.50
Wages per Set	Rs. 125.00
Cost of Goods Sold Growth Rate	10%

13.3 Revenue Assumptions

Description	Details
Growth in Sales Price	10%
Days Operational / Year	300
Per Day Production Capacity	80 sets
Production Capacity in First Year	70%
Percentage Increase in Production Capacity every Year	5%
Maximum Production Capacity	95%

13.4 Financial Assumptions

Description	Details
Project Life Years	10
Debt	3,523,494
Equity	3,523,494
Interest Rate on Debt	16%