



Pre-feasibility Study

SOFT GUMMY CANDY MANUFACTURING UNIT

September 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

Soft Gummy candy manufacturing unit is proposed to be located at any industrial zone throughout Pakistan and adjacent to cities with higher population density.

The finished Product would include **soft candy**, which typically is consumed by children aged between 6 to 16 years.

The installed unit would have the capacity to produce 253,440,000 **Units** packed in 25,344,000 packets yearly and initially operate at 60% capacity utilization.

Total Cost Estimated is **Rs.100, 907,983** with fixed investment **Rs.96, 310,297** and working capital **Rs.4, 597,686**

Given the cost assumptions IRR and payback are **48%** and **2.97 years** respectively

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

- The manufacturing unit should be established adjacent to populated cities where there's demand for this product considering age group for this product.
- Appearance of the product may play a vital role in success of the project. Soft candy produced in different shapes may attract consumer.
- Packing may play vital role in attracting children as candy is mainly consumed by children.
- Market research should be done to identify market gaps moreover most recent trends may be identified and product may be reshaped in accordance to demand.
- Human resource would play vital role in manufacturing therefore well trained staff will be required to run the project successfully.
- Procurement of raw material from trusted suppliers and below market rates.

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 **Soft Candy 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

- **Technology:** The proposed manufacturing unit is likely to be equipped with modern processing machines including all advance machining method like CNC, laser cutting and welding, wire cutting etc. for mechanical parts making it guarantee the performance of the whole line. However constant efforts may be done for up gradation of the machinery.
- **Location:** The proposed project may be established in adjoining areas of major cities with high population density.
- **Product:** The main product would be soft gummy candy produced in different shapes through raw material healthy for consumption.
- **Target Market:** local markets in Karachi, Lahore, Quetta and Islamabad may be targeted through distribution channels moreover children, teenagers and youngsters are the main target.
- **Employment Generation:** The proposed project will provide employment to 21 people. Financial analysis shows the unit shall be profitable from the very first year of operation

5.1 Production Process Flow

Soft Gummy candy recipes are typically developed by experienced food technologists and chemists. By blending together different ingredients, they can control the various characteristics of gummy candy, such as texture, taste, and appearance. The original base ingredient, used was gum Arabic, which led to the name gummy candies. Today, the base ingredient of gummy candies is edible gelatin. Also found in licorice, soft caramels, and marshmallows, edible gelatin gives gummy candy its chewy consistency and long shelf life. Soft Gummy candy is mainly composed of gelatin. Other than gelatin water, sugar, glucose, colorants, and flavors are added to manufacture soft candy gummy. Gummy is widely popular and well known in sweet industry. Some soft candy gummies are made with pectin or starch instead of gelatin, to make it suitable for vegetarians. However soft candy gummies are often produced using gelatin.

Gelatin

Mainly responsible for the candy's unique, gummy characteristics is gelatin. This is a protein derived from animal tissue that forms thick solutions or gels when placed in water. When used at an appropriate concentration, the gels take on the texture of the chewy, gummy candy. However, since these gels are thermo-reversible, which means they get thinner as they are heated from which gummy candies have a "melt in the mouth"

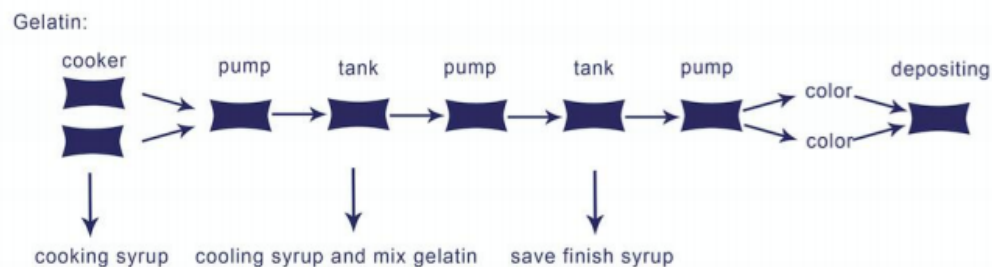
characteristic. Both the texture and the amount of time it takes the candy to dissolve in the mouth can be controlled by the amount of gelatin used in a recipe.

Sweeteners

Gelatin is a tasteless and odorless compound that contains no fat, sweeteners and flavorings are added to give gummy candy its taste. Various sugars are added as sweeteners. Generally sucrose and fructose are used. Corn syrup is also used because it helps prevent the other sugars from crystallizing and ruining the gummy texture. Also, corn syrup helps add body to the candy, maintain moisture, and keep costs lower. Another sweetener is sorbitol, which has the added benefit of helping the candy maintain its moisture content. In addition to flavor, some of these sweeteners have the added benefit of preserving the gummy candy from microbial growth.

Flavor

The sweetness of gummy candy is only one of its characteristics. Artificial and natural flavors are also used to create a unique taste. Natural flavors are obtained from fruits, berries, honey, molasses, and maple sugar. The impact of these flavors can be improved by the addition of artificial flavors that are mixtures of aromatic chemicals and include materials such as methyl anthranilate and ethyl caproate. Also, acids such as citric acid, lactic acid, and malic acid are added to provide flavor.



Step1. First, the ingredients are mixed together in a large cooker. Typically ingredients include water, sugar, and glucose are heated at temperature around 118 degrees.

Step2. The syrup is cooled down less than 100 degrees and passed to a tank where gelatin preheated at 70 degrees with water is mixed to the syrup.

Step3. Once the ingredients are mixed, the resulting liquid is cooked until it thickens into what manufacturers call slurry. The slurry syrup is then pumped into holding tank for continues use.

Step4. Colorants and flavor is then added into the concentration for further enhancement of taste and color.

Step5. The syrup is then deposited into molds for shaping preferably into bear-shaped molds. There are so many different types of shapes for gummy candies, though of which bear shaped is most popular.

Step6. After the syrup is poured into the molds, it is cooled to 65° F.

Step7. After 24 hours in the molds, the gummy bear candies are removed and placed in a large drum tumbler.

Step8. In the tumbler, the gummy bear candies are tumbled in light food-grade oil that to keep the gummy candies soft and fresh moreover gummies are coated with sugar in the same tumbler.

5.2 Installed And Operational Capacities

The proposed manufacturing unit is set to operate at 60% capacity utilization initially and shall increase its production by 5%.

The proposed manufacturing plant has the ability to produce 96000pcs of gummies per hour. The proposed plant is set to operate for 8 hours per day however production can be increased if needed.

6. CRITICAL FACTORS

- Trained and specialized human resource should be hired which would play vital role in project success.
- Continuous efforts should be made to upgrade technology.
- Molds used in production should be bear like so that end product may be more attractive and eye catching.
- Packets used in packing may should be designed colorful so that it may catch an eye.
- Product may be advertised through social media as more and more youngsters are using social media these days.
- Price may be adjusted in accordance to the segment targeted moreover price would play vital role in success of the project.
- Some of the most popular flavors of gummy bears include raspberry, orange, strawberry, pineapple, and lemon however constant research should be done to improve taste of the product and development new flavors.

7. GEOGRAPHICAL POTENTIAL FOR INVESTMENT

Big cities with growing middle income group such as Karachi, Islamabad, Quetta, Lahore, Sukkur, Hyderabad and Noshehra are some of the prospective cities for setting up this business. Cities like Lahore and Karachi with more concentration of middle income class are also favorable for this project.

8. POTENTIAL TARGET CUSTOMERS / MARKETS

Areas having presence of middle income groups in the above stated cities will be an ideal location for the project moreover children, youngster's age range between 4 to 16 would be the target segment of the market.

9. PROJECT COST SUMMARY

9.1 Project Economics

All the figures in this financial model have been calculated for estimated sales of Rs.180.956 million in the year one. The capacity utilization during year one is worked out at 60% 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)	48%
Payback Period (yrs.)	2.94
Net Present Value (Rs.)	247,353,612

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.50,453,992
Bank Loan (50%)	Rs.50,453,992
Markup to the Borrower (%age / annum)	14%
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	
Plant and Machinery	57,062,880
Furniture & Fixture	1,360,000
Office Equipment	520,000
Motor Vehicles	5,050,000
Pre-operating Cost	1,007,417
Total Capital Cost	96,310,297
Working Capital	
Raw Material Inventory	1,105,843
Up-front insurance payment	2,954,144
Equipment spare part inventory	37,699
Cash	500,000
Total Working Capital	4,597,686
Total Project Cost	100,907,983

9.4 Space Requirement

The space requirement for the proposed Soft Gummy Candy 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 (Sqft)	Unit Cost (Rs.)	Total Cost (Rs.)
Management Office	2,000	2000	4000000
Factory	6000	1800	10800000
Cafeteria	500	1500	750000
Pavement/driveway	1000	600	600000
warehouse	3000	1600	4800000
Guard room	200	1000	200000
Total	12,700		21,150,000

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.)
CLM 300 production line.	1	44,533,800	44,533,800
Packaging machinery	2	62,64,540	12,529,080
Total			57,062,880

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.)
-------------	----------	-----------------	------------------

Tables	3	35,000	105,000
Chairs	15	6,000	90,000
Sitting Benches	3	25,000	75,000
Storage Racks	4	32,500	130,000
Air Conditioners (1.5 ton)	2	80,000	160,000
Electrical wiring and lights	1	300,000	300,000
Carpeting	1	300,000	300,000
Total			1,360,000

9.7 Office Equipment Requirement

Following office equipment will be required for Soft Gummy Candy Manufacturing Unit;

Table 7: Office Equipment

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Laptop	2	135,000	135,000
Desktop Computers.	2	50,000	100,000
Printer and scanner	2	65,000	130,000
Telephone Sets	2	10,000	20,000
Total			520,000

9.8 Human Resource Requirement

In order to run operations of Soft Gummy Candy 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.)
Manager	1	65,000
Operations manager	1	55,000
Accounts and Admin manager	1	45,000
Quality control supervisor	1	40,000
Supervisor	2	30,000

Machine operator	2	28,000
Labor	8	25000
Peon	1	22500
Guards	2	22000
Drivers	2	22500
Total	21	

9.9 other costs

The promotional expense being essential for marketing of Soft Gummy Candy is estimated as 1% of revenue expenses which is estimated to be Rs. 1,809,562 in first year of operations.

9.10 Revenue Generation

Based on the capacity utilization of 60% 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.)	Sale Price / unit (Rs.)	Sales Revenue (Rs.)
Soft Gummy Candy	150,079,680	12	180,956,160
Total			180,956,160

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
SHANGHAI FUDE MACHINERY MANUFACTURING	No.329,Huayuan Cun, Huqiao town, Fengxian Dist, Shanghai	+8613818555416 +8613818555416	hannah@sino-fude.com	www.sino-fude.com/
Sama Engineering	Nazimabad # 2, Block-A, Plot No. 1/32, Opposite Firdous Colony KHI-74600 Pakistan	021-36688883 021-36603311 021-36602467	info@samaengineering.com	www.samaengineering.com
HENAN CANKEY TECHNOLOGY	7th Floor, Building 8, Jingkai Square, No.1507, Hanghai East Road, Free Trade Zone, Zhengzhou, Henan, China	+8615538388915	william@cankeytech.com	www.cankey-tech.com

10.2 Raw Material Suppliers

Name of Supplier	Address	Phone	E-mail
RAVI GELATIN private limited.	4.5km, ravi roinala,manga road,rainwind,lohore, paksitan.	0303-3480125	ravigelatin@gmail.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	Rs. in actuals Year 10
Revenue	180,956,160	217,312,128	257,443,085	303,427,112	356,033,513	416,126,924	484,678,681	562,779,521	619,329,109	681,262,020
Cost of goods sold	145,533,002	166,667,807	188,349,697	211,823,953	237,223,836	264,692,321	294,382,829	326,460,022	343,646,498	361,645,171
Gross Profit	35,423,158	50,644,321	69,093,388	91,603,159	118,809,677	151,434,602	190,295,852	236,319,499	275,682,611	319,616,849
<i>General administration & selling expenses</i>										
Administration expense	3,334,590	3,668,049	4,034,854	4,438,339	4,882,173	5,370,391	5,907,430	6,498,173	7,147,990	7,862,789
Rental expense	-	-	-	-	-	-	-	-	-	-
Utilities expense	-	-	-	-	-	-	-	-	-	-
Travelling & Comm. expense (phone, fax, etc.)	33,180	36,498	40,148	44,163	48,579	53,437	58,780	64,658	71,124	78,237
Office vehicles running expense	25,250	27,775	30,553	33,608	36,969	40,665	44,732	49,205	54,126	59,538
Office expenses (stationary, etc.)	16,590	18,249	20,074	22,081	24,289	26,718	29,390	32,329	35,562	39,118
Promotional expense	1,809,562	2,173,121	2,574,431	3,034,271	3,560,335	4,161,269	4,846,787	5,627,795	6,193,291	6,812,620
Insurance expense	2,954,144	2,658,730	2,363,315	2,067,901	1,772,486	1,477,072	1,181,658	886,243	590,829	295,414
Professional fees (legal, audit, etc.)	904,781	1,086,561	1,287,215	1,517,136	1,780,168	2,080,635	2,423,393	2,813,898	3,096,646	3,406,310
Depreciation expense	8,514,288	8,514,288	8,514,288	8,514,288	8,514,288	8,514,288	8,514,288	8,514,288	8,514,288	8,514,288
Amortization expense	201,483	201,483	201,483	201,483	201,483	-	-	-	-	-
Property tax expense	-	-	-	-	-	-	-	-	-	-
Miscellaneous expense	542,868	651,936	772,329	910,281	1,068,101	1,248,381	1,454,036	1,688,339	1,857,987	2,043,786
Subtotal	18,336,736	19,036,690	19,838,690	20,783,551	21,888,871	22,972,856	24,460,494	26,174,928	27,561,843	29,112,101
Operating Income	17,086,422	31,607,631	49,254,698	70,819,608	96,920,806	128,461,747	165,835,358	210,144,571	248,120,768	290,504,748
Other income	858,645	2,804,267	5,085,597	7,674,004	10,889,909	14,793,294	19,346,781	24,657,974	30,611,021	37,161,501
Gain / (loss) on sale of assets	-	-	-	-	-	-	-	-	-	-
Earnings Before Interest & Taxes	17,945,067	34,411,898	54,340,295	78,493,612	107,810,715	143,255,041	185,182,139	234,802,545	278,731,789	327,666,249
Interest expense	6,919,756	6,393,083	5,995,635	5,542,545	5,026,022	4,437,186	3,765,912	3,000,661	2,128,274	1,133,754
Earnings Before Tax	11,025,312	28,018,816	48,344,660	72,951,067	102,784,693	138,817,855	181,416,227	231,801,884	276,603,515	326,532,496
Tax	4,520,378	11,487,714	19,821,311	29,909,938	42,141,724	56,915,321	74,380,653	95,038,772	113,407,441	133,878,323
NET PROFIT/(LOSS) AFTER TAX	6,504,934	16,531,101	28,523,349	43,041,130	60,642,969	81,902,535	107,035,574	136,763,111	163,196,074	192,654,172
Balance brought forward		4,878,700	16,057,351	33,435,525	57,357,491	88,500,345	127,802,160	176,128,300	234,668,559	298,398,474
Total profit available for appropriation	6,504,934	21,409,802	44,580,701	76,476,655	118,000,460	170,402,880	234,837,734	312,891,412	397,864,632	491,052,647
Dividend	1,626,233	5,352,450	11,145,175	19,119,164	29,500,115	42,600,720	58,709,433	78,222,853	99,466,158	122,763,162
Balance carried forward	4,878,700	16,057,351	33,435,525	57,357,491	88,500,345	127,802,160	176,128,300	234,668,559	298,398,474	368,289,485

12.2 Balance Sheet

Statement Summaries Balance Sheet											SMEDA
											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
Assets											
<i>Current assets</i>											
Cash & Bank	500,000	16,672,903	39,412,445	62,299,495	91,180,590	126,617,588	169,248,291	217,687,324	275,472,150	336,748,270	406,481,754
Accounts receivable	-	7,436,555	8,183,595	9,755,244	11,524,730	13,550,561	15,866,310	18,509,704	21,523,114	24,289,903	26,724,475
Finished goods inventory	-	1,222,966	1,389,789	1,570,516	1,766,181	1,977,895	2,206,851	2,454,327	2,721,694	2,863,721	3,013,710
Equipment spare part inventory	37,699	45,500	54,172	64,167	75,668	88,882	104,042	121,411	134,279	148,446	-
Raw material inventory	1,105,843	1,273,992	1,447,861	1,637,052	1,842,730	2,066,138	2,308,608	2,571,563	2,714,833	2,864,827	-
Pre-paid annual land lease	-	-	-	-	-	-	-	-	-	-	-
Pre-paid building rent	-	-	-	-	-	-	-	-	-	-	-
Pre-paid lease interest	-	-	-	-	-	-	-	-	-	-	-
Pre-paid insurance	2,954,144	2,658,730	2,363,315	2,067,901	1,772,486	1,477,072	1,181,658	886,243	590,829	295,414	-
Total Current Assets	4,597,686	29,310,645	52,851,177	77,394,375	108,162,386	145,778,137	190,915,760	242,230,573	303,156,898	367,210,582	436,219,939
<i>Fixed assets</i>											
Land	10,160,000	10,160,000	10,160,000	10,160,000	10,160,000	10,160,000	10,160,000	10,160,000	10,160,000	10,160,000	10,160,000
Building/Infrastructure	21,150,000	19,035,000	16,920,000	14,805,000	12,690,000	10,575,000	8,460,000	6,345,000	4,230,000	2,115,000	-
Machinery & equipment	57,062,880	51,356,592	45,650,304	39,944,016	34,237,728	28,531,440	22,825,152	17,118,864	11,412,576	5,706,288	-
Furniture & fixtures	1,360,000	1,224,000	1,088,000	952,000	816,000	680,000	544,000	408,000	272,000	136,000	-
Office vehicles	5,050,000	4,545,000	4,040,000	3,535,000	3,030,000	2,525,000	2,020,000	1,515,000	1,010,000	505,000	-
Office equipment	520,000	468,000	416,000	364,000	312,000	260,000	208,000	156,000	104,000	52,000	-
Total Fixed Assets	95,302,880	86,788,592	78,274,304	69,760,016	61,245,728	52,731,440	44,217,152	35,702,864	27,188,576	18,674,288	10,160,000
<i>Intangible assets</i>											
Pre-operation costs	1,007,417	805,934	604,450	402,967	201,483	-	-	-	-	-	-
Legal, licensing, & training costs	-	-	-	-	-	-	-	-	-	-	-
Total Intangible Assets	1,007,417	805,934	604,450	402,967	201,483	-	-	-	-	-	-
TOTAL ASSETS	100,907,983	116,905,171	131,729,931	147,557,358	169,609,597	198,509,577	235,132,912	277,933,437	330,345,474	385,884,870	446,379,939
Liabilities & Shareholders' Equity											
<i>Current liabilities</i>											
Accounts payable	-	11,387,226	13,034,312	14,719,924	16,539,647	18,502,745	20,619,073	22,899,117	25,341,808	26,594,585	27,636,462
Export re-finance facility	-	-	-	-	-	-	-	-	-	-	-
Short term debt	-	-	-	-	-	-	-	-	-	-	-
<i>Other liabilities</i>											
Total Current Liabilities	-	11,387,226	13,034,312	14,719,924	16,539,647	18,502,745	20,619,073	22,899,117	25,341,808	26,594,585	27,636,462
<i>Other liabilities</i>											
Lease payable	-	-	-	-	-	-	-	-	-	-	-
Deferred tax	-	4,520,378	9,358,312	9,358,312	9,358,312	9,358,312	9,358,312	7,018,734	4,679,156	2,339,578	0
Long term debt	50,453,992	45,664,875	42,825,964	39,589,605	35,900,155	31,694,183	26,899,375	21,433,293	15,201,960	8,098,240	-
Total Long Term Liabilities	50,453,992	50,185,253	52,184,276	48,947,917	45,258,468	41,052,495	36,257,687	28,452,027	19,881,116	10,437,818	0
<i>Shareholders' equity</i>											
Paid-up capital	50,453,992	50,453,992	50,453,992	50,453,992	50,453,992	50,453,992	50,453,992	50,453,992	50,453,992	50,453,992	50,453,992
Retained earnings	-	4,878,700	16,057,351	33,435,525	57,357,491	88,500,345	127,802,160	176,128,300	234,668,559	298,398,474	368,289,485
Total Equity	50,453,992	55,332,692	66,511,343	83,889,517	107,811,483	138,954,337	178,256,152	226,582,292	285,122,550	348,852,466	418,743,477
TOTAL CAPITAL AND LIABILITY	100,907,983	116,905,171	131,729,931	147,557,358	169,609,597	198,509,577	235,132,912	277,933,437	330,345,474	385,884,870	446,379,939

12.3 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	-	6,504,934	16,531,101	28,523,349	43,041,130	60,642,969	81,902,535	107,035,574	136,763,111	163,196,074	192,654,172
Add: depreciation expense	-	8,514,288	8,514,288	8,514,288	8,514,288	8,514,288	8,514,288	8,514,288	8,514,288	8,514,288	8,514,288
amortization expense	-	201,483	201,483	201,483	201,483	201,483	-	-	-	-	-
Deferred income tax	-	4,520,378	4,837,935	-	-	-	-	(2,339,578)	(2,339,578)	(2,339,578)	(2,339,578)
Accounts receivable	-	(7,436,555)	(747,040)	(1,571,649)	(1,769,486)	(2,025,831)	(2,315,750)	(2,643,394)	(3,013,410)	(2,766,790)	(2,434,572)
Finished good inventory	-	(1,222,966)	(166,823)	(180,726)	(195,665)	(211,715)	(228,956)	(247,475)	(267,367)	(142,027)	(149,989)
Equipment inventory	(37,699)	(7,801)	(8,672)	(9,995)	(11,501)	(13,214)	(15,160)	(17,369)	(12,868)	(14,166)	148,446
Raw material inventory	(1,105,843)	(168,149)	(173,868)	(189,192)	(205,678)	(223,408)	(242,470)	(262,955)	(143,270)	(149,995)	2,864,827
Pre-paid building rent	-	-	-	-	-	-	-	-	-	-	-
Pre-paid lease interest	-	-	-	-	-	-	-	-	-	-	-
Advance insurance premium	(2,954,144)	295,414	295,414	295,414	295,414	295,414	295,414	295,414	295,414	295,414	295,414
Accounts payable	-	11,387,226	1,647,086	1,685,612	1,819,723	1,963,098	2,116,329	2,280,044	2,442,690	1,252,778	1,041,877
Other liabilities	-	-	-	-	-	-	-	-	-	-	-
Cash provided by operations	(4,097,686)	22,588,253	30,930,904	37,268,584	51,689,708	69,143,085	90,026,231	112,614,548	142,239,012	167,845,998	200,594,886
<i>Financing activities</i>											
Change in long term debt	50,453,992	(4,789,116)	(2,838,911)	(3,236,359)	(3,689,449)	(4,205,972)	(4,794,808)	(5,466,082)	(6,231,333)	(7,103,720)	(8,098,240)
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	50,453,992	-	-	-	-	-	-	-	-	-	-
Purchase of (treasury) shares	-	-	-	-	-	-	-	-	-	-	-
Cash provided by / (used for) financ	100,907,983	(4,789,116)	(2,838,911)	(3,236,359)	(3,689,449)	(4,205,972)	(4,794,808)	(5,466,082)	(6,231,333)	(7,103,720)	(8,098,240)
<i>Investing activities</i>											
Capital expenditure	(96,310,297)	-	-	-	-	-	-	-	-	-	-
Acquisitions	-	-	-	-	-	-	-	-	-	-	-
Cash (used for) / provided by invest	(96,310,297)	-	-	-	-	-	-	-	-	-	-
NET CASH	500,000	17,799,136	28,091,993	34,032,225	48,000,259	64,937,113	85,231,422	107,148,467	136,007,679	160,742,278	192,496,645
Cash balance brought forward		500,000	16,672,903	39,412,445	62,299,495	91,180,590	126,617,588	169,248,291	217,687,324	275,472,150	336,748,270
Cash available for appropriation	500,000	18,299,136	44,764,895	73,444,670	110,299,754	156,117,703	211,849,011	276,396,757	353,695,003	436,214,428	529,244,915
Dividend	-	1,626,233	5,352,450	11,145,175	19,119,164	29,500,115	42,600,720	58,709,433	78,222,853	99,466,158	122,763,162
Cash carried forward	500,000	16,672,903	39,412,445	62,299,495	91,180,590	126,617,588	169,248,291	217,687,324	275,472,150	336,748,270	406,481,754

13. KEY ASSUMPTIONS

13.1 Operating Cost Assumptions

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

13.2 Production Cost Assumptions

Description	Details
Production capacity	60%
Production capacity growth rate	5%
Production capacity maximum growth rate	95%

13.3 Revenue Assumptions

Description	Details
Production units	25,344,000
Sale price per unit	12
COGs	8.80

13.4 Financial Assumptions

Description	Details
Interest rate	14%
Debt : Equity Ratio	50:50

Small and Medium Enterprises Development Authority

HEAD OFFICE

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

www.smeda.org.pk, helpdesk@smeda.org.pk

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