

Pre-Feasibility Study

TEA COMPANY



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1 INTRODUCTION TO SMEDA

The Small and Medium Enterprise Development Authority (SMEDA) was established with the objective to provide fresh impetus to the economy through the launch of an aggressive SME support program¹.

Since its inception in October 1998, SMEDA had adopted a sectoral SME development approach. A few priority sectors were selected on the criterion of SME presence. In depth research was conducted and comprehensive development plans were formulated after identification of impediments and retardants. The all-encompassing sectoral development strategy involved recommending changes in the regulatory environment by taking into consideration other important aspects including financial aspects, niche marketing, technology upgradation and human resource development.

SMEDA has so far successfully formulated strategies for sectors including, fruits and vegetables, marble and granite, gems and jewelry, marine fisheries, leather and footwear, textiles, surgical instruments, urban transport and dairy. Whereas the task of SME development at a broader scale still requires more coverage and enhanced reach in terms of SMEDA's areas of operation.

Along with the sectoral focus a broad spectrum of business development services is also offered to the SMEs by SMEDA. These services include identification of viable business opportunities for potential SME investors. In order to facilitate these investors, SMEDA provides business guidance through its help desk services as well as development of project specific documents. These documents consist of information required to make well-researched investment decisions. Pre-feasibility studies and business plan development are some of the services provided to enhance the capacity of individual SMEs to exploit viable business opportunities in a better way. This document is in the continuation of this effort to enable potential investors to make well-informed investment decisions.

¹ For more information on services offered by SMEDA, please visit our website: www.smeda.org.pk

2 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, finance and business management.

3 PROJECT PROFILE

3.1 Project Brief

The project involves buying loose tea and then packing and marketing the product under a brand. The branded tea will be positioned in competition with other branded and unbranded tea. The brand standardization will be done through the combination of different types of unbranded/open tea available in the market. It is suggested that the company should initially introduce its products in the rural or small town markets where brand awareness is easy to make and heavy advertisement budget is not required.

3.2 Opportunity Rationale

In Pakistan, a morning and evening cup of tea is an essential part of everyday culture. This tradition has existed for many years. Every guest in a home in Pakistan is most likely to ask for a cup of tea to relax after a demanding journey. This trend has always created a strong demand for tea in Pakistan and made it the world's third largest importer of tea. In terms of tea consumption, it is the seventh largest country. Even in summer when the weather is extremely hot, tea is drunk twice a day.

During the review period, the hot drinks market grew in both volume and value terms. Tea dominated the market in both the retail and foodservice channels. Tea is a part of daily life, and rural areas generate the most sales. Rural areas drove sales growth because they consist 66% of the country's population. Consequently, companies have to focus on rural areas to maintain their market shares. Throughout the review period, sales of loose black standard tea were very dynamic as consumers in rural areas always buy loose black standard tea. Introducing affordable brand in such areas would attract sales. On the other side, in urban areas, offices prefer to use tea bags. Such a market could also be explored with low cost and high product quality.

In rural areas and small towns new brands of tea are relatively easy to introduce. The tea sachet packets have seen high sales growth throughout the country and especially in rural areas. This pre-feasibility report focuses Quetta for such a business but opportunity exists in other provinces for similar business - targeting markets in the rural areas and in small towns.

3.3 Market Entry Timing

The tea business can be started in any month of the year as it is consumed throughout the year.

3.4 Proposed Business Legal Status

It is recommended that this project should be started as sole proprietorship or partnership as it does not involve heavy investment. Moreover, less complications and costs are involved in forming, administering and running the sole proprietorship or partnership business.

3.5 Project Capacity and Rationale

The project consists of a sachet-manufacturing machine having production capacity of 3,000 sachets per hour and two box-making machine with production capacity of 2,640 boxes (60 g and 125 g packs) per hour and 1,200 boxes (250 g packs)

The box packing would be in three different sizes i.e. 60g, 125g, and 250g. The project is assumed to start with 20% capacity utilization. At 20% capacity utilization, the production breakdown of the four different categories of products is shown in the table below:

Table 3.5 Production Breakdown (At 20% Capacity Utilization)

	Sachets	60gms	125gms	250gms
Production %age	44%	19%	19%	18%
Kgs	107,358	46,359	46,359	43,919
Total (at 20% capacity at start)	243,995 Kgs / Year			

3.6 Project Investment

The total cost of the project is Rs 2.76 millions. This amount includes cost of the business equipment, working capital and other pre-operating costs. The project cost is further divided in debt and equity at the split ratio of 30-70%.

3.7 Proposed Product Mix

Loose imported tea is a vast product group available in the local market from which countless blends can be made altering the mix of different tea leaves for color and taste. The product would be of a blend that would give a unique taste in such a way to focus the lower and middle-income groups of people. Such classes of consumers usually focus on strong taste and color. The price would be less than that offered by the brands targeting higher-end consumer classes. The box packs would be in three different sizes of 60 grams, 125 grams and 250 grams. Other than this the product would also be packed in 7 grams sachets. Twenty sachets would be packed in a box for sale to the wholesalers.

3.8 Recommended Project Parameters

Initial Capacity	Human Resource	Technology/Machinery	Location	
243,995 Kgs	22	Local	Quetta	
Financial Summary				
Project Cost	IRR	NPV	Payback Period	Cost of Capital (WACC)
2,762,143	57%	24,112,873	3.08 Yrs	13%

3.9 Proposed Location

Since the center of the unbranded tea market is located at the business hub of Quetta that is Qandhari Bazar, therefore, the vicinity of the production and distribution facility should be near that area.

3.10 Key Success Factors

- High demand of such blended tea in the locality.
- Accelerated sales growth experienced in the category of sachet packs.
- Extensive distribution channel for the sachet packs focusing even on small kiosks in the urban and rural areas.
- The product would be focussing the price conscious segment of the market by providing similar and better quality branded product at lesser price.
- Emphasizing on excellent service to the other wholesalers.
- Adapting to the rapid social and economic changes.
- Improving the packaging will increase the life of tea and hence would secure the overall distribution and selling techniques.

3.11 Strategic Recommendations

Initially, the product should be launched in the local market with branding concept in mind. Tea sachets have shown tremendous growth in the last few years. The company should focus to capture the sachet market first by aggressive marketing campaign. The preferred mode of distribution is going directly to the wholesalers. There is an option of having no involvement of any distributor between the manufacturer and the wholesaler in the city where manufacturing is being done.

By giving healthier profit margins to the wholesalers, the wholesalers will hence promote the product. This strategy is important to introduce such a new product and to create an extensive distribution and sales channel. The company will later expand into other cities through a distributor network.

4 INDUSTRY ANALYSIS

4.1 World Scenario

4.1.1 Leading tea producers of the world

- India,
- Sri Lanka,
- Bangladesh,
- China,
- Iran,
- Indonesia and
- Malawi.

4.1.2 Large tea importers of the world

- UK,
- US,
- Netherlands,
- Australia,
- Canada,
- Japan,
- South Africa,
- Ireland and

Developing countries in South Asia and East Africa account for more than 85 percent of world tea production and exports. India and Sri Lanka are dominant in both. Developed countries account for about 62 percent of world tea imports.

Table 4-1 Tea Consumption Percentage Around the World

Country	Percentage of World Tea Consumption
India	23%
China	16%
Russia/CIS	6%
UK	6%
Japan	5%
Turkey	5%

Pakistan	4%
United States	4%
Iran	3%
Egypt	3%
Poland	1%
Australia	0.4%
Rest of World	23.6%
Total	100%

4.2 Tea Industry Scenario in Pakistan

- Pakistan imports tea from 21 countries and the major portion is imported from Kenya.
- Pakistan meets its green tea requirement from 5 countries in which China and Vietnam take lion's share.
- Pakistan is the world's third-biggest importer of tea, consuming around 200 million dollars worth every year, while Sri Lanka is the world's largest tea exporter, with annual exports worth \$ 660 million.
- Pakistan now imports just 2 percent, or 3 million kilograms, of its total annual consumption of tea from Sri Lanka, which lost its market in that country to Kenya six years ago. As a result, the balance of trade has tilted and is now 2.6 times in favor of Pakistan.

4.2.1 Leading Tea Brands in Pakistan

A vast range of branded and unbranded tea is available in the market. The top leading brands having an enormous range of products are:

1. Brooke Bond Supreme

Supreme is Pakistan's largest brand of tea, with over 30 million cups consumed daily and is made primarily from the world's finest Kenyan tea. The success of Brooke Bond Supreme is based on this very insight, since tea is a part of the social fabric of Pakistanis. Brooke Bond Supreme was launched in Pakistan in 1984. Since then Brooke Bond Supreme has never looked back and today, is the largest selling tea brand in Pakistan.

Their products ranges from:

- Supreme 125g
- Supreme 250g
- 500g Supreme
- Supreme 60g
- Supreme jar
- Supreme sachet
- Supreme Triple sachet

2. Brook Bond A1 Karak Chai

A1 is the individual's aegis. Launched in 1996 the brand has certainly come a long way to acquire national status. It has two variants catering to regional taste preferences, mixture for the South and leaf for Punjab.

A1 has a unique standing thanks to its strong blend which translates into the strength of the common man. It mentally and emotionally revives, bolstering courage to face challenges and defy all odds.

Their products ranges from:

- Leaf tea
- Mixture

3. Tetley Tea

Tata Tea has been ranked in the 20th position among 275 brands (195 consumer products and 80 service brands) in the Most Trusted Brands Survey conducted by The Economic Times, which makes it the only tea brand to figure in the top 50 list.

Tetley tea has introduced by tata tea in Pakistan predicting that this new arrival is likely to give a tough competition to some of the old market players. The firm has initially introduced two tastes namely "danedar" and "mixture." A pack of 400 grams of Tetley tea has a price tag of Rs 100 while Tapal's 500 grams pack is available at Rs 120. The company introduced four packs of 400 grams, 200, 100 and 45 grams.

4. Lipton

Lipton is the world's leading brand of tea by far. It's the global market leader in both leaf and ready-to-drink tea, giving a global share of all tea-based beverages that's nearly three times larger than its nearest rival.

Their products ranges from:

- Caramel flavoured
- Cookies flavoured
- Vanilla flavoured
- Lipton Green Tea
- Lipton Yellow Label tea bags
- Lipton Yellow Label sachet

- Lipton Yellow Label pack

5. Tapal Tea

Tapal chai family mixture is the pride of Tapal developed in 1947 and thus creating a new category of mixture in tea market.

It is the blend that started the Tapal success story, and now the other tea companies are following Tapal's footsteps by entering the market with similar blends. Danedar Leaf Blend Pioneer of the Danedar category in Pakistan, Tapal's Danedar remains a firm favorite around the country with its grape-nutty appearances, rich golden color and a strong refreshing taste. In fact its popularity is such that several multinationals have launched their own versions, but Tapal's remains the original and ultimate Danedar because of its unique color and taste

Their range of products are as follows:

- Danedar Leaf Blend
- Family Mixture
- Safari Kenya Leaf
- Mezban Super Dust
- Chenak Kenya Dust
- Special Teabags
- Jasmine Green Tea
- Gulbahar Green Tea
- Tezdum
- Special Round Teabags

4.3 Current Industry Structure at Quetta

In Quetta and the rural areas of Punjab and Sind, there is relatively more trend of using loose unbranded tea by the consumers as compared to popular brands. Small local brands are also commonly sold in these areas. The mixture of different blends not only gives better taste but also better color. The main market for such type of product in Balochistan is located in the center of the business hub Quetta - Qandhari Bazar.

There are five major categories of unbranded (loose) tea available in the market. The details are:

Table 4.3-1 Black Unblended

Category	Origin
Assam	India
Ceylon	Sri Lanka
Darjeeling	India
Nilgiri	India
Sikkim	India
Yunnan	China

Table 4.3-2 Scented/Flavored

Category	Origin
Jasmine	China
Earl Grey	
Lapsan Souchong	China, Taiwan

Table 4.3-3 Oolong

Category	Origin
Tie Guan Yin	China
Formosa Oolong	Taiwan
Pu-erh	China

Table 4.3-4 Green

Category	Origin
Genmaicha	Japan
Gyokuro	Japan
Spider Leg	Japan
Matcha	Japan
Sencha	Japan
Hojicha	Japan
Genmaicha	Japan
Longjing	China
Baozhong	China
Gunpowder	China

4.4 Other Popular Blends

Some of the other popular blends are:

- English Breakfast
- Irish Breakfast
- Russian Caravan

5 MARKET INFORMATION

Initially, the business will be catering areas within the province of its establishment and then will explore the other markets nation wide.

5.1 Local Market

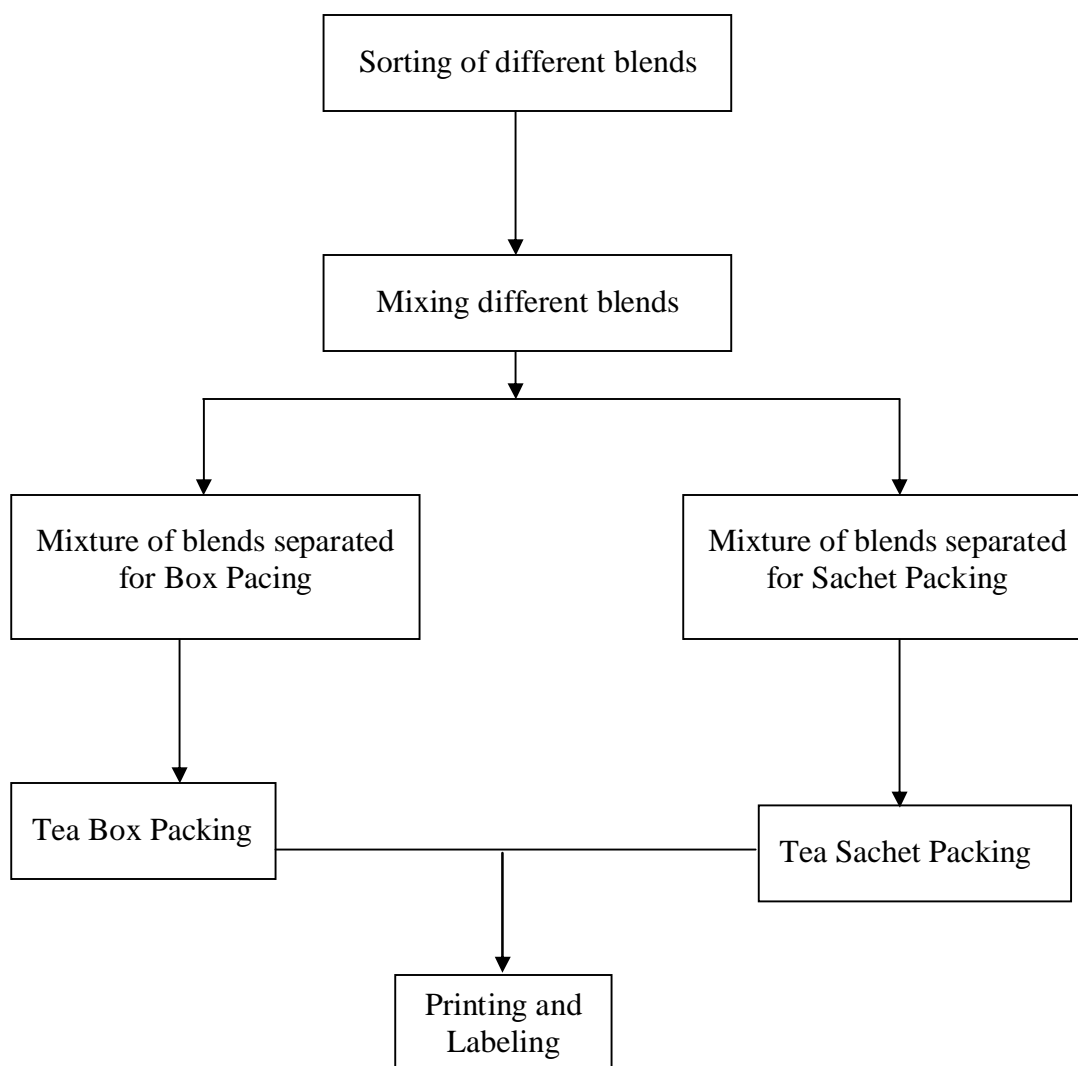
5.1.1 Market Segments

According to buying power and purchase patterns, the market for tea can be broadly classified into three major segments.

- ◆ Lower segment, which includes tea consumed in the rural areas and in the urban areas in the lower income households like office staff, labor etc. This segment accounts for almost 70% of the total market.
- ◆ Middle segment, which includes middle and upper income households in the urban areas. It accounts for about 20% of the total market.
- ◆ Upper Segment, which includes the tea consumers in the upper income segment of the society, accounting for 10% of the total.

6 PRODUCTION PROCESS

6.1 Production Process Flow



6.2 Raw Material Requirement

The raw material required for the production process is unblended and blended tea imported from areas like Indonesia, Turkey, Russia, Africa, South America, and Kenya. The project will not import raw material, as it is already available in the local wholesale market.

7 MACHINERY REQUIREMENT

7.1 Machinery Details

The project will purchase one sachet-manufacturing machine having production capacity of 3,000 sachets per hour, one box-making machine for 60 g and 125 g packs with production capacity of 2,640 boxes per hour, and another box-making machine for 250 g packs with production capacity of 1200 boxes per hour. These machines are locally fabricated. The machinery is available in Karachi and is designed for carrying out assembly line operations. The machinery is semi-automatic. The assembly line would involve direct labor placed on either sides of the manufacturing table. Inputs would be introduced from one end of the table and would be worked upon as they pass down various manufacturing levels towards the other end of the table. The estimated cost of machinery is subject to change according to market trend.

Table 7.1-1 Machinery Requirement Details

Description	Qty	Total Amount (Rs)
Machine for 250 g boxes	1	185,000
Machine for 60 and 125 g boxes	1	185,000
Machine for sachet	1	175,000
Total	3	545,000

Table 7.1-2 Office Equipment

Description	Qty	Cost/Unit	Total Cost
Computer	1	30,000	30,000
Computer Printer	1	10,000	10,000
Telephone	1	800	800
Fax machines.	1	12,000	12,000
Total Cost			52,800

Table 7.1-3 Furniture & Fixtures

Description	Total Cost
Furniture	20,000
Electric wiring and lighting	10,000
Total Cost	30,000

Table 7.1-4 Office Vehicle Details

Description	Qty	Cost/Unit	Total Cost
Motor cycle	2	50,000	100,000
Registration fee 1% of total cost			1,000
Total Vehicle Cost			101,000

7.2 Technology and Processes

On the technology front, local machines have dominated the Pakistani packaging industry since long. These machines are time tested. Easy availability of machine parts and abundant technicians makes Pakistani machinery the first choice for the entrepreneurs. New Pakistani machines are easily available in the local market.

7.3 Machine Maintenance

The machinery maintenance would be an on going process whenever required.

8 HUMAN RESOURCE REQUIREMENT

The optimum number of direct laborers and administration staff has been worked out as 21-keeping the capacity utilization level of the unit under consideration. The total direct labor for operating sachet machine and box machine will be 15 in number.

The salaries structure of all the direct and indirect labor is given in details in the following table.

Table 8-1 Administrative Staff/Labor Details

Description	No.	Salary	Total Monthly Salary
Owner/CEO	1	30,000	30,000
Accounts Officer	1	12,000	12,000
Sales Man	3	9,000	27,000
Operators for Sachet Machine	3	7,000	21,000
Operators for Box Machine	12	6,000	72,000
Office Boy	1	3,000	3,000
Guard	1	3,500	3,500
Total	22		168,500

9 LAND & BUILDING REQUIREMENT

9.1 Land Requirement

For this particular project there is no need to purchase land because the building will be taken on rent. The required space would easily be available on around Rs. 20,000 per month rent in the proposed location.

9.2 Suitable Location

It is recommended that the office is located in the center of business hub of Quetta that is Qandhari Bazaar. This enables the business to be aware of all the major competitors in the markets, as well as the respond of its product.

10 PROJECT ECONOMICS

10.1 Project Cost

Description	Amount in (Rs.)
Capital Cost	
Machinery and equipment	545,000
Furniture and fixtures	30,000
Office vehicles	101,000
Office equipment	52,800
Pre-operating costs	168,500
Total capital costs	897,300
Working Capital	
Raw material inventory	1,292,543
Upfront building rent	240,000
Upfront insurance payment	32,300
Cash	300,000
Total working capital	1,864,843
Total Project Investment	2,762,143

10.2 Debt Equity Split

Debt	825,516
Equity	1,936,627
Total	2,762,143

10.3 Project Returns

Description	Equity	Project
IRR	73%	57%
MIRR	46%	36%
Payback Period (yrs)	2.50	3.08
NPV	20,868,654	24,112,873

11 FINANCIAL ANALYSIS

11.1 Projected Income Statement

Statement Summaries										SMEDA
Income Statement										Rs. in actuals
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Revenue	54,198,390	72,744,619	91,742,705	112,458,737	135,017,016	159,549,976	186,198,690	215,113,400	246,454,085	280,391,054
Cost of goods sold	49,036,031	65,604,269	82,574,719	101,094,358	121,277,329	143,245,423	167,128,585	193,065,453	221,203,923	251,701,745
Gross Profit	5,162,359	7,140,350	9,167,985	11,364,380	13,739,687	16,304,554	19,070,106	22,047,947	25,250,162	28,689,309
<i>General administration & selling expenses</i>										
Administration expense	996,600	1,093,630	1,200,108	1,316,952	1,445,172	1,585,876	1,740,279	1,909,716	2,095,648	2,299,683
Rental expense	240,000	264,000	290,400	319,440	351,384	386,522	425,175	467,692	514,461	565,907
Utilities expense	99,200	104,736	110,595	116,796	123,362	130,314	137,676	145,473	153,734	162,487
Travelling & Comm. expense (phone, fax, etc.)	167,610	183,929	201,836	221,487	243,052	266,716	292,683	321,179	352,450	386,765
Office vehicles running expense	10,100	10,908	11,781	12,723	13,741	14,840	16,027	17,310	18,694	20,190
Office expenses (stationary, etc.)	9,060	9,942	10,910	11,972	13,138	14,417	15,821	17,361	19,051	20,906
Promotional expense	250,000	200,000	183,485	224,917	270,034	319,100	372,397	430,227	492,908	560,782
Insurance expense	32,300	29,070	25,840	22,610	19,380	16,150	12,920	9,690	6,460	3,230
Professional fees (legal, audit, etc.)	108,397	145,489	183,485	224,917	270,034	319,100	372,397	430,227	492,908	560,782
Depreciation expense	72,880	72,880	72,880	72,880	72,880	72,880	72,880	72,880	72,880	72,880
Amortization expense	33,700	33,700	33,700	33,700	33,700	-	-	-	-	-
Miscellaneous expense	1,625,952	2,182,339	2,752,281	3,373,762	4,050,510	4,786,499	5,585,961	6,453,402	7,393,623	8,411,732
Subtotal	3,645,798	4,330,623	5,077,302	5,952,158	6,906,387	7,912,414	9,044,217	10,275,157	11,612,818	13,065,345
Operating Income	1,516,560	2,809,727	4,090,684	5,412,221	6,833,300	8,392,140	10,025,889	11,772,790	13,637,343	15,623,964
Income from cash at bank	18,200	33,392	135,277	308,375	556,663	894,404	1,331,062	1,869,729	2,520,520	3,714,950
Earnings Before Interest & Taxes	1,534,760	2,843,119	4,225,961	5,720,596	7,389,963	9,286,543	11,356,951	13,642,519	16,157,864	19,338,914
Interest expense	116,555	103,033	54,156	37,795	19,797	-	-	-	-	-
Earnings Before Tax	1,418,205	2,740,085	4,171,805	5,682,802	7,370,166	9,286,543	11,356,951	13,642,519	16,157,864	19,338,914
Tax	312,005	602,819	917,797	1,250,216	1,621,437	2,043,040	2,498,529	3,001,354	3,554,730	4,254,561
NET PROFIT/(LOSS) AFTER TAX	1,106,200	2,137,266	3,254,008	4,432,585	5,748,729	7,243,504	8,858,422	10,641,165	12,603,134	15,084,353
Balance brought forward		1,106,200	3,243,466	6,497,474	10,930,060	16,678,789	23,922,293	32,780,715	43,421,880	56,025,014
Total profit available for appropriation	1,106,200	3,243,466	6,497,474	10,930,060	16,678,789	23,922,293	32,780,715	43,421,880	56,025,014	71,109,367
Balance carried forward	1,106,200	3,243,466	6,497,474	10,930,060	16,678,789	23,922,293	32,780,715	43,421,880	56,025,014	71,109,367

11.2 Projected 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	520,000	-	954,050	2,911,020	5,899,695	10,004,967	15,549,431	22,480,924	30,939,900	41,074,966	65,066,450
Accounts receivable	-	2,969,775	3,477,891	4,506,502	5,594,560	6,780,158	8,070,329	9,472,566	10,994,852	12,645,685	14,434,113
Finished goods inventory	-	1,386,623	1,814,095	2,281,261	2,791,060	3,346,631	3,951,323	4,608,710	5,322,606	6,097,080	6,936,471
Raw material inventory	1,292,543	1,821,583	2,412,175	3,104,701	3,913,852	4,856,260	5,950,742	7,218,572	8,683,786	10,373,530	-
Pre-paid building rent	20,000	22,000	24,200	26,620	29,282	32,210	35,431	38,974	42,872	47,159	-
Pre-paid insurance	32,300	29,070	25,840	22,610	19,380	16,150	12,920	9,690	6,460	3,230	-
Total Current Assets	1,864,843	6,229,050	8,708,251	12,852,713	18,247,829	25,036,376	33,570,175	43,829,436	55,990,477	70,241,649	86,437,034
<i>Fixed assets</i>											
Machinery & equipment	545,000	490,500	436,000	381,500	327,000	272,500	218,000	163,500	109,000	54,500	-
Furniture & fixtures	30,000	27,000	24,000	21,000	18,000	15,000	12,000	9,000	6,000	3,000	-
Office vehicles	101,000	90,900	80,800	70,700	60,600	50,500	40,400	30,300	20,200	10,100	-
Office equipment	52,800	47,520	42,240	36,960	31,680	26,400	21,120	15,840	10,560	5,280	-
Total Fixed Assets	728,800	655,920	583,040	510,160	437,280	364,400	291,520	218,640	145,760	72,880	-
<i>Intangible assets</i>											
Pre-operation costs	168,500	134,800	101,100	67,400	33,700	-	-	-	-	-	-
Total Intangible Assets	168,500	134,800	101,100	67,400	33,700	-	-	-	-	-	-
TOTAL ASSETS	2,762,143	7,019,770	9,392,391	13,430,273	18,718,809	25,400,776	33,861,695	44,048,076	56,136,237	70,314,529	86,437,034
Liabilities & Shareholders' Equity											
<i>Current liabilities</i>											
Accounts payable	-	2,688,243	3,606,344	4,551,609	5,585,312	6,714,299	7,945,927	9,288,098	10,749,305	12,338,676	13,391,040
Short term debt	-	536,229	-	-	-	-	-	-	-	-	-
Total Current Liabilities	-	3,224,472	3,606,344	4,551,609	5,585,312	6,714,299	7,945,927	9,288,098	10,749,305	12,338,676	13,391,040
<i>Other liabilities</i>											
Deferred tax	-	62,172	64,394	66,616	68,838	71,060	56,848	42,636	28,424	14,212	-
Long term debt	825,516	690,299	541,559	377,946	197,972	-	-	-	-	-	-
Total Long Term Liabilities	825,516	752,471	605,953	444,562	266,810	71,060	56,848	42,636	28,424	14,212	-
<i>Shareholders' equity</i>											
Paid-up capital	1,936,627	1,936,627	1,936,627	1,936,627	1,936,627	1,936,627	1,936,627	1,936,627	1,936,627	1,936,627	1,936,627
Retained earnings	-	1,106,200	3,243,466	6,497,474	10,930,060	16,678,789	23,922,293	32,780,715	43,421,880	56,025,014	71,109,367
Total Equity	1,936,627	3,042,827	5,180,094	8,434,102	12,866,687	18,615,417	25,858,920	34,717,342	45,358,507	57,961,641	73,045,994
TOTAL CAPITAL AND LIABIL	2,762,143	7,019,770	9,392,391	13,430,273	18,718,809	25,400,776	33,861,695	44,048,076	56,136,237	70,314,529	86,437,034

Note: Total assets value will differ from project cost due to first installment of leases paid at the start of year 0

11.3 Projected 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	-	1,106,200	2,137,266	3,254,008	4,432,585	5,748,729	7,243,504	8,858,422	10,641,165	12,603,134	15,084,353
Add: depreciation expense	-	72,880	72,880	72,880	72,880	72,880	72,880	72,880	72,880	72,880	72,880
amortization expense	-	33,700	33,700	33,700	33,700	33,700	-	-	-	-	-
Deferred income tax	-	62,172	2,222	2,222	2,222	2,222	(14,212)	(14,212)	(14,212)	(14,212)	(14,212)
Accounts receivable	-	(2,969,775)	(508,116)	(1,028,611)	(1,088,058)	(1,185,598)	(1,290,171)	(1,402,238)	(1,522,286)	(1,650,833)	(1,788,429)
Finished good inventory	-	(1,386,623)	(427,472)	(467,166)	(509,799)	(555,571)	(604,692)	(657,387)	(713,896)	(774,474)	(839,391)
Raw material inventory	(1,292,543)	(529,039)	(590,593)	(692,526)	(809,151)	(942,408)	(1,094,482)	(1,267,830)	(1,465,215)	(1,689,744)	10,373,530
Pre-paid building rent	(20,000)	(2,000)	(2,200)	(2,420)	(2,662)	(2,928)	(3,221)	(3,543)	(3,897)	(4,287)	47,159
Advance insurance premium	(32,300)	3,230	3,230	3,230	3,230	3,230	3,230	3,230	3,230	3,230	3,230
Accounts payable	-	2,688,243	918,100	945,266	1,033,703	1,128,987	1,231,628	1,342,171	1,461,207	1,589,371	1,052,364
Cash provided by operations	(1,344,843)	(921,012)	1,639,018	2,120,583	3,168,650	4,303,244	5,544,464	6,931,493	8,458,976	10,135,065	23,991,484
<i>Financing activities</i>											
Change in long term debt	825,516	(135,217)	(148,739)	(163,613)	(179,974)	(197,972)	-	-	-	-	-
Change in short term debt	-	536,229	(536,229)	-	-	-	-	-	-	-	-
Issuance of shares	1,936,627	-	-	-	-	-	-	-	-	-	-
Cash provided by / (used for) financing activities	2,762,143	401,012	(684,968)	(163,613)	(179,974)	(197,972)	-	-	-	-	-
<i>Investing activities</i>											
Capital expenditure	(897,300)	-	-	-	-	-	-	-	-	-	-
Cash (used for) / provided by investing activities	(897,300)	-	-	-	-	-	-	-	-	-	-
NET CASH	520,000	(520,000)	954,050	1,956,970	2,988,675	4,105,272	5,544,464	6,931,493	8,458,976	10,135,065	23,991,484
Cash balance brought forward		520,000	-	954,050	2,911,020	5,899,695	10,004,967	15,549,431	22,480,924	30,939,900	41,074,966
Cash available for appropriation	520,000	-	954,050	2,911,020	5,899,695	10,004,967	15,549,431	22,480,924	30,939,900	41,074,966	65,066,450
Cash carried forward	520,000	-	954,050	2,911,020	5,899,695	10,004,967	15,549,431	22,480,924	30,939,900	41,074,966	65,066,450

12 KEY ASSUMPTIONS

12.1 Production Assumptions

Maximum attainable capacity in percentage	95%
Capacity utilization (1st Year) in percentage	20%
Production capacity in units (20% in first year)	243,996 Kgs
Production capacity utilization growth rate	5%
Sale price growth rate in percentage	5%

12.2 Cash flow Assumptions

Raw Material Inventory Cycle (In Days)	10
Accounts Receivables Cycle (In Days)	20
Accounts Payable Cycle (In Days)	20
Initial Cash in Bank (Rupees)	300,000

12.3 Expense Assumptions

Communication Expense (% of Admin. Exp.)	3.5%
Machine Maintenance (per unit of production)	Rs. 1 / Kg
Pre-Operational Expense	Rs. 168,500
Wages Growth Rate	10%
Electricity Tariff Growth Rate	8%
Vehicle Price Growth Rate	10%
Office Equipment Price Growth Rate	5%

12.4 Depreciation Expense Assumptions

Plant & Machinery Depreciation Rate	10%
Furniture & Fixtures Depreciation Rate	10%
Vehicle Depreciation Rate	10%

12.5 Financing Assumptions

Debt	30%
Equity	70%
Return on Equity	16%
WACC (Weighted Average Cost of Capital)	13%
Tax Rate	Sole Proprietorship