



Pre-feasibility Study

SNACK (NIMKO) MANUFACTURING UNIT

March 2019

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

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

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1 DISCLAIMER

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2 EXECUTIVE SUMMARY

The project involves setting up a Snack (Nimko) Manufacturing unit in any big city of Pakistan. The unit will produce premium quality Snack (Nimko) with proper packaging to be sold in the local market, competing with a few existing brands. The unit will be using modern automated machinery for all the processes, ensuring quality check throughout the production process. After processing, the finished Snacks (Nimko) are packed in 1 kg packets.

The opportunity of the snack food business was almost unknown to the investors of Pakistan up to the mid-eighties and since then there has been moderate investment in Snack Manufacturing, Mainly multinational companies producing corn and potato based snacks. Potato chips have taken up a major share in the snack sector but there is a fairly big demand for traditional local snacks (Nimko). These Chick peas flour snacks have been in demand since long as a quick snack. Over the past few years the demand for snacks in general has been on the rise, causing a gap between demand and supply. Which is why a few brands taking up the Nimko business have earned great profits even now exporting these snacks as the traditional snacks have a huge market in south Asian market like India, Nepal and Bangladesh as well as some European countries with large south Asian population. This gap opens up an opportunity to set up units to produce good quality snacks at optimum production level. Most of the snack (Nimko) manufacturing units are set-up in Lahore and Karachi and a few in Quetta, Peshawar and Rawalpindi.

These snacks (Nimko) are mostly sold under a brand name but not packaged to be placed in shelves as rather are sold to wholesalers and then retailers in plastic shoppers with no proper packaging but a few names like gourmet ,Rehmat-e-shereen, Shahi and Nimko to make a few have properly packaged Snack (Nimko products).

The total project cost for setting up this plant is estimated at Rs. 63.537 million. The project is financed through 50% debt and 50% equity. The project NPV is around Rs. 211.063 million, with an IRR of 45% and payback period of 4.18 years. The legal business status of this project is proposed as 'Sole Proprietorship'. The overall proposed production capacity of the plant is 150 kg potato chips per hour. The plant will work in two shifts and operate at 50% capacity in the first year. The maximum capacity attained is 95% and the plant operates at this capacity sixth year onwards.

Snack Manufacturing Unit is proposed to be located at any big city of Pakistan preferably near food processing industrial area. The processing unit will produce different kinds of lentil and chick pea flour based snacks.

With Installed capacity of 288,000 kg per year and initial utilization of 75%.
Total Cost Estimates is Rs.19.70 Million with fixed investment Rs 7.028 Million
and working capital Rs.12.673 Million

Given the cost assumptions IRR and payback are 73% and 1.80 years respectively.

The most critical considerations or factors for success of the project are Quality, the taste and freshness of the Snacks (Nimko) for prolonged time as customers prefer tasty and good quality snack within reasonable pricing. Continuous availability of raw material, i.e. Fresh chick pea Flour (Besan) and other raw materials are important to ensure the taste and quality. Waste Production should be kept at minimum and production process need to be monitored very carefully. Fully automated plant, hence less labour involved and availability of low cost labour as well as Product affordable to all income groups are important critical factors to be considered.

It is recommended to estimate the Chick pea (Besan) Flour requirements for the year and this should be contracted for in advance with the suppliers so as to secure from the drastic changes in the prices. Quality maintenance will play an important role as it is evident from the behavior of the general consumers that they are more specific towards health issues than ever before.

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 Snack (**Nimko**) **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 it's 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

The emergence of the middle class, a rapidly growing population, rising number of working women, increased urbanization, and awareness about the significance of nutritious and hygienic food, has drastically changed the business landscape for the processed food industry. As convenience has an immense impact on the food choices of consumers, the demand for food products that reduce both the preparation time and effort has been growing strongly.

The processed food industry in Pakistan has been going through a major change in recent years. The production landscape is transforming from a focus on traditional processed food items (e.g., cereal, biscuits, jam, pickles, juices, spices, etc.) to higher value added products, such as frozen ready-to-cook/fully cooked food, healthier snacks, dressing and sauces, processed meat and poultry. Thus, a large number of firms of varying size have come up in recent years, catering to the rapidly changing needs of highly diversified consumers in terms of age, gender, taste, income, and social background.

Some of the international potato chip companies keeping in view the piquant tastes of the national introduced traditional flavored potato chips. With the growth in the food segment in Pakistan, a major share is of traditional Sweets and snacks (nimko). Due to piquant taste of the people as well as authentic spicy flavors of the traditional snacks (Nimko), there is a high demand for the traditional snacks in Pakistan. These snacks mostly are sold in the market unpackaged and due to more awareness in the masses about food hygiene; packaged snacks are in high demand.

5.1 Product Description:

The unit will produce Chick pea flour based fried traditional snacks through automated machinery line to ensure high quality hygienic product with less help from labour. The products produced through the automated machinery line are:

1. **Dal Moth** (Fried and Seasoned whole Masoor dal (not peeled)).
2. **Mix Dal** (fried and seasoned and coloured chick peas with a mixture of thick sev, roasted peanuts and fine sev).
3. **Dal Chana** (Fried and Seasoned split chick peas).
4. **Dal mong** (Fried and Seasoned whole mong dal).
5. **Sev Fine** (Fine Vermicelli/ crunchy noodles made from chickpea flour paste, fried and seasoned).
6. **Sev Thick** (Fine Vermicelli/ crunchy noodles made from chickpea flour paste, fried and seasoned).
7. **Kabuli Chana** (Fried and Seasoned whole chana dal)

8. **Gathiya** : A thick stand of Chick pea flour that is deep fried and seasoned.
9. **Fried Peanuts**: Crunchy fried peanuts coated with chick pea flour and seasoning.

This unit will make premium quality snacks in one standard packet size of 200 grams.

Technology: This proposed unit will manufacture snacks with modern processing machines including dough maker, cutter, batch fryers, oil extractor and packing machine.

Location: The said project can be set up in any big city of Pakistan preferably near food processing industrial area. It is recommended to establish the unit in an area where raw material is easily available. It may be area of any big city like Quetta, Lahore, and Karachi. The recommended location for this proposed project is Satellite town, Quetta.

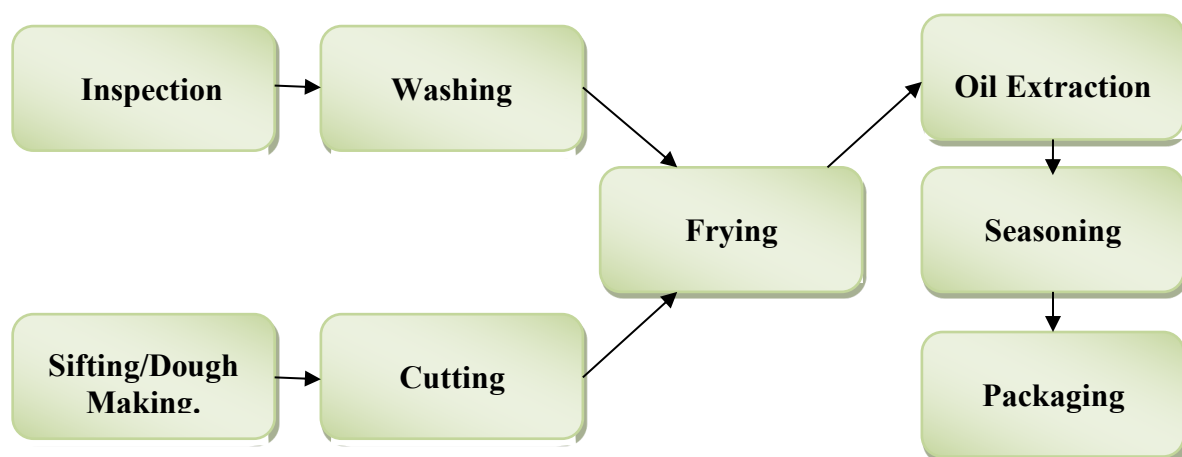
Target Market: In addition to local markets in Quetta, interior Balochistan, Karachi, Lahore and Islamabad an enormous export market for the Pakistani traditional snacks exists in South Asia, Europe, USA, Middle East, etc.

Employment Generation: The proposed project will provide direct employment to 28 people and 20 skilled and unskilled people as labour.

5.2 Production Process Flow

Manufacturing Process of Snacks is given below in detail:

Figure 1: Manufacturing Process Flow



- I. Inspection:**
First of all the unit receives raw material from the wholesaler and is then checked by quality officer. In case of any any problem in the material, it gets rejected and sent back to supplier.
- II. Storage:**
After getting checked for the quality, the raw material then gets sent to the store room for storage.
- III. Cleaning:**
The Raw materials like Chick peas, Moong Dal, Masoor Dal, are washed and cleaned for frying and seasoning later.
- IV. Dough Making Process:**
The first step in the production process and where chick pea flour is first sifted, seasoned and then (Besan) is knead with water for making dough.
- V. Cutting process:**
The dough made in the dough making process is now cut into different types of noodles/Vermicelli through a cutter.
- VI. Frying Process:**
In this step all noodles/vermicelli to make sev thick and fine are fried. The lentils cleaned and washed are also fried to be packaged separately as well as to be used to make a snack mixture comprising of dough and lentil based snack.
- VII. Oil Extractor:**
All fried snacks are now sent to the dryer/oil extractor to extract excess oil out of them.
- VIII. Semi Automation Seasoning Process:**
In this step, all snacks are seasoned manually in large skillets in to as many as seasoning like sweet, spice, salty etc.
- IX. Automatic Pouch Packing:**
In this step all product are packed in proper plastic packs with an automation packing machine according to grams. All products have one standard size packaging of 200 Grams.
- X. Box Packing:**
Box packing is last step of process. In this process all pouch packaged products are packed in the big cartoons manually according to box size and sent to retailers.

5.3 Installed and Operational Capacities

The Unit will have a installed capacity of 106Kg/hour (381600 kg/year) but at 75% capacity utilization producing 80Kg/hr ,288,000 Kg per year are produced. The unit will operate with a total of 7 machines i.e. two Dough Kneaders, 2 cutters, Fryer and a dryer unit and a packaging machine. Capacity Growth is assumed to be 5%.

6 CRITICAL FACTORS

Waste Production should be kept at minimum and production process need to be monitored very carefully. Snacks must be fried in the finest vegetable oil and seasoned with delicious flavours. A variety of flavors should be introduced. Advance sale orders can ensure the success of the business.

It is recommended to estimate the raw material requirements for the year and this should be contracted for in advance with the suppliers so as to secure from the drastic changes in the prices of Potatoes. Quality maintenance will play an important role as it is evident from the behavior of the general consumers that they are more specific towards health issues than ever before.

7 GEOGRAPHICAL POTENTIAL FOR INVESTMENT

The said project can be set up in any big city of Pakistan preferably near food processing industrial area. It is recommended to establish the unit in an area where raw material is easily available. It may be area of any big city like Quetta, Lahore, and Karachi. The recommended location for this proposed project is Satellite town, Quetta.

8 POTENTIAL TARGET CUSTOMERS / MARKETS

In addition to local markets in Quetta, interior Balochistan, Karachi, Lahore and Islamabad an enormous export market for the Pakistani traditional snacks exists in South Asia, Europe, USA, 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. 159 million in the year one. The capacity utilization during year one is worked out at 75 % with 5% increase in subsequent years up to the maximum capacity utilization of 90%.

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)	73%
Payback Period (yrs.)	1.80
Net Present Value (Rs.)	76,709,752

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 9.850 Million
Bank Loan (50%)	Rs.9.850 Million
Markup to the Borrower (%age / annum)	16%
Tenure of the Loan (Years)	5

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	1,546,506
Furniture & Fixture	826,100
Office Equipment	83,000
Motor Vehicles	728,800
Pre-operating Cost	3,700,000
Total Capital Cost	7,028,408
Working Capital	
Raw Material Inventory	2,704,896
Up-front Building Rent	90,000
Cash	6,479,031

Total Working Capital	9,273,927
Total Project Cost	19,701,472

9.4 Machinery & Equipment Requirement

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

Table 4: Machinery & Equipment

Description	No.	Cost	Total Cost
Dough Kneader	2	150,000	300,000
Dal Washer	1	100,000	100,000
Cutter/Sev Maker	2	150,000	300,000
Batch Fryer with dryer	1	350,000	350,000
Packing Machine	1	160,000	160,000
Water Tanker	1	100,000	100,000
Water Steel Buckets	2	2,000	4,000
Steel Strainers	4	1,200	4,800
Large Spoons	6	500	3,000
Total	7		1,321,800
GST 17%		17%	224,706
Total Machinery Cost			1,546,506

9.5 Furniture & Fixtures Requirement

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

Table 5: Furniture & Fixture

Description	No.	Cost (Rs.)	Total Cost(Rs)
Office Tables 2.5x4	2	16,000	32,000
Office Chairs	2	5,000	10,000
Visitors Chairs	2	3,500	7,000
Work Shop Chairs	10	2,500	25,000
Air conditioners (1.5 ton Split) for Workshop	2	60,000	120,000
Energy Savers	12	200	2,400
Fans	2	3,000	6,000
Total Furniture & Fixtures			826,100

9.6 Office Equipment Requirement

Following office equipment will be required for Snack Manufacturing Unit.

Table 6: Office Equipment

Description	No	Cost (Rs)	Total Cost (Rs.)
Laptop (Used/New)	1	60,000	60,000
Computer printer (s)	1	15,000	15,000
Telephone Sets	4	2,000	8,000
Total Office Equipment			83,000

9.7 Human Resource Requirement

In order to run operations of Snack Manufacturing Unit smoothly, details of human resources required along with number of employees and monthly salary are recommended as under;

Table 7: Human Resource Requirement

Description	No	Salary Per Person (Rs.)
CEO/ Marketing Manager / Owner / Main Designer	1	60,000
Production Manager	1	50,000
Purchase Officer	1	40,000
Quality Incharge	2	25,000
Store Supervisor	1	30,000
Machine Operator	8	20,000
Skilled Labour	10	24,000
Unskilled Labour	10	18,000
Driver	1	25,000
Marketing Manger	1	50,000
Accountant	1	25,000
Office Boy	4	18,000
Guard	2	18,000
Total	48	

9.8 Utilities and other costs

An essential cost to be borne by the project is the cost of electricity and gas. The electricity expenses are estimated to be around Rs. 185,007 per month.

Furthermore, promotional expense being essential for marketing of is estimated as 5.0% of administrative / Cost of Sales expenses.

9.9 Revenue Generation

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

Table 8: 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.)
First Year Production	1,440,000	402,013	1,037,987	154	159,850,000

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
Sama Engineering	Nazimabad # 2, Block-A, Plot No. 1/32, Opposite Firdous Colony KHI- 74600 Pakistan	0345 2266208	info@samaengineering.com	https://www.samaengineering.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	159,850,000	190,513,400	217,637,860	248,282,078	282,878,761	321,911,960	354,595,650	390,055,215	429,060,736	471,966,810
Cost of goods sold	117,810,080	138,952,074	157,194,253	177,695,161	200,724,122	226,581,742	249,586,565	274,545,221	301,999,743	332,199,718
Gross Profit	42,039,920	51,561,326	60,443,607	70,586,917	82,154,639	95,330,217	105,009,085	115,509,994	127,060,993	139,767,092
<i>General administration & selling expenses</i>										
Administration expense	11,568,960	12,725,856	13,998,442	15,398,286	16,938,114	18,631,926	20,495,118	22,544,630	24,799,093	27,279,003
Rental expense	-	-	-	-	-	-	-	-	-	-
Utilities expense	185,007	203,508	223,859	246,244	270,869	297,956	327,751	360,527	396,579	436,237
Travelling & Comm. expense (phone, fax, etc.)	3,421,640	4,057,372	4,624,572	5,264,637	5,986,471	6,800,024	7,489,876	8,238,864	9,062,751	9,969,026
Office vehicles running expense	-	-	-	-	-	-	-	-	-	-
Office expenses (stationary, etc.)	224,640	247,104	271,814	298,996	328,895	361,785	397,963	437,760	481,536	529,689
Promotional expense	7,992,500	9,525,670	10,881,893	12,414,104	14,143,938	16,095,598	17,729,782	19,502,761	21,453,037	23,598,340
Insurance expense	39,140	31,312	23,484	15,656	7,828	63,035	50,428	37,821	25,214	12,607
Professional fees (legal, audit, etc.)	-	-	-	-	-	-	-	-	-	-
Depreciation expense	414,921	414,921	414,921	414,921	414,921	902,747	902,747	902,747	902,747	902,747
Amortization expense	370,000	370,000	370,000	370,000	370,000	370,000	370,000	370,000	370,000	370,000
Property tax expense	-	-	-	-	-	-	-	-	-	-
Miscellaneous expense	-	-	-	-	-	-	-	-	-	-
Subtotal	24,216,808	27,575,742	30,808,984	34,422,844	38,461,036	43,523,071	47,763,668	52,395,110	57,490,957	63,097,649
Operating Income	17,823,112	23,985,584	29,634,623	36,164,073	43,693,603	51,807,146	57,245,418	63,114,884	69,570,036	76,669,443
Other income	-	-	-	-	-	-	-	-	-	-
Gain / (loss) on sale of assets	-	-	-	-	1,113,542	-	-	-	-	-
Earnings Before Interest & Taxes	17,823,112	23,985,584	29,634,623	36,164,073	44,807,145	51,807,146	57,245,418	63,114,884	69,570,036	76,669,443
Interest expense	1,494,586	1,255,977	976,838	650,285	268,265	-	-	-	-	-
Earnings Before Tax	16,328,526	22,729,607	28,657,785	35,513,788	44,538,880	51,807,146	57,245,418	63,114,884	69,570,036	76,669,443
Tax	4,937,483	7,177,862	9,252,724	11,652,325	14,811,107	17,355,000	19,258,395	21,312,709	23,572,012	26,056,804
NET PROFIT/(LOSS) AFTER TAX	11,391,043	15,551,745	19,405,061	23,861,463	29,727,773	34,452,146	37,987,022	41,802,175	45,998,024	50,612,639
Balance brought forward	-	11,391,043	26,942,788	46,347,848	70,209,311	99,937,084	134,389,230	172,376,252	214,178,427	260,176,452
Total profit available for appropriation	11,391,043	26,942,788	46,347,848	70,209,311	99,937,084	134,389,230	172,376,252	214,178,427	260,176,452	310,789,090
Dividend	-	-	-	-	-	-	-	-	-	-
Balance carried forward	11,391,043	26,942,788	46,347,848	70,209,311	99,937,084	134,389,230	172,376,252	214,178,427	260,176,452	310,789,090

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	6,479,031	11,006,186	23,425,898	38,504,952	57,085,239	75,021,357	105,781,495	139,269,478	175,550,595	214,703,351	306,591,292
Accounts receivable	-	3,065,616	3,359,649	3,913,779	4,467,725	5,093,323	5,799,363	6,487,059	7,140,488	7,854,537	8,639,990
Finished goods inventory	-	5,122,177	5,798,963	6,559,884	7,414,999	8,375,539	9,454,037	10,399,440	11,439,384	12,583,323	13,841,655
Equipment spare part inventory	3,450,000	4,522,980	5,683,636	7,132,305	8,938,765	11,189,405	13,558,011	16,405,193	19,850,283	24,018,843	-
Raw material inventory	2,704,896	3,546,142	4,456,129	5,591,925	7,008,240	8,772,804	10,629,857	12,862,127	15,563,174	18,831,440	-
Pre-paid annual land lease	-	-	-	-	-	-	-	-	-	-	-
Pre-paid building rent	-	-	-	-	-	-	-	-	-	-	-
Pre-paid lease interest	-	-	-	-	-	-	-	-	-	-	-
Pre-paid insurance	39,140	31,312	23,484	15,656	7,828	63,035	50,428	37,821	25,214	12,607	-
Total Current Assets	12,673,066	27,294,413	42,747,759	61,718,500	84,922,797	108,515,463	145,273,190	185,461,119	229,569,138	278,004,100	329,072,939
<i>Fixed assets</i>											
Land	-	-	-	-	-	-	-	-	-	-	-
Building/Infrastructure	90,000	85,500	81,000	76,500	72,000	67,500	63,000	58,500	54,000	49,500	45,000
Machinery & equipment	1,546,506	1,391,855	1,237,205	1,082,554	927,904	3,263,916	2,860,199	2,456,483	2,052,766	1,649,049	1,245,332
Furniture & fixtures	826,100	743,490	660,880	578,270	495,660	1,743,492	1,527,838	1,312,184	1,096,530	880,875	665,221
Office vehicles	782,800	626,240	469,680	313,120	156,560	1,260,707	1,008,566	756,424	504,283	252,141	-
Office equipment	83,000	66,400	49,800	33,200	16,600	133,672	106,938	80,203	53,469	26,734	-
Total Fixed Assets	3,328,406	2,913,485	2,498,565	2,083,644	1,668,724	6,469,288	5,566,541	4,663,794	3,761,047	2,858,300	1,955,553
<i>Intangible assets</i>											
Pre-operation costs	3,700,000	3,330,000	2,960,000	2,590,000	2,220,000	1,850,000	1,480,000	1,110,000	740,000	370,000	-
Legal, licensing, & training costs	-	-	-	-	-	-	-	-	-	-	-
Total Intangible Assets	3,700,000	3,330,000	2,960,000	2,590,000	2,220,000	1,850,000	1,480,000	1,110,000	740,000	370,000	-
TOTAL ASSETS	19,701,472	33,537,899	48,206,324	66,392,144	88,811,521	116,834,752	152,319,731	191,234,913	234,070,185	281,232,399	331,028,492
Liabilities & Shareholders' Equity											
<i>Current liabilities</i>											
Accounts payable	-	3,850,135	4,610,175	5,313,434	6,120,400	7,046,931	8,079,765	9,007,925	10,041,021	11,205,212	10,388,665
Export re-finance facility	-	-	-	-	-	-	-	-	-	-	-
Short term debt	-	-	-	-	-	-	-	-	-	-	-
Other liabilities	-	-	-	-	-	-	-	-	-	-	-
Total Current Liabilities	-	3,850,135	4,610,175	5,313,434	6,120,400	7,046,931	8,079,765	9,007,925	10,041,021	11,205,212	10,388,665
<i>Other liabilities</i>											
Lease payable	-	-	-	-	-	-	-	-	-	-	-
Deferred tax	-	-	-	-	-	-	-	-	-	-	-
Long term debt	9,850,736	8,445,985	6,802,624	4,880,125	2,631,073	-	-	-	-	-	-
Total Long Term Liabilities	9,850,736	8,445,985	6,802,624	4,880,125	2,631,073	-	-	-	-	-	-
<i>Shareholders' equity</i>											
Paid-up capital	9,850,736	9,850,736	9,850,736	9,850,736	9,850,736	9,850,736	9,850,736	9,850,736	9,850,736	9,850,736	9,850,736
Retained earnings	-	11,391,043	26,942,788	46,347,848	70,209,311	99,937,084	134,389,230	172,376,252	214,178,427	260,176,452	310,789,090
Total Equity	9,850,736	21,241,779	36,793,524	56,198,585	80,060,047	109,787,820	144,239,966	182,226,988	224,029,163	270,027,188	320,639,826
TOTAL CAPITAL AND LIABILITY	19,701,472	33,537,899	48,206,324	66,392,144	88,811,521	116,834,752	152,319,731	191,234,913	234,070,185	281,232,399	331,028,492
Note: Total assets value will differ from project cost due to first installment of leases paid at the start of year 0											

12.3 Cash Flow Statement

Statement Summaries											SMEDA
Cash Flow Statement											
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Rs. in actuals Year 10
<i>Operating activities</i>											
Net profit	-	11,391,043	15,551,745	19,405,061	23,861,463	29,727,773	34,452,146	37,987,022	41,802,175	45,998,024	50,612,639
Add: depreciation expense	-	414,921	414,921	414,921	414,921	414,921	902,747	902,747	902,747	902,747	902,747
amortization expense	-	370,000	370,000	370,000	370,000	370,000	370,000	370,000	370,000	370,000	370,000
Deferred income tax	-	-	-	-	-	-	-	-	-	-	-
Accounts receivable	-	(3,065,616)	(294,033)	(554,130)	(553,946)	(625,598)	(706,040)	(687,696)	(653,428)	(714,049)	(785,454)
Finished good inventory	-	(5,122,177)	(676,786)	(760,921)	(855,115)	(960,540)	(1,078,498)	(945,404)	(1,039,944)	(1,143,938)	(1,258,332)
Equipment inventory	(3,450,000)	(1,072,980)	(1,160,656)	(1,448,668)	(1,806,461)	(2,250,640)	(2,368,606)	(2,847,182)	(3,445,090)	(4,168,559)	24,018,843
Raw material inventory	(2,704,896)	(841,246)	(909,987)	(1,135,796)	(1,416,315)	(1,764,564)	(1,857,053)	(2,232,270)	(2,701,047)	(3,268,266)	18,831,440
Pre-paid building rent	-	-	-	-	-	-	-	-	-	-	-
Pre-paid lease interest	-	-	-	-	-	-	-	-	-	-	-
Advance insurance premium	(39,140)	7,828	7,828	7,828	7,828	(55,207)	12,607	12,607	12,607	12,607	12,607
Accounts payable	-	3,850,135	760,040	703,259	806,966	926,531	1,032,834	928,159	1,033,097	1,164,190	(816,546)
Other liabilities	-	-	-	-	-	-	-	-	-	-	-
Cash provided by operations	(6,194,036)	5,931,906	14,063,073	17,001,553	20,829,340	25,782,676	30,760,138	33,487,984	36,281,117	39,152,756	91,887,943
<i>Financing activities</i>											
Change in long term debt	9,850,736	(1,404,751)	(1,643,360)	(1,922,499)	(2,249,052)	(2,631,073)	-	-	-	-	-
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	9,850,736	-	-	-	-	-	-	-	-	-	-
Purchase of (treasury) shares	-	-	-	-	-	-	-	-	-	-	-
Cash provided by / (used for) financ	19,701,472	(1,404,751)	(1,643,360)	(1,922,499)	(2,249,052)	(2,631,073)	-	-	-	-	-
<i>Investing activities</i>											
Capital expenditure	(7,028,406)	-	-	-	-	(5,215,485)	-	-	-	-	-
Acquisitions	-	-	-	-	-	-	-	-	-	-	-
Cash (used for) / provided by invest	(7,028,406)	-	-	-	-	(5,215,485)	-	-	-	-	-
NET CASH	6,479,031	4,527,155	12,419,712	15,079,053	18,580,287	17,936,118	30,760,138	33,487,984	36,281,117	39,152,756	91,887,943
Cash balance brought forward	-	6,479,031	11,006,186	23,425,898	38,504,952	57,085,239	75,021,357	105,781,495	139,269,478	175,550,595	214,703,351
Cash available for appropriation	6,479,031	11,006,186	23,425,898	38,504,952	57,085,239	75,021,357	105,781,495	139,269,478	175,550,595	214,703,351	306,591,294
Dividend	-	-	-	-	-	-	-	-	-	-	-
Cash carried forward	6,479,031	11,006,186	23,425,898	38,504,952	57,085,239	75,021,357	105,781,495	139,269,478	175,550,595	214,703,351	306,591,294

13 KEY ASSUMPTIONS

Cash Flow Assumptions

Description	Details
Accounts Receivable Cycle (In days)	30
Accounts Payable Cycle (In days)	30

Revenue Assumptions

Description	Details
Sale Price Per uNIT	Rs. 154
Growth in Sales Price	10%
Maximum units Produced in Year 1	1,440,000

Financial Assumptions

Description	Details
Debt	50
Equity	50
Interest Rate On Debt	16
Debt Tenure	5

Small and Medium Enterprises Development Authority

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