# **Pre-Feasibility Study**

## SALT PRODUCTS MANUFACTURING UNIT



## **Small and Medium Enterprises Development Authority**

## Ministry of Industries & Production Government of Pakistan

www.smeda.org.pk

#### 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 helpdesk@smeda.org.pk

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

May 2016

## TABLE OF CONTENTS

1	DISC	LAIMER
2	EXE	CUTIVE SUMMARY4
3	INTR	ODUCTION TO SMEDA4
4	PUR	POSE OF THE DOCUMENT
5	<b>BRIE</b> 5.1 5.2	F DESCRIPTION OF PROJECT & PRODUCT
6		ICAL FACTORS7
7	GEO	GRAPHICAL POTENTIAL FOR INVESTMENT7
8	ΡΟΤΙ	ENTIAL TARGET CUSTOMERS / MARKETS7
9	9.1 9.2 9.3 9.4 9.5 9.6 9.7 9.8 9.9 9.10 9.11	JECT COST SUMMARY8PROJECT ECONOMICS.8PROJECT FINANCING8PROJECT COST9SPACE REQUIREMENT.9MACHINERY & EQUIPMENT REQUIREMENT10FURNITURE & FIXTURE REQUIREMENT11OFFICE EQUIPMENT REQUIREMENT11RAW MATERIAL REQUIREMENT12HUMAN RESOURCE REQUIREMENT12UTILITIES AND OTHER COSTS13REVENUE GENERATION13
		TACT DETAILS13
-		FUL WEB LINKS14
12	2 ANN 12.1 12.2 12.3	EXURES
1:	<b>B KEY</b> 13.1 13.2 13.3 13.4	ASSUMPTIONS18OPERATING COST ASSUMPTIONS18PRODUCTION COST ASSUMPTIONS18REVENUE ASSUMPTIONS18FINANCIAL ASSUMPTIONS19



## 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.

For more information on services offered by SMEDA, please contact our website: <u>www.smeda.org.pk</u>

Document No.	PREF-92
Revision	No. 3
Prepared by	SMEDA-Punjab
Revision Date	May, 2016
For information	janjua@smeda.org.pk

## **Document Control**



## 2 EXECUTIVE SUMMARY

The salt products manufacturing project entails production of rock salt crystal products ranging from lamps, tiles, candle stands, salt soaps and various decorative shapes / pieces. There is a growing demand of salt products in western countries due to its healing properties for their natural curative properties and distinctive color composition of decorative items.

Pakistan's salt products are well known all over the world for their distinctive composition and craftsmanship. Pakistan holds one of the largest reserves of salt deposits in the world. Growing international demand for salt products, availability of cheap and skilled labour coupled with abundant raw material offers new start-ups a very promising opportunity to venture into salt products manufacturing.

This pre-feasibility provides details for setting up a Salt Products Manufacturing Unit, which has a capacity of manufacturing around 655 pieces of different salt products in a day and 196,500 products in a year. The initial starting capacity in year one is assumed at 60%, while maximum capacity utilization is 95%. The salt products manufacturing unit is proposed to be ideally located in any adjoining industrial areas of Khewra, Warcha, Mianwali, Kalabagh and Mianwali districts. These areas are preferred due to their proximity to raw material and availability of skilled labor.

The proposed salt products manufacturing unit entails a total investment of about Rs. 24.34 million. This includes capital investment of Rs. 20.41 million and Rs. 3.93 million as initial working capital. The project is financed through 50% debt and 50% equity. The Net Present Value (NPV) of the project is around Rs. 12.25 million with an Internal Rate of Return (IRR) of 29% and a payback period of 4.31 years.

The project will provide employment opportunities to 33 people including owner manager. Higher return on investment and a steady growth of business is expected with the entrepreneur having some prior experience or education in the related field of business. The legal business status of this project is proposed as 'Sole Proprietorship'.

## 3 INTRODUCTION TO SMEDA

The Small and Medium Enterprises Development Authority (SMEDA) was established in October 1998 with an objective to provide fresh impetus to the economy through development of Small and Medium Enterprises (SMEs).

With a mission "to assist in employment generation and value addition to the national income, through development of the SME sector, by helping increase the number, scale and competitiveness of SMEs", SMEDA has carried out 'sectoral



research' to identify policy, access to finance, business development services, strategic initiatives and institutional collaboration and networking initiatives.

Preparation and dissemination of prefeasibility studies in key areas of investment has been a successful hallmark of SME facilitation by SMEDA.

Concurrent to the prefeasibility studies, a broad spectrum of business development services is also offered to the SMEs by SMEDA. These services include identification of experts and consultants and delivery of need based capacity building programs of different types in addition to business guidance through help desk services.

## 4 PURPOSE OF THE DOCUMENT

The objective of the pre-feasibility study is primarily to facilitate potential entrepreneurs in project identification for investment. The project pre-feasibility may form the basis of an important investment decision and in order to serve this objective, the document/study covers various aspects of project concept development, start-up, and production, marketing, finance and business management.

The purpose of this document is to facilitate potential investors in **Salt Products 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

There are a number of factors for which salt products are sought worldwide, however, therapeutic and decorative, are two distinct reasons for which, salt products are bought all over the world.

This pre-feasibility details information about investment opportunities for the production of rock salt crystal products such as salt lamps, candle stand, salt soap, salt spa products, salt inhalers, salt bricks, tiles and blocks etc. The proposed salt products manufacturing unit will primarily focus on indirect export (middlemen /



traders). The rock salt crystal products are highly suitable for decorative and natural curative purposes in homes, offices and restaurants, etc.

The proposed project is based on a unit with 2 lathe machines (5ft capacity), 2 cutter (18" and 32" length), grinders, drills and blowers with a capacity of manufacturing 196,500 units (i.e. different types of salt products) per annum. Total employment required for this unit would be 33 persons including owner / manager. Total area required for the unit would be approximately 2.25 kanals that would be purchased. The legal business status of this project is proposed as 'Sole Proprietorship'.

Growing international demand for salt products, especially in western countries due to its healing properties for a number of ailments, availability of cheap and skilled labor coupled with abundant raw material offers new start-ups a very promising opportunity to venture into salt products manufacturing.

#### 5.1 Production Process

Blocks of salt are cut into small pieces by cutters. Lathe machines are used to shape and size salt pieces into lamps and candle stands etc. Finishing operations are carried out on a grinder and drill machine. Natural profile products (natural shape) are made on grinders and hand drills.

#### 5.2 Installed and Operational Capacities

The proposed unit is based on 2 lathe machines and 2 cutting machine with a capacity of manufacturing 655 salt products per 8 hours shift. The total employment required for this unit would be 33 persons. Total number of salt products produced in year 1 would be 117,900 reaching 60% of the total installed capacity with gradual 5% increase, while maximum capacity 95% will be achieved with production reaching at 186,675 pieces in year 8 of the project.

Product Mix	Percent of Production	Installed Capacity (No of Units)	Starting Capacity Year 1	Maximum Capacity Utilization
Salt Lamps 2-12 kg	50%	98,250	58,950	93,337
Candle Stand 1- 2 kg	10%	19,650	11,790	18,668
Salt Soap 0.4- 0.6 kg	10%	19,650	11,790	18,668
Natural Profiles 3-4 kg	30%	58,950	35,370	56,002

 Table 1: Insalled and Operational Capacities



Total	196,500	117,900	186,676

## 6 CRITICAL FACTORS

Before making the decision, whether to invest in setting up the salt products manufacturing business or not, one should carefully analyze the associated risk factors. The most critical considerations or factors for success of the project are:

- ⇒ Awareness / knowledge of international markets and the demand trends for salt products.
- $\Rightarrow$  Availability of skilled labor and good quality raw material.
- $\Rightarrow$  Strict management / supervision controls to minimize wastage.
- $\Rightarrow$  Regular training and capacity building of the entrepreneur and employees.
- $\Rightarrow$  Prior experience / education in the related field of business.
- $\Rightarrow$  Ventilation and adequate safety measures.
- ⇒ The production process is highly manual and requires high involvement of manpower, therefore, strong management control in production operation is required.
- ⇒ Ability to generate work orders through networking, direct marketing and negotiating long term contracts.
- $\Rightarrow$  The most important factor for the success of the project would be the quality products and customer satisfaction in order to get a comparative advantage.

## 7 GEOGRAPHICAL POTENTIAL FOR INVESTMENT

The said project can be started near any adjoining industrial areas of Khewra, Jhelum, Warcha, Mianwali, Kalabagh, Mianwali districts. The availability of raw material in these regions considerably increases the scope for establishment of the proposed project.

Additionally, proposed unit may also be setup at any geographical location, where access to raw material (i.e. rock salt) and skilled labor (craftsman) is easily available, for instance, Lahore, Gujranwala, Sargodha and etc.

## 8 POTENTIAL TARGET CUSTOMERS / MARKETS

Salt products manufactured in this unit will be sold to exporters for European countries such as UK, Germany, France, Italy, and Spain. In addition to these countries, Korea, Japan and Australia are also potential markets of salt products.



It is suggested that proposed unit would primarily focus on indirect exports through local export traders, which will reduce the risks and costs for initial startups.

## 9 PROJECT COST SUMMARY

#### 9.1 Project Economics

All the figures in this financial model have been calculated for estimated sales of Rs. 16.74 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.

Description	Details
Internal Rate of Return (IRR)	29%
Payback Period (Years)	4.31
Net Present Value (Rs.)	12,253,808

#### Table 2: Project Economics

#### 9.2 Project Financing

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

#### Table 3: Project Financing

Description	Details
Total Equity (50%)	Rs.12,168,793
Bank Loan (50%)	Rs.12,168,793
Markup to the Borrower (%age / annum)	14%
Tenure of the Loan (Years)	5 years



#### 9.3 Project Cost

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

Description	Amount Rs.
Capital Cost	
Land	4,500,000
Building / Infrastructure	11,981,250
Plant and Machinery	2,050,800
Furniture & Fixture	411,500
Office Equipment	188,000
Office Vehicles	1,192,320
Pre-operating Cost	83,239
Total Capital Cost	20,407,110
Working Capital	
Equipment spare parts inventory	49,125
Raw Material Inventory	1,674,475
Upfront Insurance Payment	59,616
Cash	2,147,261
Total Working Capital	3,930,477
Total Project Cost	24,337,587

#### Table 4: Project Cost

#### 9.4 Space Requirement

The space requirement for the proposed salt products manufacturing unit is 2.25 Kanals 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:

Building for the proposed business will be built on the purchased land; total cost of land including acquisition and documentation charges is assumed as Rs. 4,500,000 (i.e. Rs. 2,000,000 per Kanal).



Description	Estimated Area (Sq. ft)	Unit Cost (Rs.)	Total Cost (Rs.)
Management Office	1,000	2,500	2,500,000
Production Hall	2,500	1,800	4,500,000
Store – Finished Goods	1,500	1,800	2,700,000
Store – Raw Material (open plot)	2,000	500	1,000,000
Loading / Unloading Open Space	2,000	500	1,000,000
Grounds	1,125	250	281,250
Total	10,125		11,981,250

#### Table 5: Space Requirment

However, a purpose built building can also be acquired on rental basis to avoid the initial high capital investment. The estimated rent for a building comprising of above stated infrastructural requirements will range from Rs. 80,000 to 150,000 per month, depending upon the location and cities.

#### 9.5 Machinery & Equipment Requirement

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

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Cutter 32 Inches	1	300,000	300,000
Cutter 18 Inches	1	60,000	60,000
Lathe Machines	2	700,000	1,400,000
Grinders	8	9,600	76,800
Drill Machines 8 Fit with special Bit	2	75,000	150,000
Hand Drills	10	3,000	30,000
Blowers	4	8,500	34,000
TOTAL			2,050,800

 Table 6: Machinery & Equipment Requirement



#### 9.6 Furniture & Fixture Requirement

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

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Office Tables	3	15,000	45,000
Sofa Set	1	30,000	30,000
Sitting Benches	27	2,500	67,500
Chair	10	4,000	40,000
Cupboard Steel	2	12,000	24,000
Working Table	5	10,000	50,000
Air conditioners (1.5 ton Split)	1	55,000	55,000
Total Energy Savers, Fans, Electric wiring	Lump sum	100,000	100,000
Total			411,500

#### 9.7 Office Equipment Requirement

Following office equipment will be required for Salt Products Manufacturing Unit:

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Computer with LCD	2	30,000	60,000
UPS	2	12,000	24,000
Printer	1	15,000	15,000
Scanner	1	10,000	10,000
DSLR Camera	1	75,000	75,000
Telephone Sets	2	2,000	4,000
Total			188,000

#### **Table 8: Office Equipment Requirement**

#### 9.8 Raw Material Requirement

Description	Finished Weight (Kgs)	Wastage	Raw Material Requirements Kgs / Piece	Production Capacity	Annual Requirement (Kgs)
Salt Lamp 2- 12 kg	7.00	30%	9.10	98,250	894,075
Candle Stand 1-2 kg	1.50	30%	1.95	19,650	38,318
Salt Soap 0.4-0.6 kg	0.50	30%	0.65	19,650	12,773
Natural Profiles 3-4 kg	3.50	30%	4.55	58,950	268,223
Total				196,500	1,213,388
Salt Average cost / kg					5.5
Total					6,673,631

#### Table 9: Raw Material Requirement

#### 9.9 Human Resource Requirement

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

Description	No. of Employees	Monthly Salary per person	Annual Salary
Owner Manager	1	40,000	480,000
Production In charge	1	25,000	300,000
Accountant	1	20,000	240,000
Cutter Operator	3	15,000	540,000
Lathe Machine Operator	2	15,000	360,000
Grinder Operators	8	14,000	1,344,000
Drill Machine Operator	2	14,000	336,000
Un-skilled Labor ( helpers )	12	13,000	1,872,000

#### Table 10: Human Resource Requirement



Security Guard, Gate Keepers	2	14,000	336,000
Sweeper	1	13,000	156,000
Total	33		5,964,000

#### 9.10 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. 39,206 per month. Furthermore, promotional expense being essential for marketing of Salt Products Manufacturing Unit is estimated as 5% of revenue.

#### 9.11 Revenue Generation

Based on the capacity utilization of 60% for salt products, sales revenue during the first year of operations is estimated as Rs. 16,744,748.

Category of Jobs	Average Price	Percentage of Production	No of Jobs	Production Capacity in Year 1	Revenue
Salt Lamps 2- 12 kg	209.30	50%	98,250	58,950	12,338,235
Candle Stand 1-2 kg	44.85	10%	19,650	11,790	528,782
Salt Soap 0.4- 0.6 kg	14.95	10%	19,650	11,790	176,261
Natural Profiles 3-4 kg	104.65	30%	58,950	35,370	3,701,471
Total		100%	196,500	117,900	16,744,748

#### Table 11: Revenue Generation

#### **10 CONTACT DETAILS**

In order to facilitate potential investors, contact details of few prominent mine owners are provided below:

Name of Supplier	Address	Phone	Fax	Website
Project Manager Khewra Salt Mines	Khewra, District Jehlum	0544- 231137	0544- 231125	www.pmdc.gov.pk
Project Manager Warcha Salt Mines	Warcha, District Mianwali	0454- 923000	0454- 395704	www.pmdc.gov.pk



Project Manager Kalabagh Salt Mines	Kalabagh, Distt. Mianwali	0459- 395704	0459- 206183	<u>www.pmdc.gov.pk</u>
Project Manager Jatta Salt Mines	Jatta, Distt. Karak	0927- 222009		www.pmdc.gov.pk

## **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
Punjab Vocational Training Council (PVTC)	www.pvtc.gop.pk
Technical Education and Vocational Training Authority (TEVTA)	www.tevta.org
Pakistan Mineral Development Corporation (PMDC)	www.punjmin.com

## **12 ANNEXURES**

#### **12.1 Income Statement**

Calculations										SMEDA
Income Statement										
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Revenue	16,744,748	19,954,157	23,638,002	27,859,074	32,687,980	38,204,076	44,496,512	51,665,395	56,831,934	62,515,128
Cost of sales										
Cost of goods sold 1	3,348,950	3,990,831	4,727,600	5,571,815	6,537,596	7,640,815	8,899,302	10,333,079	11,366,387	12,503,026
Operation costs 1 (direct labor)	4,752,000	5,214,661	5,722,368	6,279,506	6,890,888	7,561,794	8,298,021	9,105,928	9,992,494	10,965,378
Operating costs 2 (machinery maintenance)	589,500	734,419	909,549	1,120,695	1,374,719	1,679,735	2,045,324	2,482,796	2,855,215	3,283,498
Operating costs 3 (direct electricity)	353,696	421,487	499,300	588,461	690,461	806,976	939,890	1,091,317	1,200,448	1,320,493
Total cost of sales	9,044,145	10,361,399	11,858,818	13,560,477	15,493,663	17,689,320	20,182,538	23,013,120	25,414,545	28,072,394
Gross Profit	7,700,602	9,592,759	11,779,184	14,298,597	17,194,316	20,514,756	24,313,975	28,652,275	31,417,390	34,442,734
General administration & selling expenses										
Administration expense	1,212,000	1,330,002	1,459,493	1,601,591	1.757.524	1,928,639	2,116,415	2,322,472	2,548,591	2,796,725
Electricity expense	116,778	128,456	141,301	155,432	170.975	188,072	206,879	227,567	250.324	275,357
Travelling expense	334,895	399,083	472,760	557,181	653,760	764,082	889,930	1,033,308	1,136,639	1,250,303
Communications expense (phone, fax, mail, inter	83,724	6,650	7,297	8,008	8,788	9,643	10,582	11,612	12,743	13,984
Office vehicles running expense	189,000	207,900	228,690	251,559	276,715	57,607	63,368	69,705	76,675	84,343
Office expenses (stationary, entertainment, janit	60,600	66,500	72,975	80,080	87,876	96,432	105,821	116,124	127,430	139,836
Promotional expense	837.237	997,708	1,181,900	1,392,954	1,634,399	1,910,204	2,224,826	2,583,270	2,841,597	3,125,756
Insurance expense	59,616	47,693	35,770	23,846	11,923	96,012	76,810	57,607	38,405	19,202
Depreciation expense	1,146,423	1,146,423	1,146,423	1,156,301	1,156,301	1,301,886	1,313,320	1,313,320	1,313,320	1,326,558
Amortization of pre-operating costs	8,324	8,324	8,324	8,324	8,324	8,324	8,324	8,324	8,324	8,324
Subtotal	4,048,597	4,338,739	4,754,933	5,235,276	5,766,585	6,360,901	7,016,275	7,743,309	8,354,047	9,040,388
Operating Income	3,652,005	5,254,020	7,024,250	9,063,321	11,427,732	14,153,855	17,297,700	20,908,966	23,063,342	25,402,346
Gain / (loss) on sale of office equipment			112,800			186,980			244,653	
Gain / (loss) on sale of office vehicles	-	-	-	-	476.928	-	-	-	244,033	
Earnings Before Interest & Taxes	3,652,005	5,254,020	7,137,050	9,063,321	476,928	14,340,835	17,297,700	20,908,966	23,307,995	25,402,346
Lamings before interest & Taxes	3,032,005	3,234,020	7,137,030	9,003,521	11,904,000	14,540,655	17,297,700	20,908,900	23,307,995	23,402,340
Interest expense on long term debt (Project Loan)	795,292	660,348	505,252	326,993	122,113	-	-	-	-	-
Interest expense on long term debt (Working Cap	505,612	-	-	-	-	-	-	-	-	-
Subtotal	1,300,904	660,348	505,252	326,993	122,113	-	-	-	-	-
Earnings Before Tax	2,351,101	4,593,671	6,631,798	8,736,328	11,782,546	14,340,835	17,297,700	20,908,966	23,307,995	25,402,346
Tax	317,720	900,601	1,543,629	2,280,214	3,346,391	4,241,791	5,276,694	6,540,637	7,380,298	8,113,320
NET PROFIT/(LOSS) AFTER TAX	2,033,381	3,693,070	5,088,169	6,456,114	8,436,156	10,099,043	12,021,006	14,368,328	15,927,697	17,289,026



#### 12.2 Balance Sheet

Calculations											SMEDA
Balance Sheet											
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Assets											
Current assets											
Cash & Bank	2,147,261	-	1,056,782	6,193,541	13,109,360	22,282,473	34,951,976	50,014,005	68,466,385	88,136,863	135,150,113
Accounts receivable		1,376,281	1,508,174	1,791,459	2,116,318	2,488,235	2,913,372	3,398,654	3,951,859	4,458,794	4,904,674
Equipment spare part inventory	49,125	64,262	83,565	108,112	139,248	178,651	228,411	291,129	351,538	424,482	-
Raw material inventory	1,674,475	2,294,728	3,126,126	4,237,017	5,717,148	7,684,204	10,292,314	13,743,098	17,385,019	21,992,049	-
Pre-paid insurance	59,616	47,693	35,770	23,846	11,923	96,012	76,810	57,607	38,405	19,202	-
Total Current Assets	3,930,477	3,782,963	5,810,416	12,353,975	21,093,998	32,729,576	48,462,882	67,504,493	90,193,206	115,031,390	140,054,787
Fixed assets											
Land	4,500,000	4,500,000	4,500,000	4,500,000	4,500,000	4,500,000	4,500,000	4,500,000	4,500,000	4,500,000	4,500,000
Building/Infrastructure	11,981,250	11,382,188	10,783,125	10,184,063	9,585,000	8,985,938	8,386,875	7,787,813	7,188,750	6,589,688	5,990,625
Machinery & equipment	2,050,800	1,845,720	1,640,640	1,435,560	1,230,480	1,025,400	820,320	615,240	410,160	205,080	
Furniture & fixtures	411,500	370,350	329,200	288,050	246,900	205,750	164,600	123,450	82,300	41,150	-
Office vehicles	1,192,320	953,856	715,392	476,928	238,464	1,920,243	1,536,195	1,152,146	768,097	384,049	-
Office equipment	188,000	125,333	62,667	217,634	145,089	72,545	251,938	167,959	83,979	291,650	194,433
Total Fixed Assets	20,323,870	19,177,447	18,031,024	17,102,234	15,945,933	16,709,875	15,659,928	14,346,607	13,033,287	12,011,616	10,685,058
Intangible assets											
Pre-operation costs	83,239	74,915	66,591	58,268	49,944	41,620	33,296	24,972	16,648	8,324	-
Total Intangible Assets	83.239	74,915	66,591	58,208	49,944	41,620	33,290	24,972	16,648	8,324	
TOTAL ASSETS	24,337,587	23,035,326	23,908,031	29,514,477	37,089,875	49,481,071	64,156,106	81,876,073	103,243,141	127,051,330	150,739,846
IOTAL ASSEIS	24,337,387	23,035,320	23,908,031	29,514,477	57,089,875	49,401,071	04,150,100	81,870,075	105,245,141	127,051,550	150,759,840
Liabilities & Shareholders' Equity											
Current liabilities											
Accounts payable		517,598	652,187	820,461	1,031,417	1,296,589	1,630,790	2,053,056	2,511,159	3,011,353	1,297,522
Short term debt	-	2,817,024	-	-	-	-	-	-	-	-	-
Total Current Liabilities	-	3,334,621	652,187	820,461	1,031,417	1,296,589	1,630,790	2,053,056	2,511,159	3,011,353	1,297,522
Other liabilities											
Deferred tax		317,720	1,218,321	2,761,950	5,042,164	8,388,554	12,630,346	17,907,040	24,447,677	31,827,975	39,941,295
Long term debt (Project Loan)	6,084,397	5,180,809	4,142,279	2,948,652	1,576,766	-	-	-	-	-	-
Long term debt (Working Capital Loan)	6,084,397	-	-	-	-	-	-	-	-	-	-
Total Long Term Liabilities	12,168,793	5,498,530	5,360,600	5,710,601	6,618,930	8,388,554	12,630,346	17,907,040	24,447,677	31,827,975	39,941,295
Shareholders' equity											
Paid-up capital	12,168,793	12,168,793	12,168,793	12,168,793	12,168,793	14,089,037	14,089,037	14,089,037	14,089,037	14,089,037	14,089,037
Retained earnings	,	2,033,381	5,726,451	10,814,621	17,270,735	25,706,890	35,805,934	47,826,939	62,195,268	78,122,965	95,411,991
Total Equity	12,168,793	14,202,175	17,895,245	22,983,414	29,439,528	39,795,927	49,894,970	61,915,976	76,284,305	92,212,002	109,501,028
TOTAL CAPITAL AND LIABILITIES	24,337,587	23,035,326	23,908,031	29,514,477	37,089,875	49,481,071	64,156,106	81,876,073	103,243,141	127,051,330	150,739,846



#### 12.3 Cash Flow Statement

Calculations											<b>SMEDA</b>
Cash Flow Statement											
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Operating activities											
Net profit		2,033,381	3,693,070	5,088,169	6,456,114	8,436,156	10,099,043	12,021,006	14,368,328	15,927,697	17,289,026
Add: depreciation expense		1,146,423	1,146,423	1,146,423	1,156,301	1,156,301	1,301,886	1,313,320	1,313,320	1,313,320	1,326,558
amortization of pre-operating costs		8,324	8,324	8,324	8,324	8,324	8,324	8,324	8,324	8,324	8,324
Deferred income tax		317,720	900,601	1,543,629	2,280,214	3,346,391	4,241,791	5,276,694	6,540,637	7,380,298	8,113,320
Accounts receivable		(1,376,281)	(131,894)	(283,284)	(324,860)	(371,917)	(425,137)	(485,282)	(553,205)	(506,935)	(445,879)
Equipment inventory	(49,125)	(15,137)	(19,303)	(24,547)	(31,136)	(39,403)	(49,760)	(62,718)	(60,409)	(72,944)	424,482
Raw material inventory	(1,674,475)	(620,253)	(831,398)	(1,110,891)	(1,480,131)	(1,967,056)	(2,608,109)	(3,450,784)	(3,641,921)	(4,607,030)	21,992,049
Advance insurance premium	(59,616)	11,923	11,923	11,923	11,923	(84,089)	19,202	19,202	19,202	19,202	19,202
Accounts payable		517,598	134,589	168,274	210,956	265,172	334,200	422,267	458,102	500,195	(1,713,831)
Cash provided by operations	(1,783,216)	2,023,699	4,912,336	6,548,020	8,287,704	10,749,879	12,921,441	15,062,030	18,452,380	19,962,127	47,013,251
Financing activities											
Project Loan - principal repayment		(903,587)	(1,038,531)	(1,193,627)	(1,371,886)	(1,576,766)	-	-	-	-	-
Working Capital Loan - principal repayment		(6,084,397)	-	-	-	-	-	-	_	-	_
Short term debt principal repayment		-	(2,817,024)	-	_	_	-	_	_	-	-
Additions to Project Loan	6,084,397	-	-	-	_	_	-	_	_	-	-
Additions to Working Capital Loan	6,084,397	-	_	_	_	_	-	_	_	-	-
Issuance of shares	12,168,793	-	_	_	_	1,920,243	-	_	_	-	-
Purchase of (treasury) shares	12,100,795					1,920,245					
Cash provided by / (used for) financing activities	24,337,587	(6,987,984)	(3,855,554)	(1,193,627)	(1,371,886)	343,477	-	-	-	-	-
Investing activities											
Capital expenditure	(20,407,110)			(217,634)		(1,920,243)	(251,938)		-	(291,650)	
Acquisitions	(20,407,110)	-	-	(217,034)	-	(1,920,243)	(231,330)	-	-	(291,030)	-
Cash (used for) / provided by investing activities	(20,407,110)	-	-	(217,634)	-	(1,920,243)	(251,938)	-	-	(291,650)	-
NET CASH	2,147,261	(4,964,285)	1,056,782	5,136,760	6,915,819	9,173,113	12,669,503	15,062,030	18,452,380	19,670,478	47,013,251



## **13 KEY ASSUMPTIONS**

#### 13.1 Operating Cost Assumptions

Description	Details
Operating Cost Growth Rate	15%
Office Expenses (Stationery, Entertainment etc)	5% of Administration expenses
Communication Expenses	0.5% of Sales
Promotional Expenses	5% of Revenue
Travelling Expense	2% of Admin Expense
Office Vehicles Running Expense	3% of Vehicles Cost
Depreciation Rate	<ul><li>10% on Machinery</li><li>33% on Office Equipment</li><li>10% on Furniture &amp; Fixture</li><li>20% on Office Vehicles</li></ul>
Inflation Growth Rate	10%
Electricity Price Growth Rate	10%
Salaries Growth Rate	10%

#### **13.2 Production Cost Assumptions**

Description	Details
Production Cost Per Unit (Raw Material)	
Salt Lamp 2-12 kg	Rs. 41.86
Candle Stand 1-2 kg	Rs. 8.97
Salt Soap 0.4-0.6 kg	Rs. 2.99
Natural Profiles 3-4 kg	Rs. 20.93
Salt Average Cost / kg	Rs. 4.60
Cost of Goods Sold Growth Rate	10%

#### **13.3 Revenue Assumptions**

Description	Details
Growth in Sales Price	10%
Days Operational / Year	300
Per Day Production Capacity	655
Production Capacity in First Year	60%



Percentage Increase in Production Capacity every Year	05%
Maximum Production Capacity	95%

#### **13.4 Financial Assumptions**

Description	Details
Debt	50%
Equity	50%
Interest Rate on Debt	14%
Debt Tenure	5 Years
Debt Payment / Year	12



