



**Pre-feasibility Study**

# **MINERAL WATER SMART FILLING SHOP**

**May 2023**

*“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

## Table of Contents

<b>1</b>	<b>DISCLAIMER .....</b>	<b>1</b>
<b>2</b>	<b>EXECUTIVE SUMMARY .....</b>	<b>2</b>
<b>3</b>	<b>INTRODUCTION TO SMEDA.....</b>	<b>3</b>
<b>4</b>	<b>PURPOSE OF THE DOCUMENT .....</b>	<b>3</b>
<b>5</b>	<b>BRIEF DESCRIPTION OF PROJECT &amp; PRODUCT .....</b>	<b>4</b>
5.1	PRODUCTION PROCESS FLOW .....	5
5.2	INSTALLED AND OPERATIONAL CAPACITIES.....	6
<b>6</b>	<b>CRITICAL FACTORS.....</b>	<b>7</b>
<b>7</b>	<b>GEOGRAPHICAL POTENTIAL FOR INVESTMENT.....</b>	<b>7</b>
<b>8</b>	<b>POTENTIAL TARGET CUSTOMERS / MARKETS .....</b>	<b>7</b>
<b>9</b>	<b>PROJECT COST SUMMARY .....</b>	<b>8</b>
9.1	PROJECT ECONOMICS.....	8
9.2	PROJECT FINANCING.....	8
9.3	PROJECT COST.....	9
9.4	SPACE REQUIREMENT .....	9
9.5	MACHINERY & EQUIPMENT REQUIREMENT .....	10
9.6	FURNITURE & FIXTURES REQUIREMENT.....	11
9.7	OFFICE EQUIPMENT REQUIREMENT.....	11
9.8	HUMAN RESOURCE REQUIREMENT .....	12
9.9	UTILITIES AND OTHER COSTS.....	12
9.10	REVENUE GENERATION.....	12
<b>10</b>	<b>CONTACT DETAILS.....</b>	<b>13</b>
10.1	MACHINERY SUPPLIERS.....	13
10.2	RAW MATERIAL SUPPLIERS .....	14
<b>11</b>	<b>USEFUL WEB LINKS .....</b>	<b>15</b>
<b>12</b>	<b>ANNEXURES.....</b>	<b>16</b>
12.1	INCOME STATEMENT .....	16
12.2	BALANCE SHEET .....	17
12.3	CASH FLOW STATEMENT .....	18
<b>13</b>	<b>KEY ASSUMPTIONS .....</b>	<b>19</b>
13.1	OPERATING COST ASSUMPTIONS .....	19
13.2	PRODUCTION COST ASSUMPTIONS .....	19
13.3	REVENUE ASSUMPTIONS.....	19
13.4	FINANCIAL ASSUMPTIONS .....	19
13.5	EXPENSE ASSUMPTIONS.....	19

## 1 DISCLAIMER

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### ***Document Control***

Document No.	PREF-NO 124
Revision	No. 2
Prepared by	SMEDA-Sindh
Revision Date	June, 2022
For information	Provincial Chief (Sindh) mkumar@smeda.org.pk

## 2 EXECUTIVE SUMMARY

**Mineral Water Smart Filling Shop** is a retail shop where water is purified on site. Raw water can be sourced from hydrants or underground boring. For this pre-feasibility, underground boring water is considered as source water. It has also assumed that customers bring their own bottles for filling purpose against a reasonable price.

The growing demand of clean, safe and pure drinking water in the country has generated investment opportunities in water business. This proposed Pre-feasibility study presents an investment opportunity for establishing a Mineral Water Smart Filling Shop with a capacity of **5,000 gallons per day** for providing pure drinking water. The proposed product line will consist of Mineral Water in **liters**. Total installed production capacity of purified mineral water is **2,079,000 liters per year**, where initial capacity utilization will be **70%**.

The total project cost for setting up a Mineral Water Smart Filling Shop is estimated at **Rs. 1.858 million** out of which **Rs. 1.210 million** is capital cost and **Rs. 0.648 million** is working capital. The project is proposed to be financed through **100%** equity. The NPV is projected around **Rs. 1.035 million**, with an IRR of **40%** and a Payback Period of **2.68 years**. The legal business status of this project is proposed as a 'Sole Proprietorship'.

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

- Most significant consideration
  - Selection of appropriate location keeping in mind the target market.
  - Maintenance of quality & hygiene standards.
  - Build contracts / linkages with bulk suppliers / buyers, households & distributors of mineral water.
- Equally important factor
  - Source of raw water.
  - Reasonable & competitive prices.

### 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 Pre-feasibility studies in key areas of investment has been a successful hallmark of SME facilitation by SMEDA.

Concurrent to the Pre-feasibility 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 **Mineral Water Smart Filling Shop** 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 process of Mineral Water Smart Filling Shop is collecting raw water from a suitable source, filtration, de-mineralization, blending with salts, aeration, testing for standards conformation and then finally filling. For this Pre-feasibility, it is estimated that customers bring their own empty bottles at the smart filling shop for filling purpose at a very reasonable price.

Raw water can be acquired from hydrants through water tanker and also it can be acquired through underground boring. This Pre-feasibility study focuses on Ground / Boring water as source of water. Initially, we recommend Resistivity or Geological survey at particular plant location, which consists of four tests and will cost around Rs. 50,000 to 90,000. This Resistivity survey report will identify the TDS (Total Dissolved Solids), time period for the availability of boring water at particular depth and composition of chemical and microbiological components from Ground / Boring water which will be more helpful for Capital Cost estimates. Boring depth, as recommended by technical experts, must be at least 300ft, which will cost around Rs. 225,000.

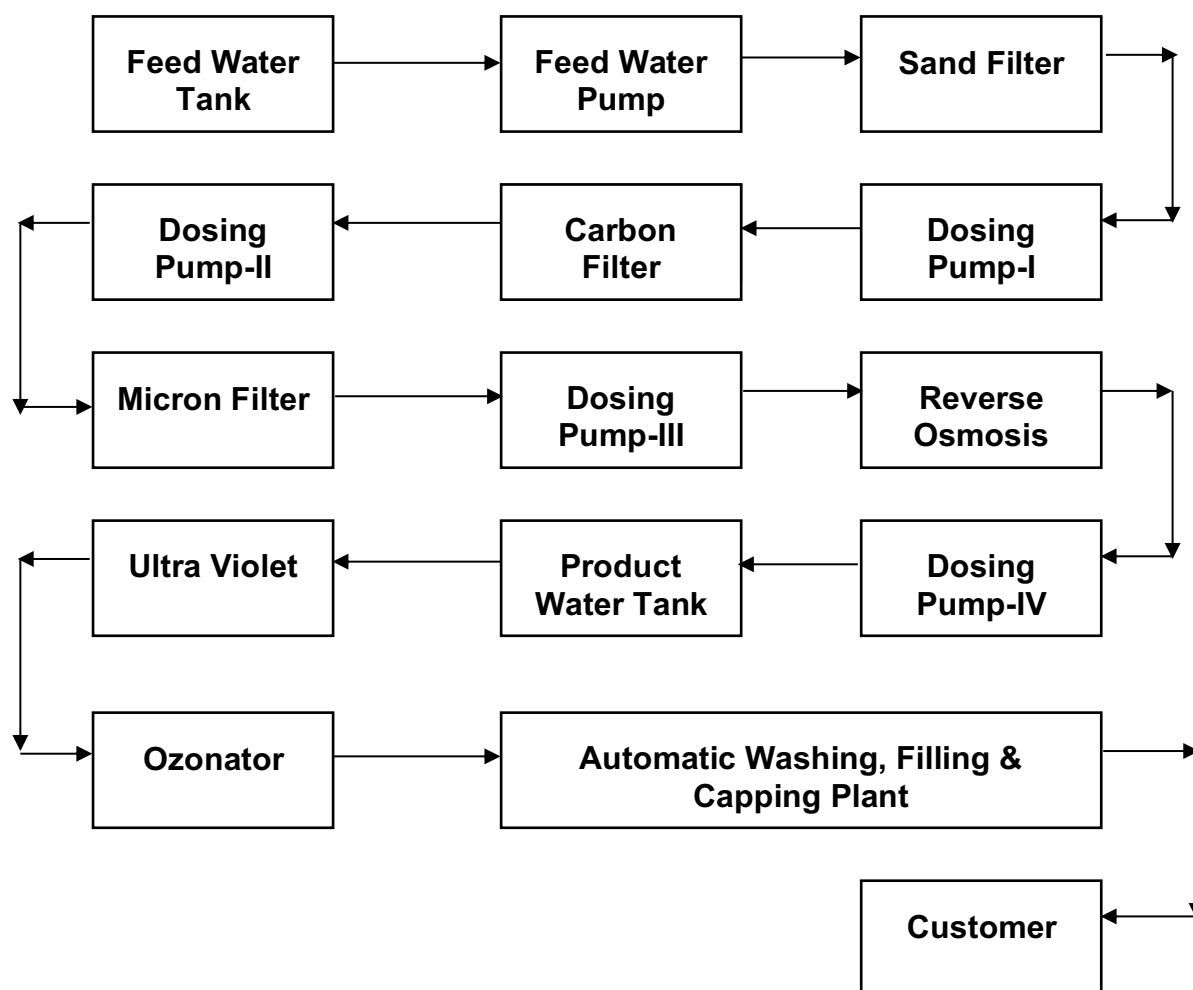
Following key parameters must be addressed as per Pre-feasibility study under preparation:

- **Technology:** Most of the water purification plants being installed in the country are Reverse Osmosis based. Government also recommends RO based technology. This Pre-feasibility study is based on Reverse Osmosis technology. Most of the machinery is imported from China, Taiwan, Italy and Germany along with some local components.
- **Location:** Smart Shop can be set-up in any major city with significant population such as Karachi, Hyderabad, Lahore, Rawalpindi, Islamabad, Multan, Peshawar and Quetta. This business can also be done in all small second tier towns in addition to suburban towns of large cities.
- **Product:** For this particular Pre-feasibility, proposed product line will be consist of mineral water to be filled in customer's utensils / cans.
- **Target Market:** The target market for Mineral Water Smart Filling Shop consist of Bulk Suppliers, Households and distribution agencies of mineral water. Moreover the Bottled / Mineral water have been emerging as a daily preference of Upper middle, Middle & Lower middle class due to unavailability of clean / pure drinking water.
- **Employment Generation:** The proposed project will provide direct employment to 02 peoples. Financial analysis shows the unit will be profitable from the very first year of operation.

## 5.1 Production Process Flow

- i. The first step for setting up a Water Purification Plant is the analysis of source water.
- ii. After the chemical analysis, the specifications of the purification plant are set. In purification plant, source water is stored into feed water tank and then passes through the sand filter for preliminary water filtration.
- iii. In next stage, water passes through the dosing pump-I, where chlorine is added to kill the germs in water.
- iv. After the chlorination, water passes through carbon filter. It helps in maintenance of proper odour and taste of water. It also removes chlorine from water.
- v. Furthermore, water passes through dosing pump-II, where Sodium Meta Bisulphate is added. It helps in Dechlorination of water.
- vi. Water is filtered next and passes through dosing pump-III, where Antiscalant is added. It prevents scaling of membrane from Calcium, Magnesium and Biological growth.
- vii. Water, then passes through Reverse Osmosis module. This stage of the process makes water clear from all the contaminations and minute particles.
- viii. In next step, water passes through dosing pump-IV, where Minerals are added for taste development. After this stage, water undergoes Ultra Violet treatment to avoid any contamination from bacteria and other microorganisms.
- ix. At last stage, water passes through automatic washing, filling and capping plant. Here water is filled into bottles or cans.

The complete process flow diagram is as under:



## 5.2 Installed and Operational Capacities

Following table provides details of installed capacities and capacity utilization for the first year of operations @ of 70%:

Product	Unit	Installed Capacity	First Year Production
Mineral Water	Liters	2,079,000	1,455,300



## 6 CRITICAL FACTORS

Following factors play a critical role in the successful execution of the business operations:

- Selection of appropriate location keeping in mind the target market, preferably close to the densely populated areas / markets.
- Timely supply of Raw water in case source water is from hydrants.
- Compliance with Standards and obtaining license from (PSQCA) Pakistan Standards & Quality Control Authority.
- The sale price must be according to the prevailing market price.
- Build contracts / linkages with bulk suppliers, households and distributors of mineral water.

## 7 GEOGRAPHICAL POTENTIAL FOR INVESTMENT

The market for Mineral Water has been showing a mushroom growth trend over the last few years due to the increasing population in a country, less availability of clean drinking water in majority of areas and awareness of hygiene with respect to drinking water. The demand of clean-fresh water is increasing year after year. Keeping this situation in mind many individuals and companies have set up Mineral Water Smart Filling Shops. For this particular Pre-feasibility study, proposed location is any big cities like Karachi, Hyderabad, Quetta, Lahore, Rawalpindi, Islamabad, Multan, Faisalabad and Peshawar, where Line / Boring / Tanker water is easily available and ideal for Reverse Osmosis plant.

## 8 POTENTIAL TARGET CUSTOMERS / MARKETS

Pakistan has a domestic market of above 207 million consumers with growing incomes & changing consumption habits. The potential target customers of Mineral Water Smart Filling Shop consist of Bulk suppliers, Households, Mineral water distribution agencies etc. Moreover the Bottled / Mineral water have been emerging as a daily preference of Upper middle, Middle & Lower middle class due to unavailability of clean / pure drinking water.

## 9 PROJECT COST SUMMARY

A detailed financial model has been developed to analyze the commercial viability of this project. Various costs and revenue related assumptions along with results of the analysis are outlined in this section.

The projected Income Statement, Cash Flow Statement and Balance Sheet are attached in appendices:

### 9.1 Project Economics

The capacity utilization during year one is worked out at 70% 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 9.1: Project Economics**

Description	Details
Internal Rate of Return (IRR)	40%
Payback Period	2.68 years
Net Present Value	Rs.1,035,051

This particular business and its profitability are highly dependent on the efficiency in sourcing of good quality water for extraction of Purified mineral water. Mineral water sales is also very important in this regard, adequate marketing & build strong linkages with bulk suppliers or distribution agencies for its sale.

### 9.2 Project Financing

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

**Table 9.2: Project Financing**

Description	Details
Total Equity (100%)	Rs.1,858,633

### 9.3 Project Cost

Following fixed and working capital requirements has been identified for the operation of proposed business:

**Table 9.3: Project Cost**

Description	Amount (Rs.)
<b>Capital Cost</b>	
Building / Infrastructure (Underground Boring if applicable)	225,000
Machinery & Equipment	660,000
Furniture & Fixture	35,000
Office equipment	90,000
Pre-operating cost	130,000
Legal, Licensing & Training costs	70,000
<b>Total Capital Cost</b>	<b>1,210,000</b>
<b>Working Capital</b>	
Raw Material Inventory	62,233
Up-front building rental	360,000
Up-front insurance payment	26,400
Cash	200,000
<b>Total Working Capital</b>	<b>648,633</b>
<b>Total Project Cost</b>	<b>1,858,633</b>

### 9.4 Space Requirement

The space requirement for the proposed Mineral Water Smart Filling Shop is estimated considering various facilities including Management building, Store, Ground, etc. However, the unit's operating in the industry do not follow any set pattern. Estimated rent for the proposed facility would be Rs.30,000 per month. Following table shows calculations for project space requirement:

**Table 9.4: Space Requirement**

Description	Total Estimated Area (Sq. ft.)	Unit Cost (Rs.)	Total Cost (Rs.)
Space Requirement	1500	20	30,000

## 9.5 Machinery & Equipment Requirement

This Pre-feasibility study is based on Reverse Osmosis technology. Most of the machinery is imported from China, Taiwan, Italy and Germany along with some local components. Details of the machinery & equipment are as following:

**Table 9.5: Machinery & Equipment**

Machinery Name	
Reverse Osmosis Water Purification Plant	
Feed Pump	
Multimedia Filter	
Carbon Filter	
Antiscalant Dosing Pump	
Micron Cartridge Filter	
High Pressure Pump	
Membrane	
Membrane Housing	
Remineralization (Mineral Dosing)	
Product Water Storage Tank	
Transfer / Filling Pump	
Pressure Gauges	
Flow Meter	
Electric Control Panel	
Membrane's Cleaning / Flushing System	
TDS Meter	
Ozonator	
Ultraviolet Sterilizer	
Frame	
Pipes & Fittings	
Safety Switches ( Low & High )	

Bottle's Washing / Rinsing Manual System	
Bottle's Filling Manual System	
<b>Total Machinery Cost</b>	<b>Rs.660,000</b>

This Pre-feasibility study proposes 1 Reverse Osmosis plant, with a capacity to purified 5,000 gallons per day of water. This Reverse Osmosis plant is assembled locally with some imported components. These components can be Chinese, German, and Taiwanese & Italian with respect to the capital expenditure budget.

## 9.6 Furniture & Fixtures Requirement

Details of the furniture and fixtures required for the project are given below:

**Table 9.6: Furniture & Fixture**

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Furniture Set for Office	1	15,000	15,000
Electric Wiring & Lighting	1	20,000	20,000
<b>Total</b>			<b>30,000</b>

## 9.7 Office Equipment Requirement

Following office equipment will be required for Mineral Water Smart Filling Shop:

**Table 9.7: Office Equipment**

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Computer	1	60,000	60,000
Printer & Other Accessories	1	30,000	30,000
<b>Total</b>			<b>90,000</b>

## 9.8 Human Resource Requirement

In order to run operations of Mineral Water Smart Filling Shop smoothly, details of human resources required along with number of employees and monthly salary are recommended as under:

**Table 9.8: Human Resource Requirement**

Description	No. of Employees	Monthly Salary per person (Rs.)	Total Monthly Salary (Rs.)	Total Annual Salary (Rs.)
Owner / Manager	01	35,000	35,000	420,000
QC Officer / Production Officer	01	25,000	25,000	300,000
<b>Total</b>	<b>02</b>		<b>60,000</b>	<b>720,000</b>

## 9.9 Utilities and other costs

An essential cost to be borne by the project is the cost of electricity and promotional expense. The direct & indirect electricity expenses are estimated to be around Rs. 23,087 per month and promotional expense being essential for marketing of Mineral Water Smart Filling Shop is estimated as 1.5% of Total Revenue.

## 9.10 Revenue Generation

Based on the capacity utilization of 70% for Purified Mineral Water, sales revenue during the first year of operations is estimated as under:

**Table 9.10: Revenue Generation – Year 1**

Description	No. of Units Sold (Liters)	Sale Price / Liter (Rs.)	Sales Revenue (Rs.)
Mineral Water	1,559,250	2.0	3,118,500

## 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

#### Machinery Supplier -1

<b>Name of Supplier</b>	Mr. Ayaz Khan		
<b>Address</b>	LS.77 Sector 11-I UP More North Karachi, Karachi		
<b>Phone</b>	03000867295	<b>Fax</b>	
<b>E-mail</b>	pkwaterkhan@gmail.com		
<b>Website</b>	www.pkwater.com.pk		

#### Machinery Supplier -2

<b>Name of Supplier</b>	Mr. Fahad		
<b>Address</b>	Shop No.8, Opp. Akbar Sanitary Jam Sadiq Road Gizri, Karachi.		
<b>Phone</b>	0322-2682235	<b>Fax</b>	-
<b>E-mail</b>	socleanwatercare@gmail.com		
<b>Website</b>	www.thewaterfiltershop.com.pk		

#### Machinery Supplier -3

<b>Name of Supplier</b>	Mr. Shafiq Lodhi		
<b>Address</b>	Suite.No.1, 1st Floor, Rana Plaza, Opp.Rasheed Hospital, Main Boulevard, D.H.A , Lahore		
<b>Phone</b>	0300-5070122	<b>Fax</b>	+92-42-36621454
<b>E-mail</b>	Aquaplug786@gmail.com		
<b>Website</b>	www.aquaplug.pk		

## 10.2 Raw Material Suppliers

### Raw Material Supplier -1

<b>Name of Supplier</b>	Trans Pak Pvt. Ltd.		
<b>Address</b>	F-31-A, S.I.T.E, Karachi-75700, Pakistan.		
<b>Phone</b>	021-32576914-15 – 32564190	<b>Fax</b>	021-32564115
<b>E-mail</b>	info@transpakpvt.com		
<b>Website</b>	www.transpakpvt.com		

### Raw Material Supplier -2

<b>Name of Supplier</b>	Mr. Naveed Ahmed		
<b>Address</b>	Shop Number 25, KDA Flats, Shadman Town No. 2, Karachi		
<b>Phone</b>	03332065847	<b>Fax</b>	-
<b>E-mail</b>	-		

### Raw Material Supplier -3

<b>Name of Supplier</b>	Mehran Plastic Industries (Pvt.) Ltd.		
<b>Address</b>	F-226, Near Labour Square, Site Karachi, Pakistan		
<b>Phone</b>	021-32568467	<b>Fax</b>	021-32568468
<b>E-mail</b>	info@mehranplastic.com.pk		
<b>Website</b>	www.mehranplastic.com.pk		



## 11 USEFUL WEB LINKS

<b>Small &amp; Medium Enterprises Development Authority (SMEDA)</b>	<a href="http://www.smeda.org.pk">www.smeda.org.pk</a>
<b>Government of Pakistan</b>	<a href="http://www.pakistan.gov.pk">www.pakistan.gov.pk</a>
<b>Ministry of Industries &amp; Production</b>	<a href="http://www.moip.gov.pk">www.moip.gov.pk</a>
<b>Ministry of Education, Training &amp; Standards in Higher Education</b>	<a href="http://moptt.gov.pk">http://moptt.gov.pk</a>
<b>Government of Punjab</b>	<a href="http://www.punjab.gov.pk">www.punjab.gov.pk</a>
<b>Government of Sindh</b>	<a href="http://www.sindh.gov.pk">www.sindh.gov.pk</a>
<b>Government of Khyber Pakhtunkhwa</b>	<a href="http://www.khyberpakhtunkhwa.gov.pk">www.khyberpakhtunkhwa.gov.pk</a>
<b>Government of Balochistan</b>	<a href="http://www.balochistan.gov.pk">www.balochistan.gov.pk</a>
<b>Government of Gilgit Baltistan</b>	<a href="http://www.gilgitbaltistan.gov.pk">www.gilgitbaltistan.gov.pk</a>
<b>Government of Azad Jamu Kashmir</b>	<a href="http://www.ajk.gov.pk">www.ajk.gov.pk</a>
<b>Trade Development Authority of Pakistan (TDAP)</b>	<a href="http://www.tdap.gov.pk">www.tdap.gov.pk</a>
<b>Security Commission of Pakistan (SECP)</b>	<a href="http://www.secp.gov.pk">www.secp.gov.pk</a>
<b>Federation of Pakistan Chambers of Commerce and Industry (FPCCI)</b>	<a href="http://www.fpcci.com.pk">www.fpcci.com.pk</a>
<b>State Bank of Pakistan (SBP)</b>	<a href="http://www.sbp.org.pk">www.sbp.org.pk</a>
<b>Punjab Small Industries Corporation</b>	<a href="http://www.psic.gop.pk">www.psic.gop.pk</a>
<b>Sindh Small Industries Corporation</b>	<a href="http://www.ssic.gos.pk">www.ssic.gos.pk</a>
<b>Pakistan Horticulture Development and Export Company (PHDEC)</b>	<a href="http://www.phdec.org.pk">www.phdec.org.pk</a>
<b>Punjab Vocational Training Council (PVTC)</b>	<a href="http://www.pvtc.gop.pk">www.pvtc.gop.pk</a>
<b>Technical Education and Vocational Training Authority (TEVTA)</b>	<a href="http://www.tevta.org">www.tevta.org</a>
<b>Pakistan Standards and Quality Control Authority (PSQCA)</b>	<a href="http://www.psqca.com.pk">www.psqca.com.pk</a>
<b>Pakistan Council of Research in Water Resources</b>	<a href="http://www.pcrwr.gov.pk">www.pcrwr.gov.pk</a>

## 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	3,118,500	3,492,720	3,896,566	4,332,064	4,548,667	4,776,101	5,014,906	5,265,651	5,528,934	5,805,380
<i>Cost of sales</i>										
Cost of goods sold 1	746,799	836,415	933,125	1,037,415	1,089,286	1,143,750	1,200,938	1,260,985	1,324,034	1,390,236
Operation costs 1 (direct labor)	300,000	329,208	361,261	396,433	435,031	477,386	523,865	574,869	630,839	692,259
Operating costs 3 (direct electricity)	218,295	240,125	264,137	290,551	319,606	351,566	386,723	425,395	467,935	514,728
Total cost of sales	1,265,094	1,405,747	1,558,523	1,724,400	1,843,923	1,972,703	2,111,526	2,261,249	2,422,808	2,597,223
Gross Profit	1,853,406	2,086,973	2,338,043	2,607,665	2,704,745	2,803,398	2,903,380	3,004,402	3,106,126	3,208,158
	59%	60%	60%	60%	59%	59%	58%	57%	56%	55%
<i>General administration &amp; selling expenses</i>										
Administration expense	420,000	460,892	505,765	555,007	609,043	668,340	733,411	804,817	883,175	969,162
Administration benefits expense	29,400	32,262	35,404	38,850	42,633	46,784	51,339	56,337	61,822	67,841
Building rental expense	360,000	378,000	396,900	416,745	437,582	459,461	482,434	506,556	531,884	558,478
Electricity expense	58,757	64,633	71,096	78,206	86,026	94,629	104,092	114,501	125,951	138,546
Maintenance expense	33,000	35,310	37,782	40,426	43,256	46,284	49,524	52,991	56,700	60,669
Communications expense (phone, fax, mail, internet, etc.)	21,000	23,045	25,288	27,750	30,452	33,417	36,671	40,241	44,159	48,458
Office expenses (stationary, entertainment, janitorial services, etc.)	16,800	18,436	20,231	22,200	24,362	26,734	29,336	32,193	35,327	38,766
Promotional expense	31,185	34,927	38,966	43,321	45,487	47,761	50,149	52,657	55,289	58,054
Insurance expense	26,400	23,760	21,120	18,480	15,840	13,200	10,560	7,920	5,280	2,640
Professional fees (legal, audit, consultants, etc.)	62,370	69,854	77,931	86,641	90,973	95,522	100,298	105,313	110,579	116,108
Depreciation expense	89,750	89,750	89,750	89,750	89,750	89,750	89,750	89,750	89,750	89,750
Amortization of pre-operating costs	26,000	26,000	26,000	26,000	26,000	-	-	-	-	-
Amortization of legal, licensing, and training costs	14,000	14,000	14,000	14,000	14,000	-	-	-	-	-
Bad debt expense	31,185	34,927	38,966	43,321	45,487	47,761	50,149	52,657	55,289	58,054
Miscellaneous expense 1	50,000	52,500	55,125	57,881	60,775	63,814	67,005	70,355	73,873	77,566
Subtotal	1,269,847	1,358,296	1,454,323	1,558,579	1,661,667	1,733,458	1,854,718	1,986,287	2,129,079	2,284,094
Operating Income	583,559	728,676	883,720	1,049,086	1,043,078	1,069,940	1,048,662	1,018,115	977,047	924,064
Earnings Before Tax	583,559	728,676	883,720	1,049,086	1,043,078	1,069,940	1,048,662	1,018,115	977,047	924,064
Tax	116,712	145,735	176,744	209,817	208,616	213,988	209,732	203,623	195,409	184,813
<b>NET PROFIT/(LOSS) AFTER TAX</b>	<b>466,847</b>	<b>582,941</b>	<b>706,976</b>	<b>839,269</b>	<b>834,462</b>	<b>855,952</b>	<b>838,929</b>	<b>814,492</b>	<b>781,638</b>	<b>739,251</b>
Balance brought forward		233,424	408,182	557,579	698,424	766,443	811,198	825,064	819,778	800,708
Total profit available for appropriation	466,847	816,365	1,115,159	1,396,848	1,532,886	1,622,395	1,650,127	1,639,556	1,601,415	1,539,959
Dividend	233,424	408,182	557,579	698,424	766,443	811,198	825,064	819,778	800,708	769,980
Balance carried forward	233,424	408,182	557,579	698,424	766,443	811,198	825,064	819,778	800,708	769,980
	15%	17%	18%	19%	18%	18%	17%	15%	14%	13%

## 12.2 Balance Sheet

Calculations Balance Sheet											SMEDA
Assets	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
<i>Current assets</i>											
Cash & Bank	530,000	886,846	1,184,360	1,455,803	1,722,978	1,917,025	2,047,490	2,146,732	2,226,471	2,292,058	2,351,080
Accounts receivable	-	-	-	-	-	-	-	-	-	-	-
Finished goods inventory	-	-	-	-	-	-	-	-	-	-	-
Equipment spare part inventory	-	-	-	-	-	-	-	-	-	-	-
Raw material inventory	62,233	69,701	77,760	86,451	90,774	95,313	100,078	105,082	110,336	115,853	115,853
Pre-paid annual land lease	-	-	-	-	-	-	-	-	-	-	-
Pre-paid building rent	30,000	31,500	33,075	34,729	36,465	38,288	40,203	42,213	44,324	46,540	46,540
Pre-paid machinery & equipment lease interest	-	-	-	-	-	-	-	-	-	-	-
Pre-paid office equipment lease interest	-	-	-	-	-	-	-	-	-	-	-
Pre-paid office vehicles lease interest	-	-	-	-	-	-	-	-	-	-	-
Pre-paid insurance	26,400	23,760	21,120	18,480	15,840	13,200	10,560	7,920	5,280	2,640	2,640
<b>Total Current Assets</b>	<b>648,633</b>	<b>1,011,807</b>	<b>1,316,316</b>	<b>1,595,463</b>	<b>1,866,057</b>	<b>2,063,826</b>	<b>2,198,331</b>	<b>2,301,947</b>	<b>2,386,411</b>	<b>2,457,091</b>	<b>2,516,113</b>
<i>Fixed assets</i>											
Land	-	-	-	-	-	-	-	-	-	-	-
Building/Infrastructure	225,000	213,750	202,500	191,250	180,000	168,750	157,500	146,250	135,000	123,750	112,500
Machinery & equipment	660,000	594,000	528,000	462,000	396,000	330,000	264,000	198,000	132,000	66,000	-
Bottles	-	-	-	-	-	-	-	-	-	-	-
Furniture & fixtures	35,000	31,500	28,000	24,500	21,000	17,500	14,000	10,500	7,000	3,500	-
Office vehicles	-	-	-	-	-	-	-	-	-	-	-
Office equipment	90,000	81,000	72,000	63,000	54,000	45,000	36,000	27,000	18,000	9,000	-
<b>Total Fixed Assets</b>	<b>1,010,000</b>	<b>920,250</b>	<b>830,500</b>	<b>740,750</b>	<b>651,000</b>	<b>561,250</b>	<b>471,500</b>	<b>381,750</b>	<b>292,000</b>	<b>202,250</b>	<b>112,500</b>
<i>Intangible assets</i>											
Pre-operation costs	130,000	104,000	78,000	52,000	26,000	-	-	-	-	-	-
Legal, licensing, & training costs	70,000	56,000	42,000	28,000	14,000	-	-	-	-	-	-
<b>Total Intangible Assets</b>	<b>200,000</b>	<b>160,000</b>	<b>120,000</b>	<b>80,000</b>	<b>40,000</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>TOTAL ASSETS</b>	<b>1,858,633</b>	<b>2,092,057</b>	<b>2,266,816</b>	<b>2,416,213</b>	<b>2,557,057</b>	<b>2,625,076</b>	<b>2,669,831</b>	<b>2,683,697</b>	<b>2,678,411</b>	<b>2,659,341</b>	<b>2,628,613</b>
<b>Liabilities &amp; Shareholders' Equity</b>											
<i>Current liabilities</i>											
Accounts payable	-	-	-	-	-	-	-	-	-	-	-
Export re-finance facility	-	-	-	-	-	-	-	-	-	-	-
Short term debt	-	-	-	-	-	-	-	-	-	-	-
Other liabilities	-	-	-	-	-	-	-	-	-	-	-
<b>Total Current Liabilities</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<i>Other liabilities</i>											
Machinery & equipment lease payable	-	-	-	-	-	-	-	-	-	-	-
Office equipment lease payable	-	-	-	-	-	-	-	-	-	-	-
Office vehicle lease payable	-	-	-	-	-	-	-	-	-	-	-
Deferred tax	-	-	-	-	-	-	-	-	-	-	-
Long term debt (Project Loan)	-	-	-	-	-	-	-	-	-	-	-
Long term debt (Working Capital Loan)	-	-	-	-	-	-	-	-	-	-	-
<b>Total Long Term Liabilities</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<i>Shareholders' equity</i>											
Paid-up capital	1,858,633	1,858,633	1,858,633	1,858,633	1,858,633	1,858,633	1,858,633	1,858,633	1,858,633	1,858,633	1,858,633
Retained earnings	-	233,424	408,182	557,579	698,424	766,443	811,198	825,064	819,778	800,708	769,980
<b>Total Equity</b>	<b>1,858,633</b>	<b>2,092,057</b>	<b>2,266,816</b>	<b>2,416,213</b>	<b>2,557,057</b>	<b>2,625,076</b>	<b>2,669,831</b>	<b>2,683,697</b>	<b>2,678,411</b>	<b>2,659,341</b>	<b>2,628,613</b>
<b>TOTAL CAPITAL AND LIABILITIES</b>	<b>1,858,633</b>	<b>2,092,057</b>	<b>2,266,816</b>	<b>2,416,213</b>	<b>2,557,057</b>	<b>2,625,076</b>	<b>2,669,831</b>	<b>2,683,697</b>	<b>2,678,411</b>	<b>2,659,341</b>	<b>2,628,613</b>

## 12.3 Cash Flow Statement

Calculations	SMEDA										
Cash Flow Statement											
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
<i>Operating activities</i>											
Net profit		466,847	582,941	706,976	839,269	834,462	855,952	838,929	814,492	781,638	739,251
Add: depreciation expense		89,750	89,750	89,750	89,750	89,750	89,750	89,750	89,750	89,750	89,750
amortization of pre-operating costs		26,000	26,000	26,000	26,000	26,000	-	-	-	-	-
amortization of training costs		14,000	14,000	14,000	14,000	14,000	-	-	-	-	-
Deferred income tax		-	-	-	-	-	-	-	-	-	-
Accounts receivable		-	-	-	-	-	-	-	-	-	-
Finished goods inventory		-	-	-	-	-	-	-	-	-	-
Equipment inventory		-	-	-	-	-	-	-	-	-	-
Raw material inventory	(62,233)	(7,468)	(8,059)	(8,691)	(4,323)	(4,539)	(4,766)	(5,004)	(5,254)	(5,517)	-
Pre-paid building rent	(30,000)	(1,500)	(1,575)	(1,654)	(1,736)	(1,823)	(1,914)	(2,010)	(2,111)	(2,216)	-
Pre-paid machinery & equipment lease interest	-	-	-	-	-	-	-	-	-	-	-
Pre-paid office equipment lease interest	-	-	-	-	-	-	-	-	-	-	-
Pre-paid office vehicles lease interest	-	-	-	-	-	-	-	-	-	-	-
Advance insurance premium	(26,400)	2,640	2,640	2,640	2,640	2,640	2,640	2,640	2,640	2,640	-
Accounts payable	-	-	-	-	-	-	-	-	-	-	-
Other liabilities	-	-	-	-	-	-	-	-	-	-	-
Cash provided by operations	(118,633)	590,269	705,697	829,022	965,600	960,490	941,662	924,305	899,517	866,295	829,001
<i>Financing activities</i>											
Project Loan - principal repayment	-	-	-	-	-	-	-	-	-	-	-
Working Capital Loan - principal repayment	-	-	-	-	-	-	-	-	-	-	-
Add: land lease expense	-	-	-	-	-	-	-	-	-	-	-
Land lease payment	-	-	-	-	-	-	-	-	-	-	-
Machinery & equipment lease principal repayment	-	-	-	-	-	-	-	-	-	-	-
Office equipment lease principal repayment	-	-	-	-	-	-	-	-	-	-	-
Office vehicles lease principal repayment	-	-	-	-	-	-	-	-	-	-	-
Short term debt principal repayment	-	-	-	-	-	-	-	-	-	-	-
Export re-finance principal repayment	-	-	-	-	-	-	-	-	-	-	-
Additions to export refinancing	-	-	-	-	-	-	-	-	-	-	-
Additions to lease financing	-	-	-	-	-	-	-	-	-	-	-
Additions to Project Loan	-	-	-	-	-	-	-	-	-	-	-
Additions to Working Capital Loan	-	-	-	-	-	-	-	-	-	-	-
Issuance of shares	1,858,633	-	-	-	-	-	-	-	-	-	-
Purchase of (treasury) shares	-	-	-	-	-	-	-	-	-	-	-
Cash provided by / (used for) financing activities	1,858,633	-	-	-	-	-	-	-	-	-	-
<i>Investing activities</i>											
Capital expenditure	(1,210,000)	-	-	-	-	-	-	-	-	-	-
Acquisitions	-	-	-	-	-	-	-	-	-	-	-
Cash (used for) / provided by investing activities	(1,210,000)	-	-	-	-	-	-	-	-	-	-
<b>NET CASH</b>	<b>530,000</b>	<b>590,269</b>	<b>705,697</b>	<b>829,022</b>	<b>965,600</b>	<b>960,490</b>	<b>941,662</b>	<b>924,305</b>	<b>899,517</b>	<b>866,295</b>	<b>829,001</b>
Cash balance brought forward		530,000	886,846	1,184,360	1,455,803	1,722,978	1,917,025	2,047,490	2,146,732	2,226,471	2,292,058
Cash available for appropriation	530,000	1,120,269	1,592,543	2,013,382	2,421,402	2,683,468	2,858,688	2,971,795	3,046,249	3,092,766	3,121,059
Dividend		233,424	408,182	557,579	698,424	766,443	811,198	825,064	819,778	800,708	769,980
Cash balance	530,000	886,846	1,184,360	1,455,803	1,722,978	1,917,025	2,047,490	2,146,732	2,226,471	2,292,058	2,351,080
Cash carried forward	530,000	886,846	1,184,360	1,455,803	1,722,978	1,917,025	2,047,490	2,146,732	2,226,471	2,292,058	2,351,080

## 13 KEY ASSUMPTIONS

### 13.1 Operating Cost Assumptions

No. of Working Days in One Year	330
No. of Working Hours in One Day	8

### 13.2 Production Cost Assumptions

Starting Production Capacity Utilization	75%
Maximum Production Capacity Utilization	90%
Production Capacity Mineral Water Per Year (Liters)	2,079,000
Production Capacity Mineral Water Liters Per Day (1Day=8 hours)	6,300
Production of Mineral water Liters Per Year (75% Capacity Utilization)	1,559,250
Production Capacity Utilization Growth Rate / Yr.	5%

### 13.3 Revenue Assumptions

Sale Price of Mineral Water Per Liter	Rs.2.0
Sale Price Growth Rate	5%

### 13.4 Financial Assumptions

Equity	100%
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### 13.5 Expense Assumptions

Description	Cost / Rate
Cost of Goods Sold Growth Rate	5.0%
Operating Costs Growth Rate	7.0%



# Small and Medium Enterprises Development Authority

## HEAD OFFICE

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

[www.smeda.org.pk](http://www.smeda.org.pk), [helpdesk@smeda.org.pk](mailto:helpdesk@smeda.org.pk)

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