



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

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1 DISCLAIMER

This information memorandum is to introduce the subject matter and provide a general idea and information on the said matter. Although, the material included in this document is based on data/information gathered from various reliable sources; however, it is based upon certain assumptions, which may differ from case to case. The information has been provided on as is where is basis without any warranties or assertions as to the correctness or soundness thereof. Although, due care and diligence has been taken to compile this document, the contained information may vary due to any change in any of the concerned factors, and the actual results may differ substantially from the presented information. SMEDA, its employees or agents do not assume any liability for any financial or other loss resulting from this memorandum in consequence of undertaking this activity. The contained information does not preclude any further professional advice. The prospective user of this memorandum is encouraged to carry out additional diligence and gather any information which is necessary for making an informed decision, including taking professional advice from a qualified consultant/technical expert before taking any decision to act upon the information.

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| | |
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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.

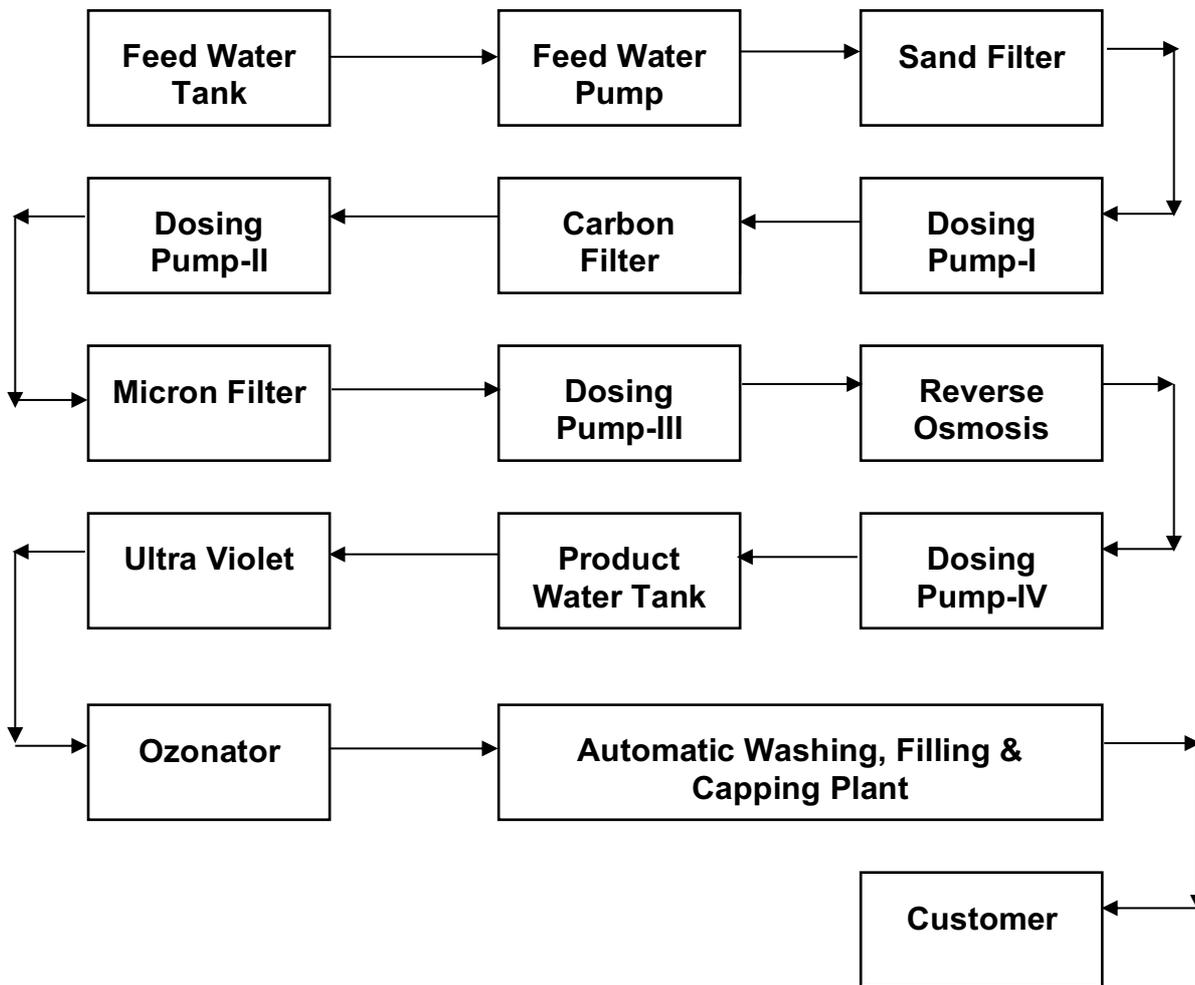
Following key parameters must be addressed as per Pre-feasibility study under preparation:

- **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.) |
|--|------------------|
| Capital Cost | |
| 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 |
| Total Capital Cost | 1,210,000 |
| Working Capital | |
| Raw Material Inventory | 62,233 |
| Up-front building rental | 360,000 |
| Up-front insurance payment | 26,400 |
| Cash | 200,000 |
| Total Working Capital | 648,633 |
| Total Project Cost | 1,858,633 |

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 | |
| Total Machinery Cost | Rs.660,000 |

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 |
| Total | | | 30,000 |

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 |
| Total | | | 90,000 |

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 |
| Total | 02 | | 60,000 | 720,000 |

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

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

Machinery Supplier -2

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

Machinery Supplier -3

| | | | |
|-------------------------|---|------------|-----------------|
| Name of Supplier | Mr. Shafiq Lodhi | | |
| Address | Suite.No.1, 1st Floor, Rana Plaza, Opp.Rasheed Hospital, Main Boulevard, D.H.A , Lahore | | |
| Phone | 0300-5070122 | Fax | +92-42-36621454 |
| E-mail | Aquaplus786@gmail.com | | |
| Website | www.aquaplus.pk | | |

10.2 Raw Material Suppliers

Raw Material Supplier -1

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

Raw Material Supplier -2

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

Raw Material Supplier -3

| | | | |
|-------------------------|---|------------|--------------|
| Name of Supplier | Mehran Plastic Industries (Pvt.) Ltd. | | |
| Address | F-226, Near Labour Square, Site Karachi, Pakistan | | |
| Phone | 021-32568467 | Fax | 021-32568468 |
| E-mail | info@mehranplastic.com.pk | | |
| Website | www.mehranplastic.com.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 |
| Pakistan Horticulture Development and Export Company (PHDEC) | www.phdec.org.pk |
| Punjab Vocational Training Council (PVTTC) | www.pvtc.gop.pk |
| Technical Education and Vocational Training Authority (TEVTA) | www.tevta.org |
| Pakistan Standards and Quality Control Authority (PSQCA) | www.psqca.com.pk |
| Pakistan Council of Research in Water Resources | www.pcrwr.gov.pk |

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 & 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 | |
| NET PROFIT/(LOSS) AFTER TAX | 466,847 | 582,941 | 706,976 | 839,269 | 834,462 | 855,952 | 838,929 | 814,492 | 781,638 | 739,251 | |
| 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 | | | | | | | | | | | 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 | | | | | | | | | | | |
| <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 |
| Total Current Assets | 648,633 | 1,011,807 | 1,316,316 | 1,595,463 | 1,866,057 | 2,063,826 | 2,198,331 | 2,301,947 | 2,386,411 | 2,457,091 | 2,516,113 |
| <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 | - |
| Total Fixed Assets | 1,010,000 | 920,250 | 830,500 | 740,750 | 651,000 | 561,250 | 471,500 | 381,750 | 292,000 | 202,250 | 112,500 |
| <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 | - | - | - | - | - | - |
| Total Intangible Assets | 200,000 | 160,000 | 120,000 | 80,000 | 40,000 | - | - | - | - | - | - |
| TOTAL ASSETS | 1,858,633 | 2,092,057 | 2,266,816 | 2,416,213 | 2,557,057 | 2,625,076 | 2,669,831 | 2,683,697 | 2,678,411 | 2,659,341 | 2,628,613 |
| Liabilities & Shareholders' Equity | | | | | | | | | | | |
| <i>Current liabilities</i> | | | | | | | | | | | |
| Accounts payable | - | - | - | - | - | - | - | - | - | - | - |
| Export re-finance facility | - | - | - | - | - | - | - | - | - | - | - |
| Short term debt | - | - | - | - | - | - | - | - | - | - | - |
| Other liabilities | - | - | - | - | - | - | - | - | - | - | - |
| Total Current Liabilities | - |
| <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) | - | - | - | - | - | - | - | - | - | - | - |
| Total Long Term Liabilities | - |
| <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 |
| Total Equity | 1,858,633 | 2,092,057 | 2,266,816 | 2,416,213 | 2,557,057 | 2,625,076 | 2,669,831 | 2,683,697 | 2,678,411 | 2,659,341 | 2,628,613 |
| TOTAL CAPITAL AND LIABILITIES | 1,858,633 | 2,092,057 | 2,266,816 | 2,416,213 | 2,557,057 | 2,625,076 | 2,669,831 | 2,683,697 | 2,678,411 | 2,659,341 | 2,628,613 |

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 | 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) | - | - | - | - | - | - | - | - | - | - |
| NET CASH | 530,000 | 590,269 | 705,697 | 829,022 | 965,600 | 960,490 | 941,662 | 924,305 | 899,517 | 866,295 | 829,001 |
| 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% |
|--------|------|

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

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