COMMUNITY BASED LIVELIHOODS RECOVERY PROGRAM (CBLRP) FOR EARTHQUAKE AFFECTED AREAS OF AZAD JAMMU AND KASHMIR AND NWFP

CBLRP-UNIDO

INVESTMENT OPPORTUNITY PROFILE FOR MINERAL WATER IN NWFP

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SUBMITTED TO
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1. PROJECT EXECUTIVE SUMMARY

1.1 PROJECT BRIEF

This proposed project presents an investment opportunity for establishing a bottled water plant for providing pure drinking water. The proposed product line will consist of bottles of 1.5 and 0.5 liters. In the initial phase of the project only 0.5 liters and 1.5 liters bottles will be introduced in the local market. After successful introduction of the new brand of bottled water the product line may be extended to 13 and 19 liters cans.

The market for mineral water has been showing a mushroom growth trend over the last few years. The country’s market is very small on a global scale and was estimated at 33 million liters a year by the end of 1992. The last three years have shown more growth and the market have been estimated to grow 70 million liters and the per capita consumption is 0.5 liter. The annual growth rate for bottled water is 40%. According to a study conducted in 2001, Pakistan registered the highest growth of 140% in 2000 amongst the countries in Asia and Middle East region. The potential markets for bottled / mineral water consist of foreign tourists and foreigners working in Pakistan, hotel industry, patients (bottle water is also used to avoid the possible consumption of contaminated water) and travelers. Moreover, the bottled / mineral water has been emerging as a daily preference of the elite class.

The project can bottle 15,000 Gallons of water per day, the size of bottles will be 1.5 Lt and .5 Lt to make the water convenient and attractive to end users. The sale at 100% capacity utilization is Rs 209 Million. The project would be set up in Manshera or Balakot where all the required infrastructure and amenities are available.

1.2 FINANCIAL SUMMARY

- Sales Rs 209 Million per annum
- Gross Profit Margin 30%
- Payback period 2.2 Years
- Net Profit Margin before tax 04%
- Internal Rate of Return 79%

<table>
<thead>
<tr>
<th>Foreign collaboration sought</th>
<th>Management expertise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint – Venture</td>
<td>Technical expertise</td>
</tr>
<tr>
<td>Loan</td>
<td>Marketing expertise</td>
</tr>
<tr>
<td>Market access</td>
<td>Technology transfer</td>
</tr>
<tr>
<td>Sub contracting</td>
<td>Joint R&amp;D</td>
</tr>
<tr>
<td>Buy – back arrangement</td>
<td>Other :-</td>
</tr>
<tr>
<td>Equipment purchase</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Studies Available</th>
<th>Project description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feasibility study</td>
<td></td>
</tr>
<tr>
<td>Other Specify</td>
<td></td>
</tr>
</tbody>
</table>

Date: 25 October 2007
2. **PROJECT RATIONALE**

Manshera and its surrounding areas is a land of many streams of water from glaciers, there is ample opportunity to bottle this water locally and for export. As the awareness of water borne diseases is increasing coupled with modern trends of living the market of bottled mineral water is growing faster than the supply. There is thus the opportunity for investment in this sector. The market for purified bottled / mineral water is a growing market. Usually the top target market for bottled mineral water follows the perception. The stronger the distribution the more successful will be the new brand. While exports are very lucrative there will be implementation of WTO, for open and competitive commodity pricing and tough market competition.

3. **MARKET OPPORTUNITY**

There are around 26 players in the bottled water sector. According to the industry sources, the number of bottlers scales up well above 70 during summer season due to increased demand for drinking water. Pakistan’s bottled water market comprises of two main segments i.e. retail market and bulk market. The retail market consists of 0.5 liter, 1.5 liter, 3.1 liter and 5.0 liter capacity PET bottles. The bulk market consists of home and office delivers in 3 and 5 gallon cans.

![Graph showing market share of various brands](image)

The process of purified bottled water manufacturing consist of collecting water from a suitable source, filtration, demineralization, blending with salts, aeration, testing for standards conformation, bottling and packaging. But today there are more than 26 brands of drinking water available in the market thus showing a substantial growth by the industry.

<table>
<thead>
<tr>
<th>Year</th>
<th>Quantity</th>
<th>Value ('000' Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1992-93</td>
<td>694,249</td>
<td>3,188</td>
</tr>
<tr>
<td>1993-94</td>
<td>814,338</td>
<td>5,384</td>
</tr>
<tr>
<td>1994-95</td>
<td>1,660,951</td>
<td>10,741</td>
</tr>
<tr>
<td>1995-96</td>
<td>2,328,460</td>
<td>12,856</td>
</tr>
</tbody>
</table>

There is no bottler of mineral water in the area

4. **BUSINESS PLAN**

High quality goods to taste bottled water will be processed/produced for the end user. The plant will start its operation from 60% capacity and finally reach 100% capacity by the end of 5 years. There is also anticipated growth of 10% in sale price of the product. As the expertise is developed the product can also be exported.
4.1 PRODUCT SALES

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant Capacity liters per day</td>
<td>15,000 Gallons</td>
</tr>
<tr>
<td>Production per year (liters)</td>
<td>18,711,000</td>
</tr>
<tr>
<td>Ratio of 1.5 liter and 0.5 liter bottle</td>
<td>80:20</td>
</tr>
<tr>
<td>Production of 1.5 liter bottle</td>
<td>9,979,200</td>
</tr>
<tr>
<td>Production of 0.5 liter bottle</td>
<td>7,484,400</td>
</tr>
<tr>
<td>Total annual production</td>
<td>17,463,600</td>
</tr>
<tr>
<td>Sale price of 1.5 liter bottle (Rs.)</td>
<td>15</td>
</tr>
<tr>
<td>Sale price of 0.5 liter bottle (Rs.)</td>
<td>8</td>
</tr>
<tr>
<td>Capacity utilization in first yr</td>
<td>60%</td>
</tr>
<tr>
<td>Sales price growth rates</td>
<td>10%</td>
</tr>
<tr>
<td>Production capacity utilization growth rate</td>
<td>10%</td>
</tr>
<tr>
<td>Maximum Capacity utilization</td>
<td>95%</td>
</tr>
<tr>
<td>Sales 100% capacity</td>
<td>209,563,200</td>
</tr>
</tbody>
</table>

4.2 RAW MATERIALS

There are many sources of natural water from spring or ground water in Mansehra, the project shall be located at site where require water is available.

4.3 PRODUCTION PROCESS

The first step for setting up a water purification plant is the analysis of source of water. After the chemical analysis, the specifications of the purification plant are set. In the purification plant, source water is stored in the feed water tank, passes through the sand filter for preliminary water filtration.

Water then passes through the dosing pump-I where chlorine is added to kill the germs in the water. After the chlorination, water passes through carbon filter. It helps in the maintenance of proper odor and taste of the water. It also removes chlorine from water. Water is then passes from dosing pump-II, where Sodium Meta Bisulphate is added. It helps in dechlorination of water.

Water is filtered next and passes through dosing pump-III, where anti scallant is added. It prevents scaling of membrane from calcium, magnesium and biological growth. Water then passes through reverse osmosis module. This stage of the process makes water clear from all the contaminations and minute particles. Water then 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 micro organisms. Water then passes through automatic washing, filling and capping plant. Here water is filled into bottles. After filling bottles are taken into the warehouse or shipped to the retailers. The complete process flow diagram is as under.
4.4 DISTRIBUTION CHANNELS

Branding and marketing of bottled water is as essential as water for the survival of the human body. The traditional marketing tools include site advertisement, TV and print media advertising and brochures. This study allocates 10% of the revenue for advertising and promotional purposes. Apart from the traditional marketing tools, this study suggests to focus more on other marketing magnets that include interactive marketing, interactive marketing may include educating the general public about the importance of water and its daily consumption requirements for human body through the participation in seminars and in general public gatherings (e.g. College and University gatherings). One of the marketing options is to sponsor public events like cricket matches or hospital campaigns, distributing free brochures about water and its daily consumption, water requirements in different age brackets. The interactive marketing may be designed through seminars and workshops about the daily human consumption requirements and diseases originating from the lack of pure water. Overall marketing strategy may change with the change of target market. A market research study is recommended to design the different dynamics of marketing before launching the new brand.

Marketing expense has been included in the total project cost and it has been estimated around Rs. 5 million. The entrepreneur may decide to increase or decrease the amount of marketing expense depending upon this choice of promotion activities and type of media used. Following table gives the breakup of the marketing expense.

<table>
<thead>
<tr>
<th></th>
<th>In %age of the marketing expense</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV Advertisement</td>
<td>40%</td>
</tr>
<tr>
<td>SITE Advertisement</td>
<td>10%</td>
</tr>
<tr>
<td>Newspapers</td>
<td>38%</td>
</tr>
<tr>
<td>Magazines</td>
<td>4%</td>
</tr>
<tr>
<td>Point of Sales Marketing</td>
<td>8%</td>
</tr>
</tbody>
</table>

Distribution is very important for the success of the new brand. The stronger the distribution the more successful will be the new brand. The distribution strategy should be designed after a careful study of the market for going for regional distribution or for nation wide distribution.
4.5 HUMAN RESOURCE REQUIREMENT

The following requirement of staff along with their levels and monthly salary is foreseen for this project.

<table>
<thead>
<tr>
<th>Designation</th>
<th>No. of Staff</th>
<th>Monthly Salary</th>
<th>Annual Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>CEO</td>
<td>1</td>
<td>50,000</td>
<td>600,000</td>
</tr>
<tr>
<td>Admin &amp; Accounts Manager</td>
<td>1</td>
<td>30,000</td>
<td>360,000</td>
</tr>
<tr>
<td>Area Sales Manager</td>
<td>1</td>
<td>40,000</td>
<td>480,000</td>
</tr>
<tr>
<td>Sales Supervisor</td>
<td>2</td>
<td>30,000</td>
<td>360,000</td>
</tr>
<tr>
<td>Sales Rep</td>
<td>25</td>
<td>10,000</td>
<td>300,000</td>
</tr>
<tr>
<td>Driver</td>
<td>2</td>
<td>20,000</td>
<td>240,000</td>
</tr>
<tr>
<td>Washer</td>
<td>1</td>
<td>9,000</td>
<td>108,000</td>
</tr>
<tr>
<td>Filler</td>
<td>2</td>
<td>15,000</td>
<td>180,000</td>
</tr>
<tr>
<td>Loader</td>
<td>2</td>
<td>15,000</td>
<td>180,000</td>
</tr>
<tr>
<td>Plant Helper</td>
<td>1</td>
<td>8,000</td>
<td>96,000</td>
</tr>
<tr>
<td>Packing Supervisor</td>
<td>1</td>
<td>8,000</td>
<td>96,000</td>
</tr>
<tr>
<td>Marketing Manager</td>
<td>1</td>
<td>30,000</td>
<td>360,000</td>
</tr>
<tr>
<td>Marketing Officer</td>
<td>1</td>
<td>15,000</td>
<td>180,000</td>
</tr>
<tr>
<td>Watchman</td>
<td>1</td>
<td>5,000</td>
<td>60,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>42</strong></td>
<td><strong>6,300,000</strong></td>
<td></td>
</tr>
</tbody>
</table>

5.0 PROJECT FINANCIALS

OPERATIONAL DATA

The plant will be operated in the first year at 60% capacity and as the expertise develops the 100% pant capacity will be attained by the end of fifth year.

FIXED COST

The fixed cost is expected to be Rs 12.7 Million as described below.

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost (Rs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land</td>
<td>1,230,000</td>
</tr>
<tr>
<td>Building / Infrastructure</td>
<td>1,057,500</td>
</tr>
<tr>
<td>Machinery &amp; Equipment</td>
<td>6,240,000</td>
</tr>
<tr>
<td>Furniture &amp; Fixture</td>
<td>108,500</td>
</tr>
<tr>
<td>Office Vehicles</td>
<td>2,056,360</td>
</tr>
<tr>
<td>Office Equipment</td>
<td>202,500</td>
</tr>
<tr>
<td>Pre-operating Cost</td>
<td>1,816,268</td>
</tr>
<tr>
<td><strong>Total Capital Costs</strong></td>
<td><strong>12,711,128</strong></td>
</tr>
</tbody>
</table>

WORKING CAPITAL

The investment in the initial working capital is of Rs 3,580,000
## OVERHEAD COSTS

In the first year following overhead cost are estimated.

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration Expenses</td>
<td>12,854,400</td>
</tr>
<tr>
<td>Utility expenses</td>
<td>428,292</td>
</tr>
<tr>
<td>Traveling</td>
<td>624,000</td>
</tr>
<tr>
<td>Office Vehicle and running</td>
<td>102,800</td>
</tr>
<tr>
<td>Office stationary</td>
<td>124,800</td>
</tr>
<tr>
<td>Promotional expenses</td>
<td>12,049,884</td>
</tr>
<tr>
<td>Insurance expenses</td>
<td>186,491</td>
</tr>
<tr>
<td>Depreciation</td>
<td>1,119,697</td>
</tr>
<tr>
<td>Amortization expenses</td>
<td>363,254</td>
</tr>
<tr>
<td>Miscellaneous expenses</td>
<td>3,614,965</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>31,468,583</strong></td>
</tr>
</tbody>
</table>