"KVIC- REGP-(Gramodyog Rojgar Yojana)"

Project Profile on Tomato Products

Introduction
Tomato, though botanically a fruit for the purpose of trade, is generally considered a vegetable because of the way in which it is consumed. Tomatoes are widely grown in all parts of the world. However, the yield per hectare is the highest (245 tonnes/hect.) in Netherlands. The world average yield of tomato is 23 tonnes per hectare. Indian average yield of tomato is 9.6 tonnes per hectare. Tomato products such as puree, juice, ketchup are commonly used commodities in households, hotels are restaurants. These items are used to enhance the taste of different food products. Tomato puree is used as a substitute of fresh tomato in cooking. Ketchup is a sweeter and diluted version of puree (Pulp).

Process of Manufacture: Special varieties of tomatoes like scarlet globe, early red bonny best, pondrosa, seoux, pasaruby, marglobe, etc. are suitable for preparation of processed products of tomato. Tomato juice. Fully ripe will developed colour tomatoes are washed, trimmed, steamed, crushed in a crusher or cut into pieces with knives. The crushed pieces are heated in the steam jacketed kettle till they become quite soft. The heated tomatoes are passed through the pulping machien using a fine mesh sieve to separate juice from seeds and the skin. The sugar and salt @ 1% is added and heated to 85-90° C. The hot juice is then filled in bottles, sealted immediately and processed sterilised in boiling water for about 30 minutes and cooled. Tomato Puree- The juice obtained as above is concentrated under cacuum to about 9% to 12% total solids so as to get tomato puree. The product is filled in bottles, crown corked and processed in boiling water for 30 min. and cooled. Tomato Ketchup - The juice obtained as above is concentrated with spices, salt, sugar etc. The spices like cloves, cardamom, pepper, cinnamon and other ingredients etc. are tied loosely in a muslin cloth and placed in boiling juice in steam jacketted Kettle. The sugar, salt and vinegar or acetic etc. are added later on. Generally, concentration is done three fold. It is concentrated to 28% to 30% solids in which 12% are tomato solids. The final product could be preserved by addition of sodium benzoate @ 750 ppm. The tomato ketchup is filled hot into clean, dry bottles, crown corked and processed in boiling water for 30 minutes and cooled at room temperature.

1. Name of the Product: Tomato Product such as Tomato puri, Ketchup, Juice

2. Project Cost:
   a. Capital Expenditure
      - Land: 100,000.00 Own
      - Workshop in sq. fmrts: 150 On rent Rs. 36,000.00
      - Equipment: Rs. 650,000.00
      - Steam boiler 150 kg/hr-1, Washing machine-1, S.S. tilting type steam jacketed kettle of cap. 10 HP motor-1, S.S. tilting type steam jacketed kettle of cap. 100 gallons-1, S.S. tilting type steam jacketed vacuum kettle of cap. 100 gallons-1, Pulper cap. 1/2 ton per hr. with 3 HP Motor-1, Exhaust and processing tank-1, Pasteuriser tank-1, Bottle washing tank-1.
      - Total Capital Expenditure: Rs. 686,000.00
   b. Working Capital: Rs. 410,000.00
   c. TOTAL PROJECT COST: Rs. 1,096,000.00

3. Estimated Annual Production Capacity:

<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>Particulars</th>
<th>Capacity in Kgs</th>
<th>Rate</th>
<th>Total Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Tomato Juice, Pure, Ketchup</td>
<td>108000.00</td>
<td>0.00</td>
<td>2459.04</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>108000.00</td>
<td>0.00</td>
<td>2459.04</td>
</tr>
</tbody>
</table>

4. Raw Material: Rs. 1,005,000.00

5. Labels and Packing Material: Rs. 400,000.00

6. Wages (4-Skilled & 4-Unskilled): Rs. 575,000.00

7. Salaries MANAGER-1: Rs. 120,000.00
8 Administrative Expenses : Rs. 65,000.00
9 Overheads : Rs. 100,000.00
10 Miscellaneous Expenses : Rs. 45,000.00
11 Depreciation : Rs. 66,800.00
12 Insurance : Rs. 6,860.00
13 Interest (As per the PLR)
   a. C.E.Loan : Rs. 89,180.00
   b. W.C.Loan : Rs. 53,300.00
Total Interest Rs. 142,480.00
14 Working Capital Requirement :
   Fixed Cost Rs. 326,040.00
   Variable Cost Rs. 2,133,300.00
   Requirement of WC per Cycle Rs. 409,890.00

15 Cost Analysis

<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>Particulars</th>
<th>Capacity Utilization(Rs in '000)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>1</td>
<td>Fixed Cost</td>
<td>326.04</td>
</tr>
<tr>
<td>2</td>
<td>Variable Cost</td>
<td>2133.00</td>
</tr>
<tr>
<td>3</td>
<td>Cost of Production</td>
<td>2459.04</td>
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<tr>
<td>4</td>
<td>Projected Sales</td>
<td>3000.00</td>
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<tr>
<td>5</td>
<td>Gross Surplus</td>
<td>540.96</td>
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<tr>
<td>6</td>
<td>Expected Net Surplus</td>
<td>474.00</td>
</tr>
</tbody>
</table>

Note: 1. All figures mentioned above are only indicative.
2. If the investment on Building is replaced by Rental then
   a. Total Cost of Project will be reduced.
   b. Profitability will be increased.
   c. Interest on C.E.will be reduced.