### **PROJECT REPORT**

Of

## **YOGURT PLANT**

#### **PURPOSE OF THE DOCUMENT**

This particular pre-feasibility is regarding Yogurt Plant Unit.

The objective of the pre-feasibility report is primarily to facilitate potential entrepreneurs in project identification for investment and in order to serve his objective; the document covers various aspects of the project concept development, start-up, marketing, finance and management.

[We can modify the project capacity and project cost as per your requirement. We can also prepare project report on any subject as per your requirement.]



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#### YOGURT PLANT

#### **INTRODUCTION**

India has been the leading producer and consumer of dairy products worldwide since 1998 with a sustained growth in the availability of milk and milk products. Dairy activities form an essential part of the rural Indian economy, serving as an important source of employment and income. India also has the largest bovine population in the world. However, the milk production per animal is significantly low as compared to the other major dairy producers.

Products produced from milk is Known as Dairy Products. They are rich sources of energy. Raw milk for processing generally comes from cows, but occasionally from other mammals such as goats, sheep, and water buffalo. Water is the main constituent of milk (about 90%).

#### **Yogurt**

Yogurt also spelled yoghurt, yogourt or yoghourt, is a food produced by bacterial fermentation of milk. The bacteria used to make yogurt are known as yogurt cultures. The fermentation of lactose by these bacteria which produces lactic acid, acts on milk protein to give its texture and characteristic tart flavour. Cow's milk is commonly available worldwide and, as such, is the milk most commonly used to make yogurt. Milk from water buffalo, goats, ewes, mares, camels, and yaks is also used to produce yogurt where available locally. The milk used be homogenized or not, even pasteurized or raw. Each type of milk produces substantially different results.

To produce yogurt, milk is first heated, usually to about 85 °C (185 °F), to denature the milk proteins so that they do not form curds. After heating, the milk is allowed to cool to about 45 °C (113 °F)

### **Health Benefits of Yogurt**

#### **Good for bones**

A bowl of yogurt is said to have 300 grams of calcium. So if you are worried about your debilitating bone health, it's always good to add yogurt to your diet. It will not only maintain your bone density but also strengthen them. For the elderly who are at risk of osteoporosis, a cup of yogurt daily after lunch is a healthy option.

#### Aids weight loss

A recent study that was conducted on people consuming yogurt proved that if you replace an unhealthy snack in a day with yogurt, it will help you cut down calories. This also helps burn belly fat.

#### **Faster workout recovery**

Among all varieties of yogurt, Greek yogurt is considered to be the healthiest. It has the perfect ratio of protein and carbohydrate and is a brilliant post workout snack. If you have a bowl of Greek yogurt within 60 minutes of your workout, it releases amino acids that help repair muscles. Tip: Have a glass of water with your yogurt and it improves the absorption of water by intestines - thereby enhancing your hydration.

## **Controls blood pressure**

Salt is the main culprit behind high blood pressure and if not monitored high BP can lead to serious health complications such as hypertension and kidney disease. The potassium present in yogurt helps eradicate excess of sodium from our bodies.

### **Builds immunity**

The probiotics present in yogurt works on building your immunity and lowers your chances of contracting various illnesses. Probiotics have long been proven to work on strengthening gut health.

Yogurt also had zinc and other minerals that are absolutely essential for good health.

### Yogurt market potential

India Yogurt Market is projected to witness robust growth at a CAGR of over 20% by 2023, due to easy availability of raw materials like milk and starter culture due to flourishing dairy industry in the country. 'Dahi' or 'Curd' has been consumed in India since ages, whereas Yogurt is a relatively newer term in the Indian Market. Yogurt is considered beneficial for gut as well as digestive health due to the presence of pre-biotic bacteria and thus possess plethora of health benefits. Growing awareness of the health benefits associated with the consumption of yogurt has led to increasing popularity of yogurts such as frozen yogurt among kids as well as youngsters which will ensure robust growth of the market during the forecast period. Moreover, the growing preference of flavoured yogurts as desserts over sugary sweets or ice-creams is expected to drive the growth of the India Yogurt market in the next five years. Further, factors such as rising disposable incomes, growing awareness of lifestyle diseases, introduction of newer products in the market by manufacturers and presence of national as well as international players that are focusing on innovation is anticipated to propel the growth of India Yogurt Market by 2023. Based on the type, the regular yogurt leads the market, owing to high use of regular yogurts. Based on the distribution channel, the supermarkets/hypermarkets segment holds the largest market share due to easy availability, a huge variety and discounted prices.

## **Analysis about Yogurt Processing Plant**

Process of yogurt processing plant is depends upon the following aspects.

Per day capacity of the plant. For example: 500 liter/day, 1000 liter/day, 2000 litre/ day etc.

- Availability of milk in a particular area.
- Potential buyer of the final product & their demand.

## **Yogurt Manufacturing Process**

### **Step1: Procurement**

Procurement of raw milk.

### Step 2: Milk Reception Area

After procurement step bring the milk to the milk reception &cool the milk, so that life span of the milk can be increased & it can be used for further processing.

#### **Step 3: Pasteurization**

After that the main processing of by product starts &put the cooled milk into the inoculation tank and boil the milk at 80oC - 90oC (depends upon the pasteurization). Then again cool it at 4oC.

Pasteurization machines are of two types:

- 1. Slow online pasteurization
- 2. Continuous online pasteurization

## **Step 4: Homogenization**

- We used Offline cream separator with pasteurization machine this helps to remove fat from milk and used for the production of the milk.
- Online homogenizer is attached with the pasteurization machine. This breaks the fat part and mixed in the milk.
- It is used for manufacturing of curd.

### Step 5: Distribution of pasteurized milk in different tanks

After that milk is transferred into different sections like pouch milk, curd processing, paneer processing.

## **Curd/yogurt**

Milk is boiled at 92oC and then we thermize it & add culture into that.

#### Step 6: Packaging

After that prepared yogurt is sent to packaging section & then taken into the incubation room to make it thick in form. Then we take curd to the Blast room where the temperature is decreased from 45°C to 20°C.

#### Step 7: Cold room

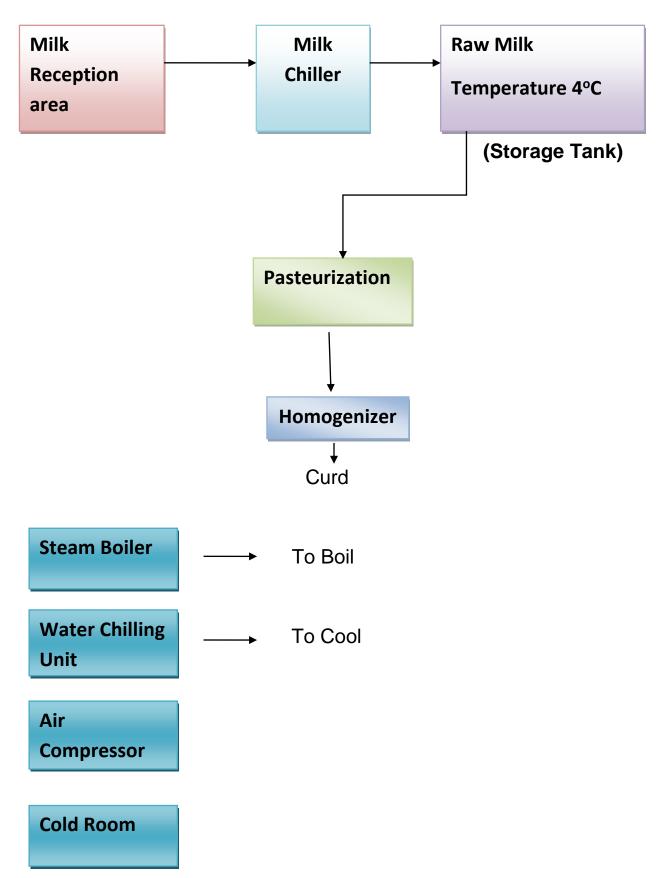
Then the product are transferred into cold rooms where the temperature is below 4°C

#### **Step 8: Distribution**

After that yogurt is transferred through transportation into different areas.

Insulation vehicle is required if the final product is transported above 40 – 50 KM.

## **Yogurt Processing Technical Process**



# **Machinery Required**

| S.N. | Particulars  | Quantity | Value     |
|------|--|----------|-----------|
| 1    | Batch Pasteurization- 300L   | 1        | 175000    |
| 2    | SS Pump 500 lph  | 1        | 30000     |
| 3    | Offline cream separator with balance tank and ss pump                  | 1        | 150000    |
| 4    | Milk Homogenizer - 300 lph   | 1        | 225000    |
| 5    | Milk Chiller - 600 lph   | 1        | 75000     |
| 6    | Sealing & Filling Machine for yogurt cup                               | 1        | 150000    |
| 7    | Cooling tower & water pump   | 1        | 200000    |
| 8    | SS and MS interconnecting pipeline to connect                          | 1        | 125000    |
| 9    | Air compressor and pipeline  | 1        | 40000     |
| 10   | Powder coated electrical Panel   | 1        | 125000    |
| 11   | Skid to mount all the above equipments made from rectangular ss pipes. | 1        | 50000     |
| 12   | Incubation room heater system  | 1        | 200000    |
| 13   | Insulation cold room   | 1        | 475000    |
|      | Sub Total  |          | 20,20,000 |
|      | GST @18%   |          | 3,63,600  |
|      | Total  |          | 23,83,600 |

# **Equipment's required**

| S.N. | Particulars                    | Quantity | Value  |
|------|--------------------------------|----------|--------|
| 1    | Milk Analyzer Ultra            | 2        | 50,000 |
| 2    | DPU                            | 2        | 30,000 |
| 3    | Stirrer                        | 5        | 5,000  |
| 4    | E.W.S. (weighing scale) 100 Kg | 2        | 10,000 |
|      | Total (inclusive of GST @18%)  | 100      | 95,000 |

# **Manpower Requirement**

| S.N. | Designation            | Number |
|------|------------------------|--------|
| 1    | Plant manager          | 1      |
| 2    | Plant Operator         | 1      |
| 3    | Collection Executive   | 1      |
| 4    | Processing Supervisors | 1      |
| 5    | Mechanic               | 1      |
| 6    | Driver                 | 1      |
| 7    | Watchmen               | 1      |
| 8    | Staff & Administration | 1      |
| 9    | Lab technician         | 1      |
| 10   | Daily Labour           | 4      |
|      | Total                  | 13     |

## **Yogurt Plant License & Registration**

### For proprietor

- Obtain the GST registration.
- FSSAI Registration.
- Additionally, apply for Udyog Aadhar registration.
- Choice of a Brand Name of the product and secure the name with Trademark if required.

## **Implementation Schedule**

| S.N. | Activity   | Time Required (in Months) |  |
|------|--|---------------------------|--|
| 1    | Registration& statutory Licensing                            | 2 Months                  |  |
| 2    | Order to Machine, Raw material & recruitment                 | 1-2 Months                |  |
| 3    | Training & market survey                                     | 1 month                   |  |
| 4    | Commissioning & commercial production                        | 1 month                   |  |
| 5    | Arrangement of Finance                                       | 1 month                   |  |
|      | Total time Required (some activities may run simultaneously) | 2-3 months<br>(approx.)   |  |

| _  | PROJECT AT A GLANCE                     | _ | _             |     | _                         | _        |
|----|---|---|---------------|-----|---------------------------|----------|
| _  |   |   |               |     |                           | _        |
| 1  | Name of the Entreprenuer                |   | XX            |     |                           |          |
|    | Constitution (legal Status)             |   |               |     |                           |          |
| 3  | :<br>Eather's /Spause's Name            | • | XX            |     |                           |          |
| 4  | Father's/Spouce's Name Unit Address :   |   | XX            |     |                           |          |
| •  | Offic Address .                         |   | Taluk/Block:  |     | хх                        |          |
|    |   |   | District :    |     | XX                        |          |
|    |   |   | Pin:          |     |                           |          |
|    |   |   | E-Mail        | :   | xx                        |          |
|    |   |   | Mobile        |     | xx                        |          |
| 5  | Product and By Product                  | : | Yogurt        |     |                           |          |
|    | Name of the project / business          |   |               |     |                           |          |
| 6  | activity proposed :                     |   |               |     |                           |          |
| 7  | Cost of Project                         | : |               | Rs. | 31.79                     |          |
| 8  | Means of Finance                        |   |               |     |                           |          |
|    | Term Loan                               |   |               | Rs. | 28.61                     | Lac<br>s |
|    | KVIC Margin Money                       |   |               | Rs. |                           | _        |
|    |   |   |               | _   |                           | Lac      |
|    | Own Capital Debt Service Coverage Ratio |   |               | Rs. | 3.68                      | S        |
| 9  | Debt Service Coverage Ratio             | : |               |     | _                         |          |
| 10 | Pay Back Period                         |   |               |     | 5 years 4 month           |          |
| 11 | Project Implementation Period           | : |               |     | 6 months                  |          |
| 12 | Employment                              | : |               |     | o monens                  |          |
|    | F - 7                                   |   |               |     | 30 KW                     |          |
| 13 | Power Requirement                       | : |               |     | connection                |          |
| 14 | Major Raw materials                     | : |               |     | Milk                      | · E00/   |
| 15 | Estimated Annual Sales Turnover         |   |               |     | 147.50 Lacs (at capacity) | . 50%    |
|    | Detailed Cost of Project & Means of     | • |               |     |                           |          |
| 16 | Finance                                 |   |               |     |                           |          |
|    | COST OF PROJECT                         |   | (Rs. In Lacs) |     |                           | 7        |
|    |   |   | Particula     | rs  | Amount                    | -        |
|    |   |   | Land          |     |                           |          |
|    |   |   | Building & Ci | VII |                           |          |

| Work                                   | 5.00          |
|--|---------------|
| Plant & Machinery Furniture & Fixtures | 24.79<br>2.00 |
| Pre-operative Expe                     | nses          |
| Contingencies Working Capital          | E 00          |
| Requirement                            | 5.00          |
| Total                                  | 36.79         |

#### **MEANS OF FINANCE**

| Particulars      | Amount |
|------------------|--------|
| Own Contribution | 3.68   |
| Bank Finance     | 28.61  |
| working capital  |        |
| from bank        | 4.50   |
|                  |        |
| Total            | 36.79  |

#### FINANCIAL ASSISTANCE REQUIRED

Term Loan of Rs. 17.65 Lacs and Working Capital limit of Rs. 4.5 Lacs

| COST OF PROJECT | PARTICULARS                           | AMOUNT | AMOUNT | AMOUNT |
|-----------------|---------------------------------------|--------|--------|--------|
|                 |                                       |        | 10.00% | 90.00% |
|                 | Building Civil Work                   | 5.00   | 0.50   | 4.50   |
|                 | Plant & Machinery                     | 24.79  | 2.48   | 22.31  |
|                 | Furniture & Fixtures and Other Assets | 2.00   | 0.20   | 1.80   |
|                 | Working capital                       | 5.00   | 0.50   | 4.50   |
|                 | Total                                 | 36 79  | 3 68   | 33 11  |

| MEANS OF FINANCE | PARTICULARS           | AMOUNT |
|------------------|-----------------------|--------|
|                  | Own Contribution      | 3.68   |
|                  | Bank Loan             | 28.61  |
|                  | Working capital Limit | 4.50   |
|                  | Total                 | 36.79  |

| COMPUTATION OF PRODUCTION OF YOGURT |         |       |  |
|-------------------------------------|---------|-------|--|
| Items to be Manufactured            |         |       |  |
| Yogurt                              |         |       |  |
| Machine capacity per Hour           | 25      | 0KG   |  |
| machine capacity per day            | 200     | 00 KG |  |
| machine capacity per annum          | 60000   | 00 KG |  |
| Raw Material Requirement            |         |       |  |
| Milk                                | 600,000 | Liter |  |

| Production of Yogurt |          |         |  |  |
|----------------------|----------|---------|--|--|
| Production           | Capacity | KG      |  |  |
| 1st year             | 50%      | 300,000 |  |  |
| 2nd year             | 55%      | 330,000 |  |  |
| 3rd year             | 60%      | 360,000 |  |  |
| 4th year             | 65%      | 390,000 |  |  |
| 5th year             | 70%      | 420,000 |  |  |

| Raw Material Cost |             |       |               |  |
|-------------------|-------------|-------|---------------|--|
| Year              | Capacity    | KG    | Amount        |  |
|                   | Utilisation |       | (Rs. in lacs) |  |
| 1st year          | 50%         | 38.00 | 114.00        |  |
| 2nd year          | 55%         | 38.50 | 127.05        |  |
| 3rd year          | 60%         | 39.00 | 140.40        |  |
| 4th year          | 65%         | 39.50 | 154.05        |  |
| 5th year          | 70%         | 40.00 | 168.00        |  |

| Packaging Cl    | harges  |      |               |
|-----------------|---------|------|---------------|
| Raw<br>Material | KG      |      | Amount        |
|                 |         | Rate | (Rs. in lacs) |
| 1st year        | 300,000 | 1.00 | 3.00          |
| 2nd year        | 330,000 | 1.10 | 3.63          |
| 3rd year        | 360,000 | 1.20 | 4.32          |
| 4th year        | 390,000 | 1.30 | 5.07          |
| 5th year        | 420,000 | 1.40 | 5.88          |

| COMPUTATION OF SALE  |          |          |          |          |          |  |  |
|----------------------|----------|----------|----------|----------|----------|--|--|
| Particulars          | 1st year | 2nd year | 3rd year | 4th year | 5th year |  |  |
| Op Stock             | -        | 5,000    | 5,500    | 6,000    | 6,500    |  |  |
| Production           | 300,000  | 330,000  | 360,000  | 390,000  | 420,000  |  |  |
| Less : Closing Stock | 5,000    | 5,500    | 6,000    | 6,500    | 7,000    |  |  |
| Net Sale             | 295,000  | 329,500  | 359,500  | 389,500  | 419,500  |  |  |
| sale price per KG    | 50.00    | 50.50    | 51.00    | 51.50    | 52.00    |  |  |
| Sales (in Lacs)      | 147.50   | 166.40   | 183.35   | 200.59   | 218.14   |  |  |

| Particulars                | Wages per<br>month | No of<br>employees | Total salary |
|----------------------------|--------------------|--------------------|--------------|
| Daily Labour               | 8000               | 4                  | 32000        |
| Plant Operator             | 18000              | 1                  | 18000        |
| Mechanic                   | 11000              | 1                  | 11000        |
| Driver                     | 10000              | 1                  | 10000        |
| Watchmen                   | 8000               | 1                  | 8000         |
| Lab technician             | 12000              | 1                  | 12000        |
| Total salary per month     |                    | 9                  | 91000        |
| Salary Per Annum (in Lacs) |                    |                    | 10.92        |

| Particulars            | Salary    | No of     | Total  |
|------------------------|-----------|-----------|--------|
|                        | Per Month | Employees | Salary |
| staff & Administartion | 14000     | 1         | 14000  |
| Total Salary Per Month |           | 1         | 14000  |
| Total Annual Salary    | (in Lacs) |           | 1.6    |

| Utility Charges at 100% capacity (per month) |       |       |  |  |  |  |  |
|--|-------|-------|--|--|--|--|--|
| Particulars value Description                |       |       |  |  |  |  |  |
| Power connection required                    | 30    | KWH   |  |  |  |  |  |
| consumption per day                          | 240   | units |  |  |  |  |  |
| Consumption per month                        | 6000  | units |  |  |  |  |  |
| Rate per Unit                                | 7     | Rs.   |  |  |  |  |  |
| power Bill per month                         | 42000 | Rs.   |  |  |  |  |  |

| PROJECTED PROFITABILITY     | STATEMENT | -        | -        |          | i        |
|-----------------------------|-----------|----------|----------|----------|----------|
|                             |           |          |          |          |          |
| PARTICULARS                 | 1st year  | 2nd year | 3rd year | 4th year | 5th year |
| Capacity Utilisation %      | 50%       | 55%      | 60%      | 65%      | 70%      |
| SALES                       |           |          |          |          |          |
| Gross Sale                  |           |          |          |          |          |
| Yogurt                      | 147.50    | 166.40   | 183.35   | 200.59   | 218.14   |
|                             |           |          |          |          |          |
| Total                       | 147.50    | 166.40   | 183.35   | 200.59   | 218.14   |
| COST OF SALES               |           |          |          |          |          |
| Raw Mateiral Consumed       | 114.00    | 127.05   | 140.40   | 154.05   | 168.00   |
| Elecricity Expenses         | 5.04      | 5.54     | 6.10     | 6.71     | 7.38     |
| Depriciation                | 4.42      | 3.79     | 3.25     | 2.79     | 2.40     |
| Consumables                 | 0.15      | 0.17     | 0.18     | 0.20     | 0.22     |
| Repair & maintennace        | 0.30      | 0.33     | 0.37     | 0.40     | 0.44     |
| Packing charges             | 3.00      | 3.63     | 4.32     | 5.07     | 5.88     |
| Labour                      | 10.92     | 12.01    | 13.21    | 14.53    | 15.99    |
|                             |           |          |          |          |          |
| Cost of Production          | 137.82    | 152.53   | 167.84   | 183.76   | 200.30   |
| Add: Opening Stock /WIP     | -         | 2.30     | 2.54     | 2.80     | 3.06     |
| Less: Closing Stock /WIP    | 2.30      | 2.54     | 2.80     | 3.06     | 3.34     |
| Cost of Sales               | 135.52    | 152.28   | 167.58   | 183.49   | 200.03   |
| GROSS PROFIT                | 11.98     | 14.12    | 15.76    | 17.10    | 18.11    |
| salary to staff             | 1.68      | 1.85     | 2.03     | 2.24     | 2.35     |
| Interest on Term Loan       | 2.82      | 2.51     | 1.85     | 1.19     | 0.46     |
| Interest on working Capital | 0.50      | 0.50     | 0.50     | 0.50     | 0.50     |
| 1                           |           |          |          |          |          |

| Selling & adm Exp  | 1.48 | 1.66 | 1.83 | 2.21  | 2.18  |
|--------------------|------|------|------|-------|-------|
| TOTAL              | 6.47 | 6.52 | 6.22 | 6.13  | 5.49  |
| NET PROFIT         | 5.51 | 7.59 | 9.55 | 10.97 | 12.62 |
| Taxation           | 0.11 | 0.54 | 0.95 | 1.86  | 2.38  |
| PROFIT (After Tax) | 5.40 | 7.06 | 8.60 | 9.11  | 10.25 |

| PROJECTED | <u> BALANCE SHEET</u> |
|-----------|-----------------------|
|           |                       |
|           |                       |

| PARTICULARS             | 1st year | 2nd year | 3rd year | 4th year | 5th year |
|-------------------------|----------|----------|----------|----------|----------|
| <u>Liabilities</u>      |          |          |          |          |          |
| Capital                 |          |          |          |          |          |
| opening balance         |          | 5.08     | 7.64     | 11.74    | 16.25    |
| Add:- Own Capital       | 3.68     |          |          |          |          |
| Add:- Retained Profit   | 5.40     | 7.06     | 8.60     | 9.11     | 10.25    |
| Less:- Drawings         | 4.00     | 4.50     | 4.50     | 4.60     | 5.00     |
| Closing Blance          | 5.08     | 7.64     | 11.74    | 16.25    | 21.49    |
|                         |          |          |          |          |          |
| Term Loan               | 25.61    | 19.61    | 13.61    | 7.61     | 1.61     |
| Working Capital Limit   | 4.50     | 4.50     | 4.50     | 4.50     | 4.50     |
| Sundry Creditors        | 1.90     | 2.12     | 2.34     | 2.57     | 2.80     |
| Provisions & Other Liab | 0.30     | 0.40     | 0.55     | 0.66     | 0.83     |
| TOTAL:                  | 37.39    | 34.27    | 32.74    | 31.58    | 31.23    |
| Assets                  |          |          |          |          |          |
| Fixed Assets (Gross)    | 31.79    | 31.79    | 31.79    | 31.79    | 31.79    |
| Gross Dep.              | 4.42     | 8.21     | 11.46    | 14.26    | 16.66    |
| Net Fixed Assets        | 27.37    | 23.58    | 20.33    | 17.53    | 15.13    |
| Current Assets          |          |          |          |          |          |
| Sundry Debtors          | 3.93     | 4.44     | 4.89     | 5.35     | 5.82     |
| Stock in Hand           | 3.06     | 3.39     | 3.73     | 4.09     | 4.46     |
| Cash and Bank           | 3.03     | 2.86     | 3.79     | 4.61     | 5.82     |
| TOTAL :                 | 37.39    | 34.27    | 32.74    | 31.58    | 31.23    |

| <b>PROJECTED</b> | CASH | <b>FLOW</b> | <u>STATEMENT</u> |
|------------------|------|-------------|------------------|
|                  |      |             |                  |

| PARTICULARS                      | 101 1100 | 2nd voor | 2rd voor | 4th year | Eth woor |
|----------------------------------|----------|----------|----------|----------|----------|
| PARTICULARS                      | 1st year | Znu year | 3rd year | 4th year | 5th year |
| SOURCES OF FUND                  |          |          |          |          |          |
| Own Margin                       | 3.68     |          |          |          |          |
| Net Profit                       | 5.51     | 7.59     | 9.55     | 10.97    | 12.62    |
| Depriciation & Exp. W/off        | 4.42     | 3.79     | 3.25     | 2.79     | 2.40     |
| Increase in Cash Credit          | 4.50     | -        | -        | -        | -        |
| Increase In Term Loan            | 28.61    | -        | -        | -        | -        |
| Increase in Creditors            | 1.90     | 0.22     | 0.22     | 0.23     | 0.23     |
| Increase in Provisions & Oth lib | 0.30     | 0.10     | 0.15     | 0.11     | 0.17     |
|                                  |          |          |          |          |          |
| TOTAL:                           | 48.92    | 11.70    | 13.18    | 14.10    | 15.42    |
| APPLICATION OF FUND              |          |          |          |          |          |
| Increase in Fixed Assets         | 31.79    |          |          |          |          |
| Increase in Stock                | 3.06     | 0.33     | 0.34     | 0.36     | 0.37     |
| Increase in Debtors              | 3.93     | 0.50     | 0.45     | 0.46     | 0.47     |
| Repayment of Term Loan           | 3.00     | 6.00     | 6.00     | 6.00     | 6.00     |
|                                  |          |          |          |          |          |
| Drawings                         | 4.00     | 4.50     | 4.50     | 4.60     | 5.00     |
| Taxation                         | 0.11     | 0.54     | 0.95     | 1.86     | 2.38     |
| TOTAL:                           | 45.89    | 11.88    | 12.24    | 13.28    | 14.22    |
| Opening Cash & Bank Balance      | -        | 3.03     | 2.86     | 3.79     | 4.61     |
| Add : Surplus                    | 3.03     | - 0.17   | 0.93     | 0.82     | 1.21     |
| Closing Cash & Bank Balance      | 3.03     | 2.86     | 3.79     | 4.61     | 5.82     |
|                                  |          |          |          |          |          |

| COMPUTATION OF CLOSING STOCK & WORKING CAPITAL |          |          |          |          |          |  |  |  |  |
|--|----------|----------|----------|----------|----------|--|--|--|--|
| PARTICULARS                                    | 1st year | 2nd year | 3rd year | 4th year | 5th year |  |  |  |  |
| Finished Goods                                 |          |          |          |          |          |  |  |  |  |
|  | 2.30     | 2.54     | 2.80     | 3.06     | 3.34     |  |  |  |  |
| Raw Material                                   |          |          |          |          |          |  |  |  |  |
|  | 0.76     | 0.85     | 0.94     | 1.03     | 1.12     |  |  |  |  |
| Closing Stock                                  | 3.06     | 3.39     | 3.73     | 4.09     | 4.46     |  |  |  |  |

| Particulars                   | Amount | Own | Margin | Bank Fina | nce  |
|-------------------------------|--------|-----|--------|-----------|------|
| Finished Goods & Raw Material | 3.06   |     |        |           |      |
| Less : Creditors              | 1.90   |     |        |           |      |
| Paid stock                    | 1.16   | 10% | 0.12   | 90%       | 1.04 |
| Sundry Debtors                | 3.93   | 10% | 0.39   | 90%       | 3.54 |
|                               | 5.09   |     | 0.51   |           | 4.58 |

| 2nd Method                |          |          |
|---------------------------|----------|----------|
| PARTICULARS               | 1st year | 2nd year |
| Total Current Assets      | 10.02    | 10.69    |
| Other Current Liabilities | 2.20     | 2.52     |
| Working Capital Gap       | 7.82     | 8.17     |
| Min Working Capital       |          |          |
| 25% of WCG                | 1.96     | 2.04     |
| Actual NWC                | 3.32     | 3.67     |
| item III - IV             | 5.87     | 6.13     |
| item III - V              | 4.50     | 4.50     |
| MPBF (Lower of VI & VII)  | 4.50     | 4.50     |

| 3rd Method                |          |          |  |  |  |  |
|---------------------------|----------|----------|--|--|--|--|
| PARTICULARS               | 1st year | 2nd year |  |  |  |  |
| Total Current Assets      | 10.02    | 10.69    |  |  |  |  |
| Other Current Liabilities | 2.20     | 2.52     |  |  |  |  |
| Working Capital Gap       | 7.82     | 8.17     |  |  |  |  |
| Min Working Capital       |          |          |  |  |  |  |
| 25% of Current Assets     | 2.51     | 2.67     |  |  |  |  |
| Actual NWC                | 3.32     | 3.67     |  |  |  |  |
| item III - IV             | 5.32     | 5.50     |  |  |  |  |
| item III - V              | 4.50     | 4.50     |  |  |  |  |
| MPBF (Lower of VI & VII)  | 4.50     | 4.50     |  |  |  |  |
| 1                         | 1        | 1        |  |  |  |  |

## **COMPUTATION OF DEPRECIATION**

| Description               | Building | Plant & Machinery | Furniture | TOTAL |  |
|---------------------------|----------|-------------------|-----------|-------|--|
| Rate of Depreciation      | 10.00%   | 15.00%            | 10.00%    |       |  |
| Opening Balance           |          | -                 | -         | -     |  |
| Addition                  | 5.00     | 24.79             | 2.00      | 31.79 |  |
| Total                     | 5.00     | 24.79             | 2.00      | 31.79 |  |
| Less : Depreciation       | 0.50     | 3.72              | 0.20      | 4.42  |  |
| WDV at end of Year        | 4.50     | 21.07             | 1.80      | 27.37 |  |
| Additions During The Year | -        | -                 | -         | -     |  |
| Total                     | 4.50     | 21.07             | 1.80      | 27.37 |  |
| Less : Depreciation       | 0.45     | 3.16              | 0.18      | 3.79  |  |
| WDV at end of Year        | 4.05     | 17.91             | 1.62      | 23.58 |  |
| Additions During The Year | -        | -                 | -         | -     |  |
| Total                     | 4.05     | 17.91             | 1.62      | 23.58 |  |
| Less : Depreciation       | 0.41     | 2.69              | 0.16      | 3.25  |  |
| WDV at end of Year        | 3.65     | 15.22             | 1.46      | 20.33 |  |
| Additions During The Year | -        | -                 | -         | -     |  |
| Total                     | 3.65     | 15.22             | 1.46      | 20.33 |  |
| Less : Depreciation       | 0.36     | 2.28              | 0.15      | 2.79  |  |
| WDV at end of Year        | 3.28     | 12.94             | 1.31      | 17.53 |  |
| Additions During The Year | -        | -                 | -         | -     |  |
| Total                     | 3.28     | 12.94             | 1.31      | 17.53 |  |
| Less : Depreciation       | 0.33     | 1.94              | 0.13      | 2.40  |  |
|                           |          |                   |           |       |  |

| WDV at end of Year  | 2.95 | 11.00 | 1.18 | 15.13 |
|---------------------|------|-------|------|-------|
| S                   | -    | -     | -    | -     |
| Total               | 2.95 | 11.00 | 1.18 | 15.13 |
| Less : Depreciation | 0.30 | 1.65  | 0.12 | 2.06  |
| WDV at end of Year  | 2.66 | 9.35  | 1.06 | 13.07 |
| Less : Depreciation | 0.27 | 1.40  | 0.11 | 1.77  |
| WDV at end of Year  | 2.39 | 7.95  | 0.96 | 11.30 |
| Less : Depreciation | 0.24 | 1.19  | 0.10 | 1.53  |
| WDV at end of Year  | 2.15 | 6.76  | 0.86 | 9.77  |

| CALCULATION OF D.S.C.R      |             |          |          |             |             |
|-----------------------------|-------------|----------|----------|-------------|-------------|
| PARTICULARS                 | 1st<br>year | 2nd year | 3rd year | 4th<br>year | 5th<br>year |
|                             |             |          |          |             |             |
| CASH ACCRUALS               | 9.82        | 10.85    | 11.86    | 11.90       | 12.65       |
| Interest on Term Loan       | 2.82        | 2.51     | 1.85     | 1.19        | 0.46        |
| Total                       | 12.64       | 13.36    | 13.71    | 13.09       | 13.11       |
|                             |             |          |          |             |             |
| REPAYMENT                   |             |          |          |             |             |
| Instalment of Term Loan     | 3.00        | 6.00     | 6.00     | 6.00        | 6.00        |
| Interest on Term Loan       | 2.82        | 2.51     | 1.85     | 1.19        | 0.46        |
|                             |             |          |          |             |             |
| Total                       | 5.82        | 8.51     | 7.85     | 7.19        | 6.46        |
|                             |             |          |          |             |             |
| DEBT SERVICE COVERAGE RATIO | 2.17        | 1.57     | 1.75     | 1.82        | 2.03        |
| AVERAGE D.S.C.R.            | 1.87        |          |          |             |             |

|      | REPAYMENT SCHEDULE OF TERM LOAN |        |          |       |          |           |                    |  |
|------|---------------------------------|--------|----------|-------|----------|-----------|--------------------|--|
|      |                                 |        |          |       |          | Interest  | 11.00%             |  |
| Year | Particulars                     | Amount | Addition | Total | Interest | Repayment | Closing<br>Balance |  |
| ist  | Opening Balance                 |        |          |       |          |           |                    |  |
|      |                                 |        |          |       |          |           |                    |  |
|      | 1st month                       | -      | 28.61    | 28.61 | -        | -         | 28.61              |  |
|      | 2nd month                       | 28.61  | -        | 28.61 | 0.26     | -         | 28.61              |  |
|      | 3rd month                       | 28.61  | -        | 28.61 | 0.26     | -         | 28.61              |  |
|      | 4th month                       | 28.61  | -        | 28.61 | 0.26     |           | 28.61              |  |
|      | 5th month                       | 28.61  | -        | 28.61 | 0.26     |           | 28.61              |  |
|      | 6th month                       | 28.61  | -        | 28.61 | 0.26     |           | 28.61              |  |
|      | 7th month                       | 28.61  | -        | 28.61 | 0.26     | 0.500     | 28.11              |  |
|      | 8th month                       | 28.11  | -        | 28.11 | 0.26     | 0.500     | 27.61              |  |
|      | 9th month                       | 27.61  | -        | 27.61 | 0.25     | 0.500     | 27.11              |  |
|      | 10th month                      | 27.11  | -        | 27.11 | 0.25     | 0.500     | 26.61              |  |
|      | 11th month                      | 26.61  | -        | 26.61 | 0.24     | 0.500     | 26.11              |  |
|      | 12th month                      | 26.11  | -        | 26.11 | 0.24     | 0.500     | 25.61              |  |
|      |                                 |        |          |       | 2.82     | 3.000     |                    |  |
| 2nd  | Opening Balance                 |        |          |       |          |           |                    |  |
|      | 1st month                       | 25.61  | -        | 25.61 | 0.23     | 0.500     | 25.11              |  |
|      | 2nd month                       | 25.11  | -        | 25.11 | 0.23     | 0.500     | 24.61              |  |
|      | 3rd month                       | 24.61  | -        | 24.61 | 0.23     | 0.500     | 24.11              |  |
|      | 4th month                       | 24.11  | -        | 24.11 | 0.22     | 0.500     | 23.61              |  |
|      | 5th month                       | 23.61  | -        | 23.61 | 0.22     | 0.500     | 23.11              |  |
|      | 6th month                       | 23.11  | -        | 23.11 | 0.21     | 0.500     | 22.61              |  |
|      | 7th month                       | 22.61  | -        | 22.61 | 0.21     | 0.500     | 22.11              |  |
|      | 8th month                       | 22.11  | -        | 22.11 | 0.20     | 0.500     | 21.61              |  |
|      | 9th month                       | 21.61  | -        | 21.61 | 0.20     | 0.500     | 21.11              |  |
|      | 10th month                      | 21.11  | -        | 21.11 | 0.19     | 0.500     | 20.61              |  |

| ı   |                 |       |   |       |      |       | i     |
|-----|-----------------|-------|---|-------|------|-------|-------|
|     | 11th month      | 20.61 | - | 20.61 | 0.19 | 0.500 | 20.11 |
|     | 12th month      | 20.11 | - | 20.11 | 0.18 | 0.500 | 19.61 |
|     |                 |       |   |       | 2.51 | 6.000 |       |
| 3rd | Opening Balance |       |   |       |      |       |       |
|     |                 |       |   |       |      |       |       |
|     | 1st month       | 19.61 | - | 19.61 | 0.18 | 0.500 | 19.11 |
|     | 2nd month       | 19.11 | - | 19.11 | 0.18 | 0.500 | 18.61 |
|     | 3rd month       | 18.61 | - | 18.61 | 0.17 | 0.500 | 18.11 |
|     | 4th month       | 18.11 | - | 18.11 | 0.17 | 0.500 | 17.61 |
|     | 5th month       | 17.61 | - | 17.61 | 0.16 | 0.500 | 17.11 |
|     | 6th month       | 17.11 | - | 17.11 | 0.16 | 0.500 | 16.61 |
|     | 7th month       | 16.61 | - | 16.61 | 0.15 | 0.500 | 16.11 |
|     | 8th month       | 16.11 | - | 16.11 | 0.15 | 0.500 | 15.61 |
|     | 9th month       | 15.61 | - | 15.61 | 0.14 | 0.500 | 15.11 |
|     | 10th month      | 15.11 | - | 15.11 | 0.14 | 0.500 | 14.61 |
|     | 11th month      | 14.61 | - | 14.61 | 0.13 | 0.500 | 14.11 |
|     | 12th month      | 14.11 | - | 14.11 | 0.13 | 0.500 | 13.61 |
|     |                 |       |   |       | 1.85 | 6.000 |       |
| 4th | Opening Balance |       |   |       |      |       |       |
|     | 1st month       | 13.61 | - | 13.61 | 0.12 | 0.500 | 13.11 |
|     | 2nd month       | 13.11 | - | 13.11 | 0.12 | 0.500 | 12.61 |
|     | 3rd month       | 12.61 | - | 12.61 | 0.12 | 0.500 | 12.11 |
|     | 4th month       | 12.11 | - | 12.11 | 0.11 | 0.500 | 11.61 |
|     | 5th month       | 11.61 | - | 11.61 | 0.11 | 0.500 | 11.11 |
|     | 6th month       | 11.11 | - | 11.11 | 0.10 | 0.500 | 10.61 |
|     | 7th month       | 10.61 | - | 10.61 | 0.10 | 0.500 | 10.11 |
|     | 8th month       | 10.11 | - | 10.11 | 0.09 | 0.500 | 9.61  |
|     | 9th month       | 9.61  | - | 9.61  | 0.09 | 0.500 | 9.11  |
|     | 10th month      | 9.11  | - | 9.11  | 0.08 | 0.500 | 8.61  |

|     | 11th month      | 8.61 |    | -      | 8.61 | 0.08 | 0.500 | 8.11 |
|-----|-----------------|------|----|--------|------|------|-------|------|
|     | 12th month      | 8.11 |    | -      | 8.11 | 0.07 | 0.500 | 7.61 |
|     |                 |      |    |        |      | 1.19 | 6.000 |      |
| 5th | Opening Balance |      |    |        |      |      |       |      |
|     | 1st month       | 7.61 |    | -      | 7.61 | 0.07 | 0.500 | 7.11 |
|     | 2nd month       | 7.11 |    | -      | 7.11 | 0.07 | 0.500 | 6.61 |
|     | 3rd month       | 6.61 |    | -      | 6.61 | 0.06 | 0.500 | 6.11 |
|     | 4th month       | 6.11 |    | -      | 6.11 | 0.06 | 0.500 | 5.61 |
|     | 5th month       | 5.61 |    | -      | 5.61 | 0.05 | 0.500 | 5.11 |
|     | 6th month       | 5.11 |    | -      | 5.11 | 0.05 | 0.500 | 4.61 |
|     | 7th month       | 4.61 |    | -      | 4.61 | 0.04 | 0.500 | 4.11 |
|     | 8th month       | 4.11 |    | -      | 4.11 | 0.04 | 0.500 | 3.61 |
|     | 9th month       | 3.61 |    | -      | 3.61 | 0.03 | 0.500 | 3.11 |
|     | 10th month      | 3.11 |    | -      | 3.11 | 0.03 | 0.500 | 2.61 |
|     | 11th month      | 2.61 |    | -      | 2.61 | 0.02 | 0.500 | 2.11 |
|     | 12th month      | 2.11 |    | -      | 2.11 | 0.02 | 0.500 | 1.61 |
|     |                 |      |    |        |      | 0.46 | 6.00  |      |
| 5th | Opening Balance |      |    |        |      |      |       |      |
|     | 1st month       | 1.61 |    | -      | 1.61 | 0.01 | 0.500 | 1.11 |
|     | 2nd month       | 1.11 |    | -      | 1.11 | 0.01 | 0.500 | 0.61 |
|     | 3rd month       | 0.61 |    | -      | 0.61 | 0.01 | 0.500 | 0.11 |
|     | 4th month       | 0.11 |    | -      | 0.11 | 0.00 | 0.110 | 0.00 |
|     |                 |      |    |        |      |      |       |      |
|     |                 |      |    |        |      | 0.02 | 1.61  |      |
|     |                 |      |    |        |      |      |       |      |
|     | OOR TO DOOR     |      | 64 | MONTHS |      |      |       |      |
|     | ATORIUM PERIOD  |      | 6  | MONTHS |      |      |       |      |
| REP | PAYMENT PERIOD  |      | 58 | MONTHS |      |      |       |      |

# **Supplier Details:**

| Process Engineers & | Address:                       |
|---------------------|--------------------------------|
| Associates          | E-78, sector 63, Noida- 201307 |
|                     |                                |



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