



**DETAILED PROJECT REPORT**  
**MAIZE FLOUR MILL UNIT**  
**UNDER PMFME SCHEME**



National Institute of Food Technology Entrepreneurship and Management

Ministry of Food Processing Industries

Plot No.97, Sector-56, HSIIDC, Industrial Estate, Kundli, Sonapat, Haryana-131028

Website: <http://www.niftem.ac.in>

Email: [pmfmeCELL@niftem.ac.in](mailto:pmfmeCELL@niftem.ac.in)

Call: 0130-2281089

**TABLE OF CONTENTS**

| <b>S No.</b> | <b>Topic</b>                                     | <b>Page Number</b> |
|--------------|--|--------------------|
| 1.           | Project Summary                                  | 3                  |
| 2.           | About the Product                                | 4-5                |
| 3.           | Process Flow Chart                               | 5-7                |
| 4.           | Economics of the Project                         | 8-25               |
|              | 4.1. Basis & Presumptions                        | 8                  |
|              | 4.2. Capacity , Utilisation, Production & Output | 9-10               |
|              | 4.3. Premises/Infrastructure                     | 11                 |
|              | 4.4. Machinery & Equipments                      | 11-13              |
|              | 4.5. Misc. Fixed Assets                          | 14                 |
|              | 4.6. Total Cost of Project                       | 14                 |
|              | 4.7. Means of Finance                            | 14                 |
|              | 4.8. Term Loan                                   | 14                 |
|              | 4.9. Term Loan repayment & interest schedule     | 15-18              |
|              | 4.10. Working Capital Calculations               | 18                 |
|              | 4.11. Salaries/Wages                             | 19                 |
|              | 4.12. Power Requirement                          | 19                 |
|              | 4.13. Depreciation Calculation                   | 20                 |
|              | 4.14. Repairs & Maintenance                      | 20                 |
|              | 4.15. Projections of Profitability Analysis      | 21                 |
|              | 4.16. Break Even Point Analysis                  | 22                 |
|              | 4.17. Projected Balance Sheet                    | 23                 |
|              | 4.18. Cash- Flow Statement                       | 24                 |
|              | 4.19. Debt-Service Coverage Ratio                | 25                 |

**1. PROJECT SUMMARY**

|   |   |  |
|---|---|--|
| 1. Name of the proposed project                   | : | Maize Flour Mill Unit  |
| 2. Nature of proposed project                     | : | Proprietorship/Company/Partnership   |
| 3. Proposed project capacity                      | : | 432000 Kg/annum(55,58,60,62,&65% capacity utilization in 1 <sup>st</sup> to 5 <sup>th</sup> Year respectively) |
| 4. Raw materials                                  | : | Maize Corn   |
| 5. Major product outputs                          | : | Maize Flour  |
| 6. Total project cost                             | : | Rs.21.10 Lakh  |
| • Land development, building & Civil Construction | : | Nil  |
| • Machinery and equipment's                       | : | Rs.10.82 Lakh  |
| • Miscellaneous Fixed Assets                      | : | Rs.2.50 Lakh   |
| • Working capital                                 | : | Rs.7.78 Lakh   |
| 8. Means of Finance                               |   |  |
| • Subsidy (max 10lakhs)                           | : | Rs.4.66 Lakh   |
| • Promoter's contribution (min10%)                | : | Rs.2.10 Lakh   |
| • Term loan                                       | : | Rs.7.33 Lakh   |
| • Working Capital Requirement                     | : | Rs.7.00 Lakh   |
| 9. Profit after Depreciation, Interest & Tax      |   |  |
| • 1 <sup>st</sup> year                            | : | Rs.1.15 Lakh   |
| • 2 <sup>nd</sup> year                            | : | Rs.2.54 Lakh   |
| • 3 <sup>rd</sup> year                            | : | Rs.3.59 Lakh   |
| • 4 <sup>th</sup> year                            | : | Rs.4.72 Lakh   |
| • 5th year  | : | Rs.6.68 Lakh   |
| 11. Average DSCR                                  | : | 2.98   |
| 12. Term loan repayment                           | : | 5 Years with 6 months grace period   |

## **2. ABOUT THE PRODUCT**

### **2.1. PRODUCT INTRODUCTION:**

Maize is one of the top three important crops in India, ranking after rice and wheat. It is widely applied in food process, diet cooking, feed products and industrial fuel raw material. The development of maize processing has a direct contribution to the economy in India.

Maize processing industry in India is largely influenced by the price of maize, the consumption and its supply. With the increasing use for alcohol production, the consumption of maize will go over its supply. The agricultural department in India predicts that the price of maize may continue to rise in the short terms. The increasing needs of maize industrial use largely encourages the development of maize processing industry in India, and meanwhile the price of downstream products such as feeding products, and maize flour product. It is profitable to invest a maize process factory in the long terms. The capital investment increase keeps a continuous increase in the past three years. Meanwhile, the increase of maize price brings out a negligible raise cost of maize mill owner. A small-scale maize flour mill factory owner said that rising maize flour price driven by the raw material cost brings out a large profit and a series of potential problem. For the maize processing factory owners, keeping an eye on the maize price in India and global market and government export-import policy is an important measure to deal with the potential risk. Maize processing in India is correlated with the price of raw material, the global market situation. The continuous rise of maize will lead to a great change in a series of maize processing industry such as maize flour mill factory, feed product, industrial fuel and poultry feed.

## **2.2 MARKET POTENTIAL:**

Maize Flour market is estimated to be valued at 1.37 Billion in 2018 and is estimated to grow at a CAGR of 3.9% during the forecast period 2019–2024. India Corn Starch market growth can be attributed to the easy availability of corn and its wide range of applications in various industries such as food and beverage, pharmaceutical, animal feed, textile industry, paper industry, and others. The Food and Beverage industry dominated the application segment of India Corn Starch Market. The rapid growth of population, as well as rapid industrialization, have propelled the growth of India corn starch market.

## **2.3 RAW MATERIAL DESCRIPTION:**

The only major raw material required for Maize Flour Production is Maize Corn.

## **3. PROCESS FLOW CHART**

### **➤ Procurement**

Dried maize kernels are procured from appropriate vendors and stored in raw material warehouse for normal plant operation.

### **➤ Cleaning and conditioning**

Cleaning and conditioning of the maize is an important step in the process and refers to the removal of foreign material and all that is not maize kernels from the to-be milled grain that lowers the quality of the product such as husk, straw, dust, sand, and everything too big or too small and lighter than a maize kernel. It also refers to the removal of other seeds, and material harmful to the milling equipment such as metal and stones.

Cleaning Process involves an array of cleaning machine vibro separator, aspirators, destoners, magnetic separators etc. Each of this machine has its own contribution to cleaning effect.

Conditioning refers to the addition of moisture to the maize to allow the bran to be peeled off in flakes during milling with plate or roller mills, allowing easy separation in a sifter and, most importantly, to add mass to the meal

➤ **Milling and sifting**

Roller type flour mills are used to grinding the grain, the different roller mills single roller mill, double roller mill and pneumatic roller mill, the mill adopted defines quality of flour produced. In a complete maize milling plant, there are several roller mill that work together, they have different functions, the first mill mainly primary grinding & separation of the hard outer covering, the second and third will grinding the maize into granular size, and meanwhile to get some super fine flour, and the granular sized product will go to the next mill to continue grinding.

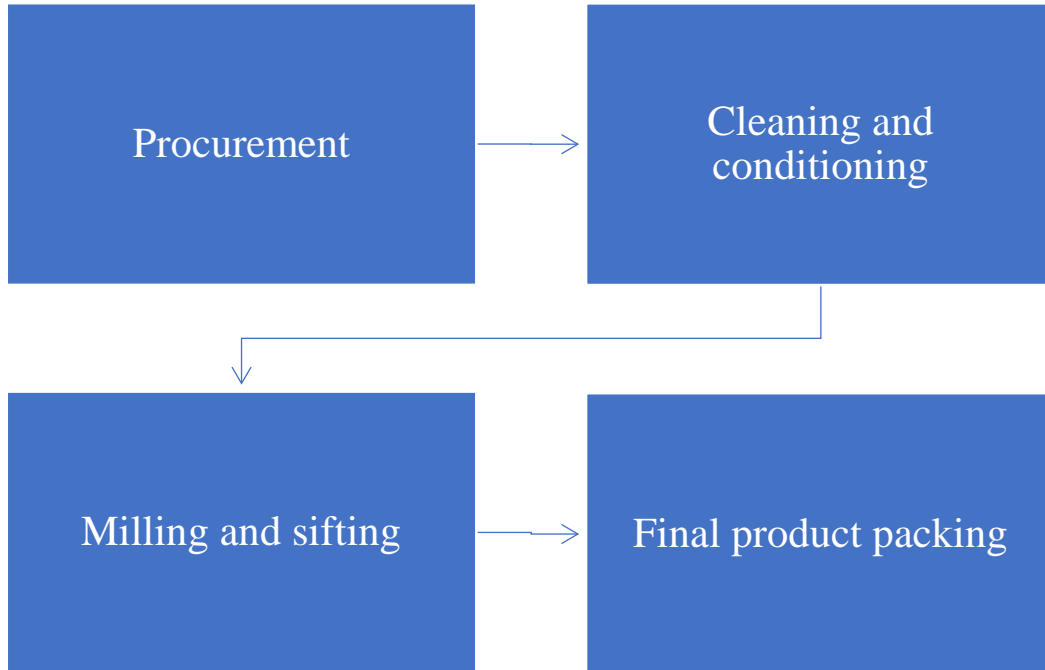
After each successive grinding double bin sifter or square plan sifter are used to sift the meal from the miller, classification and sifting more super flour. In general, the sifting is used to separate the flour and bran, also separate large size and small size to ensure flour quality.

This process of grinding, sifting & blending flour is repeated until required quality flour is obtained.

➤ **Final product packing**

After the maize is processed, it will come out in different final products like flour and grits. They are different from their granular size. For the packing, a Flour Packing Machine is adopted, and the flour is packed into 5 kg, 10 kg, 25 kg or 50 kg bags.

**FLOW CHART OF MAIZE FLOUR MANUFACTURING PROCESS**



## **4. ECONOMICS OF THE PROJECT**

### **4.1. BASIS & PRESUMPTIONS**

1. Production Capacity of Maize flour is 200 kg per hour. First year, Capacity has been taken @ 55%.
2. Working shift of 8 hours per day has been considered.
3. Raw Material stock is for 15 days and Finished goods Closing Stock has been taken for 15 days.
4. Credit period to Sundry Debtors has been given for 6 days.
5. Credit period by the Sundry Creditors has been provided for 10 days.
6. Depreciation and Income tax has been taken as per the Income tax Act, 1961.
7. Interest on working Capital Loan and Term loan has been taken at 11%.
8. Salary and wages rates are taken as per the Current Market Scenario.
9. Power Consumption has been taken at 25 KW.
10. Increase in sales and raw material costing has been taken @ 5% on a yearly basis.



## 4.2. CAPACITY, UTILIZATION, PRODUCTION & OUTPUT

### COMPUTATION OF PRODUCTION OF MAIZE FLOUR

#### Items to be Manufactured

Maize Flour

|   |        |      |
|---|--------|------|
| Machine capacity Per hour                 | 200    | Kg   |
| Total working Hours                       | 8      |      |
| Machine capacity Per Day                  | 1,600  | Kg   |
| Working days in a month                   | 25     | Days |
| Working days per annum                    | 300    |      |
| Wastage Considered                        | 10%    |      |
| Raw material requirement                  | 480000 | Kg   |
| Final Output per annum after wastage      | 432000 | Kg   |
| Final Product to be packed in 1 kg Packet |        |      |
| Number of Packets per annum               | 432000 | Kg   |

#### Production of Maize Flour

| Production | Capacity | KG       |
|------------|----------|----------|
| 1st year   | 55%      | 2,37,600 |
| 2nd year   | 58%      | 2,50,560 |
| 3rd year   | 60%      | 2,59,200 |
| 4th year   | 62%      | 2,67,840 |
| 5th year   | 65%      | 2,80,800 |




| <b>Raw Material Cost</b> |                             |                      |                             |
|--------------------------|-----------------------------|----------------------|-----------------------------|
| <b>Year</b>              | <b>Capacity Utilisation</b> | <b>Rate (per Kg)</b> | <b>Amount (Rs. in lacs)</b> |
| 1st year                 | 55%                         | 22.00                | 58.08                       |
| 2nd year                 | 58%                         | 23.00                | 64.03                       |
| 3rd year                 | 60%                         | 24.00                | 69.12                       |
| 4th year                 | 62%                         | 25.00                | 74.40                       |
| 5th year                 | 65%                         | 26.00                | 81.12                       |





| <b><u>COMPUTATION OF SALE</u></b> |                 |                 |                 |                 |                 |
|-----------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| <b>Particulars</b>                | <b>1st year</b> | <b>2nd year</b> | <b>3rd year</b> | <b>4th year</b> | <b>5th year</b> |
| Op Stock                          | -               | 11,880          | 12,528          | 12,960          | 13,392          |
| Production                        | 2,37,600        | 2,50,560        | 2,59,200        | 2,67,840        | 2,80,800        |
| Less : Closing Stock              | 11,880          | 12,528          | 12,960          | 13,392          | 14,040          |
| <b>Net Sale</b>                   | <b>2,25,720</b> | <b>2,49,912</b> | <b>2,58,768</b> | <b>2,67,408</b> | <b>2,80,152</b> |
| sale price per packet             | 48.00           | 50.00           | 53.00           | 56.00           | 59.00           |
| <b>Sales (in Lacs)</b>            | <b>108.35</b>   | <b>124.96</b>   | <b>137.15</b>   | <b>149.75</b>   | <b>165.29</b>   |


### 4.3. PREMISES/INFRASTRUCTURE

The approximate total area required for complete factory setup is 4000-5000 Sq. ft. for smooth production including storage area. It is expected that the premises will be on rental.

### 4.4. MACHINERY & EQUIPMENTS

|                                   |   |   |
|-----------------------------------|---|---|
| <p><b>Vibrating Separator</b></p> | <p>It's composed of a vibrating sieve, powered by an exciter which is in turn is powered by an appropriate motor; which is used to remove most of the dirt &amp; large impurities from given grain.</p> |   |
| <p><b>De-stoner</b></p>           | <p>It's a machine which is used to remove stones from the given grain, widely used in various grain mills in cleaning section.</p>  |  |
| <p><b>Disc Separator</b></p>      | <p>It's a separator class machine, generally used to remove foreign grains from required grain efficiently.</p>   |  |

|  |   |   |
|--|---|---|
| <p><b>Magnetic Separator</b></p>         | <p>It's a type of separator which is used to magnetic impurities from given product using powerful electromagnets, used in wide range of industries for separation.</p> |    |
| <p><b>Aspirator</b></p>                  | <p>It's a more fine-tuned separator designed to remove finer impurities like remaining dirt, similar sized impurities, leaves etc.</p>                                  |    |
| <p><b>Heavy duty Pulveriser Mill</b></p> | <p>It basically a grinder class machine, which may employ any possible grinding arrangement to achieve, required grinding as per product to be grinded.</p>             |   |
| <p><b>Flour Sifter Machine</b></p>       | <p>It's basically an industrial version of the sieve used to sieve out, large fibers, particles etc, to achieve required particle size in flour.</p>                    |  |

|  |  |   |
|--|--|---|
| <b>Packet Filling &amp;Packaging Machine</b> | It's a simple packaging machine, designed to fill the given food grade plastic material's continuous pouch with required product after sealing one end & after filling sealing the other end also to generate packet of product. |  |
|--|--|---|

| Machine   | Unit | Rate     | Price    |
|---|------|----------|----------|
| Vibrating Separator<br>(200 kg/hr)                        | 1    | 1,25,000 | 1,25,000 |
| De-stoner (300 kg/hr)                                     | 1    | 52,000   | 52,000   |
| Disc Separator (200 kg/hr)                                | 1    | 1,70,000 | 1,70,000 |
| Magnetic Separator  | 1    | 80,000   | 80,000   |
| Aspirator   | 1    | 45,000   | 45,000   |
| Heavy duty Pulveriser Mill (250 kg/hr)                    | 1    | 1,65,000 | 1,65,000 |
| Flour Sifter Machine (300 kg/hr)                          | 1    | 95,000   | 95,000   |
| Packet Filling &Packaging Machine (15 pouches per minute) | 1    | 3,50,000 | 3,50,000 |

Note: Cost of the machinery is approx. Rs.10.82 Lakhs excluding GST and other transportation cost.

#### 4.5. MISCELLANEOUS FIXED ASSETS

- Electricity connection
- Other equipment's & fixture

#### 4.6. TOTAL COST OF PROJECT

| <b>COST OF PROJECT</b> |               |
|------------------------|---------------|
| (in Lacs)              |               |
| <b>PARTICULARS</b>     | <b>Amount</b> |
| Land & Building        | Owned/Rented  |
| Plant & Machinery      | 10.82         |
| Miscellaneous Assets   | 2.50          |
| Working capital        | 7.78          |
| <b>Total</b>           | <b>21.10</b>  |

#### 4.7. MEANS OF FINANCE

| <b>MEANS OF FINANCE</b>        |               |
|--------------------------------|---------------|
| <b>PARTICULARS</b>             | <b>AMOUNT</b> |
| Own Contribution (min 10%)     | 2.10          |
| Subsidy @35%(Max. Rs 10 Lac)   | 4.66          |
| Term Loan @ 55%                | 7.33          |
| Working Capital (Bank Finance) | 7.00          |
| <b>Total</b>                   | <b>21.10</b>  |

**4.8. TERM LOAN:** Term loan of Rs.7.33 Lakh is required for project cost of Rs.21.10 Lakh.

**4.9. TERM LOAN REPAYMENT & INTEREST SCHEDULE**

| <b>REPAYMENT SCHEDULE OF TERM LOAN</b> |                    |               |                 |              |                 |                  |                        |
|--|--------------------|---------------|-----------------|--------------|-----------------|------------------|------------------------|
|  |                    |               |                 |              |                 | Interest         | 11.00%                 |
| <b>Year</b>                            | <b>Particulars</b> | <b>Amount</b> | <b>Addition</b> | <b>Total</b> | <b>Interest</b> | <b>Repayment</b> | <b>Closing Balance</b> |
| <b>1st</b>                             | Opening Balance    |               |                 |              |                 |                  |                        |
|  | 1st month          | -             | 7.33            | 7.33         | -               | -                | 7.33                   |
|  | 2nd month          | 7.33          | -               | 7.33         | 0.07            | -                | 7.33                   |
|  | 3rd month          | 7.33          | -               | 7.33         | 0.07            | -                | 7.33                   |
|  | 4th month          | 7.33          | -               | 7.33         | 0.07            | -                | 7.33                   |
|  | 5th month          | 7.33          | -               | 7.33         | 0.07            | -                | 7.33                   |
|  | 6th month          | 7.33          | -               | 7.33         | 0.07            | -                | 7.33                   |
|  | 7th month          | 7.33          | -               | 7.33         | 0.07            | 0.14             | 7.19                   |
|  | 8th month          | 7.19          | -               | 7.19         | 0.07            | 0.14             | 7.05                   |
|  | 9th month          | 7.05          | -               | 7.05         | 0.06            | 0.14             | 6.92                   |
|  | 10th month         | 6.92          | -               | 6.92         | 0.06            | 0.14             | 6.78                   |
|  | 11th month         | 6.78          | -               | 6.78         | 0.06            | 0.14             | 6.65                   |
|  | 12th month         | 6.65          | -               | 6.65         | 0.06            | 0.14             | 6.51                   |
|  |                    |               |                 |              | 0.72            | 0.81             |                        |
| <b>2nd</b>                             | Opening Balance    |               |                 |              |                 |                  |                        |
|  | 1st month          | 6.51          | -               | 6.51         | 0.06            | 0.14             | 6.38                   |
|  | 2nd month          | 6.38          | -               | 6.38         | 0.06            | 0.14             | 6.24                   |
|  | 3rd month          | 6.24          | -               | 6.24         | 0.06            | 0.14             | 6.11                   |
|  | 4th month          | 6.11          | -               | 6.11         | 0.06            | 0.14             | 5.97                   |
|  | 5th month          | 5.97          | -               | 5.97         | 0.05            | 0.14             | 5.83                   |

PM FME- Detailed Project Report of Maize Flour Mill Unit

|            |                 |   |      |             |             |      |
|------------|-----------------|---|------|-------------|-------------|------|
| 6th month  | 5.83            | - | 5.83 | 0.05        | 0.14        | 5.70 |
| 7th month  | 5.70            | - | 5.70 | 0.05        | 0.14        | 5.56 |
| 8th month  | 5.56            | - | 5.56 | 0.05        | 0.14        | 5.43 |
| 9th month  | 5.43            | - | 5.43 | 0.05        | 0.14        | 5.29 |
| 10th month | 5.29            | - | 5.29 | 0.05        | 0.14        | 5.16 |
| 11th month | 5.16            | - | 5.16 | 0.05        | 0.14        | 5.02 |
| 12th month | 5.02            | - | 5.02 | 0.05        | 0.14        | 4.88 |
|            |                 |   |      | <b>0.63</b> | <b>1.63</b> |      |
| <b>3rd</b> | Opening Balance |   |      |             |             |      |
| 1st month  | 4.88            | - | 4.88 | 0.04        | 0.14        | 4.75 |
| 2nd month  | 4.75            | - | 4.75 | 0.04        | 0.14        | 4.61 |
| 3rd month  | 4.61            | - | 4.61 | 0.04        | 0.14        | 4.48 |
| 4th month  | 4.48            | - | 4.48 | 0.04        | 0.14        | 4.34 |
| 5th month  | 4.34            | - | 4.34 | 0.04        | 0.14        | 4.21 |
| 6th month  | 4.21            | - | 4.21 | 0.04        | 0.14        | 4.07 |
| 7th month  | 4.07            | - | 4.07 | 0.04        | 0.14        | 3.93 |
| 8th month  | 3.93            | - | 3.93 | 0.04        | 0.14        | 3.80 |
| 9th month  | 3.80            | - | 3.80 | 0.03        | 0.14        | 3.66 |
| 10th month | 3.66            | - | 3.66 | 0.03        | 0.14        | 3.53 |
| 11th month | 3.53            | - | 3.53 | 0.03        | 0.14        | 3.39 |
| 12th month | 3.39            | - | 3.39 | 0.03        | 0.14        | 3.26 |
|            |                 |   |      | <b>0.46</b> | <b>1.63</b> |      |
| <b>4th</b> | Opening Balance |   |      |             |             |      |
| 1st month  | 3.26            | - | 3.26 | 0.03        | 0.14        | 3.12 |
| 2nd month  | 3.12            | - | 3.12 | 0.03        | 0.14        | 2.98 |



PM FME- Detailed Project Report of Maize Flour Mill Unit

|            |                        |   |      |             |             |      |
|------------|------------------------|---|------|-------------|-------------|------|
| 3rd month  | 2.98                   | - | 2.98 | 0.03        | 0.14        | 2.85 |
| 4th month  | 2.85                   | - | 2.85 | 0.03        | 0.14        | 2.71 |
| 5th month  | 2.71                   | - | 2.71 | 0.02        | 0.14        | 2.58 |
| 6th month  | 2.58                   | - | 2.58 | 0.02        | 0.14        | 2.44 |
| 7th month  | 2.44                   | - | 2.44 | 0.02        | 0.14        | 2.31 |
| 8th month  | 2.31                   | - | 2.31 | 0.02        | 0.14        | 2.17 |
| 9th month  | 2.17                   | - | 2.17 | 0.02        | 0.14        | 2.04 |
| 10th month | 2.04                   | - | 2.04 | 0.02        | 0.14        | 1.90 |
| 11th month | 1.90                   | - | 1.90 | 0.02        | 0.14        | 1.76 |
| 12th month | 1.76                   | - | 1.76 | 0.02        | 0.14        | 1.63 |
|            |                        |   |      | <b>0.28</b> | <b>1.63</b> |      |
| <b>5th</b> | <b>Opening Balance</b> |   |      |             |             |      |
| 1st month  | 1.63                   | - | 1.63 | 0.01        | 0.14        | 1.49 |
| 2nd month  | 1.49                   | - | 1.49 | 0.01        | 0.14        | 1.36 |
| 3rd month  | 1.36                   | - | 1.36 | 0.01        | 0.14        | 1.22 |
| 4th month  | 1.22                   | - | 1.22 | 0.01        | 0.14        | 1.09 |
| 5th month  | 1.09                   | - | 1.09 | 0.01        | 0.14        | 0.95 |
| 6th month  | 0.95                   | - | 0.95 | 0.01        | 0.14        | 0.81 |
| 7th month  | 0.81                   | - | 0.81 | 0.01        | 0.14        | 0.68 |
| 8th month  | 0.68                   | - | 0.68 | 0.01        | 0.14        | 0.54 |
| 9th month  | 0.54                   | - | 0.54 | 0.00        | 0.14        | 0.41 |
| 10th month | 0.41                   | - | 0.41 | 0.00        | 0.14        | 0.27 |
| 11th month | 0.27                   | - | 0.27 | 0.00        | 0.14        | 0.14 |
| 12th month | 0.14                   | - | 0.14 | 0.00        | 0.14        | -    |
|            |                        |   |      | <b>0.10</b> | <b>1.63</b> |      |

|                                      |         |                  |
|--------------------------------------|---------|------------------|
| DOOR TO DOOR<br>MORATORIUM<br>PERIOD | 60<br>6 | MONTHS<br>MONTHS |
| REPAYMENT PERIOD                     | 54      | MONTHS           |

#### 4.10. WORKING CAPITAL CALCULATIONS

| <b>COMPUTATION OF CLOSING STOCK &amp; WORKING CAPITAL</b> |                 |                 |                 |                 | (in<br>Lacs)    |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|
| <b>PARTICULARS</b>  | <b>1st year</b> | <b>2nd year</b> | <b>3rd year</b> | <b>4th year</b> | <b>5th year</b> |
| <b>Finished Goods</b>                                     |                 |                 |                 |                 |                 |
|   | 4.80            | 5.25            | 5.71            | 6.19            | 6.82            |
| <b>Raw Material</b>                                       |                 |                 |                 |                 |                 |
|   | 2.90            | 3.20            | 3.46            | 3.72            | 4.06            |
| <b>Closing Stock</b>                                      | <b>7.70</b>     | <b>8.45</b>     | <b>9.17</b>     | <b>9.91</b>     | <b>10.88</b>    |

| <b>COMPUTATION OF WORKING CAPITAL REQUIREMENT</b> |               |                   |             |                     |             |
|---|---------------|-------------------|-------------|---------------------|-------------|
| <b>TRADITIONAL METHOD</b>                         |               |                   |             | (in Lacs)           |             |
| <b>Particulars</b>                                | <b>Amount</b> | <b>Own Margin</b> |             | <b>Bank Finance</b> |             |
| Finished Goods & Raw Material                     | 7.70          |                   |             |                     |             |
| Less : Creditors                                  | 1.94          |                   |             |                     |             |
| <b>Paid stock</b>                                 | <b>5.77</b>   | <b>10%</b>        | <b>0.58</b> | <b>90%</b>          | <b>5.19</b> |
| <b>Sundry Debtors</b>                             | <b>2.17</b>   | <b>10%</b>        | <b>0.22</b> | <b>90%</b>          | <b>1.95</b> |
|   | <b>7.93</b>   |                   | <b>0.79</b> |                     | <b>7.14</b> |
| <b>MPBF</b>                                       |               |                   |             |                     | <b>7.14</b> |
| <b>WORKING CAPITAL LIMIT DEMAND ( from Bank)</b>  |               |                   |             |                     | <b>7.00</b> |
| <b>Working Capital Margin</b>                     |               |                   |             |                     | <b>0.78</b> |

**4.11. SALARY & WAGES**

| <b><u>BREAK UP OF LABOUR CHARGES</u></b> |                                |                            |                         |
|--|--------------------------------|----------------------------|-------------------------|
| <b>Particulars</b>                       | <b>Wages<br/>Rs. per Month</b> | <b>No of<br/>Employees</b> | <b>Total<br/>Salary</b> |
| Supervisor                               | 20,000                         | 1                          | 20,000                  |
| Plant Operator                           | 20,000                         | 1                          | 20,000                  |
| Skilled (in thousand rupees)             | 15,000                         | 4                          | 60,000                  |
| Unskilled (in thousand rupees)           | 8,500                          | 8                          | 68,000                  |
| <b>Total salary per month</b>            |                                |                            | <b>1,68,000</b>         |
| <b>Total annual labour charges</b>       | <b>(in lacs)</b>               |                            | <b>20.16</b>            |

| <b><u>BREAK UP OF STAFF SALARY CHARGES</u></b> |                                 |                            |                         |
|--|---------------------------------|----------------------------|-------------------------|
| <b>Particulars</b>                             | <b>Salary<br/>Rs. per Month</b> | <b>No of<br/>Employees</b> | <b>Total<br/>Salary</b> |
| Administrative Staff                           | 10,000                          | 2                          | 20,000                  |
| Manger   | 20,000                          | 1                          | 20,000                  |
| Accountant                                     | 15,000                          | 1                          | 15,000                  |
| <b>Total salary per month</b>                  |                                 |                            | <b>55,000</b>           |
| <b>Total annual Staff charges</b>              | <b>(in lacs)</b>                |                            | <b>6.60</b>             |

**4.12 POWER REQUIREMENT**

| <b>Utility Charges (per month)</b> |              |                    |
|------------------------------------|--------------|--------------------|
| <b>Particulars</b>                 | <b>value</b> | <b>Description</b> |
| Power connection required          | 25           | KWH                |
| consumption per day                | 200          | units              |
| Consumption per month              | 5,000        | units              |
| Rate per Unit                      | 10           | Rs.                |
| power Bill per month               | 50,000       | Rs.                |

**4.13. DEPRECIATION CALCULATION**

| <b>COMPUTATION OF DEPRECIATION</b> |                              |                         | (in<br>Lacs) |
|------------------------------------|------------------------------|-------------------------|--------------|
| <b>Description</b>                 | <b>Plant &amp; Machinery</b> | <b>Miss.<br/>Assets</b> | <b>TOTAL</b> |
| Rate of Depreciation               | <b>15.00%</b>                | <b>10.00%</b>           |              |
| <b>Opening Balance</b>             | -                            | -                       | -            |
| Addition                           | 10.82                        | 2.50                    | 13.32        |
| Total                              | 10.82                        | 2.50                    | 13.32        |
| Less : Depreciation                | 1.62                         | 0.25                    | 1.87         |
| <b>WDV at end of Year</b>          | <b>9.20</b>                  | <b>2.25</b>             | <b>11.45</b> |
| Additions During The Year          | -                            | -                       | -            |
| Total                              | 9.20                         | 2.25                    | 11.45        |
| Less : Depreciation                | 1.38                         | 0.23                    | 1.60         |
| <b>WDV at end of Year</b>          | <b>7.82</b>                  | <b>2.03</b>             | <b>9.84</b>  |
| Additions During The Year          | -                            | -                       | -            |
| Total                              | 7.82                         | 2.03                    | 9.84         |
| Less : Depreciation                | 1.17                         | 0.20                    | 1.38         |
| <b>WDV at end of Year</b>          | <b>6.64</b>                  | <b>1.82</b>             | <b>8.47</b>  |
| Additions During The Year          | -                            | -                       | -            |
| Total                              | 6.64                         | 1.82                    | 8.47         |
| Less : Depreciation                | 1.00                         | 0.18                    | 1.18         |
| <b>WDV at end of Year</b>          | <b>5.65</b>                  | <b>1.64</b>             | <b>7.29</b>  |
| Additions During The Year          | -                            | -                       | -            |
| Total                              | 5.65                         | 1.64                    | 7.29         |
| Less : Depreciation                | 0.85                         | 0.16                    | 1.01         |
| <b>WDV at end of Year</b>          | <b>4.80</b>                  | <b>1.48</b>             | <b>6.28</b>  |

**4.14. REPAIR & MAINTENANCE:** Repair & Maintenance is 2.5% of Gross Sale.

**4.15. PROJECTIONS OF PROFITABILITY ANALYSIS**

| <b><u>PROJECTED PROFITABILITY STATEMENT</u></b> |                 |                 |                 |                 | <b>(in Lacs)</b> |
|---|-----------------|-----------------|-----------------|-----------------|------------------|
| <b>PARTICULARS</b>                              | <b>1st year</b> | <b>2nd year</b> | <b>3rd year</b> | <b>4th year</b> | <b>5th year</b>  |
| Capacity Utilisation %                          | <b>55%</b>      | <b>58%</b>      | <b>60%</b>      | <b>62%</b>      | <b>65%</b>       |
| <b><u>SALES</u></b>                             |                 |                 |                 |                 |                  |
| <b>Gross Sale</b>                               |                 |                 |                 |                 |                  |
| Maize Flour                                     | 108.35          | 124.96          | 137.15          | 149.75          | 165.29           |
| <b>Total</b>                                    | <b>108.35</b>   | <b>124.96</b>   | <b>137.15</b>   | <b>149.75</b>   | <b>165.29</b>    |
| <b><u>COST OF SALES</u></b>                     |                 |                 |                 |                 |                  |
| Raw Material Consumed                           | 58.08           | 64.03           | 69.12           | 74.40           | 81.12            |
| Electricity Expenses                            | 6.00            | 6.90            | 7.94            | 9.13            | 10.04            |
| Depreciation                                    | 1.87            | 1.60            | 1.38            | 1.18            | 1.01             |
| Wages & labour                                  | 20.16           | 23.18           | 26.89           | 30.93           | 34.33            |
| Repair & maintenance                            | 2.71            | 3.12            | 3.43            | 3.74            | 4.13             |
| Packaging                                       | 7.15            | 6.12            | 5.49            | 4.49            | 5.79             |
| <b>Cost of Production</b>                       | <b>95.97</b>    | <b>104.97</b>   | <b>114.24</b>   | <b>123.87</b>   | <b>136.42</b>    |
| <b>Add: Opening Stock /WIP</b>                  | <b>-</b>        | <b>4.80</b>     | <b>5.25</b>     | <b>5.71</b>     | <b>6.19</b>      |
| <b>Less: Closing Stock /WIP</b>                 | <b>4.80</b>     | <b>5.25</b>     | <b>5.71</b>     | <b>6.19</b>     | <b>6.82</b>      |
| Cost of Sales                                   | 91.17           | 104.52          | 113.77          | 123.39          | 135.79           |
| <b>GROSS PROFIT</b>                             | <b>17.17</b>    | <b>20.44</b>    | <b>23.37</b>    | <b>26.36</b>    | <b>29.50</b>     |
|   | <b>15.85%</b>   | <b>16.36%</b>   | <b>17.04%</b>   | <b>17.60%</b>   | <b>17.85%</b>    |
| Salary to Staff                                 | 6.60            | 7.66            | 9.34            | 10.74           | 11.82            |
| Interest on Term Loan                           | 0.72            | 0.63            | 0.46            | 0.28            | 0.10             |
| Interest on working Capital                     | 0.77            | 0.77            | 0.77            | 0.77            | 0.77             |
| Rent  | 3.60            | 3.96            | 4.36            | 4.79            | 5.27             |
| selling & adm exp                               | 4.33            | 4.87            | 4.80            | 4.94            | 4.30             |
| <b>TOTAL</b>                                    | <b>16.02</b>    | <b>17.89</b>    | <b>19.72</b>    | <b>21.52</b>    | <b>22.25</b>     |
| NET PROFIT                                      | 1.15            | 2.54            | 3.65            | 4.84            | 7.25             |
|   | <b>1.06%</b>    | <b>2.04%</b>    | <b>2.66%</b>    | <b>3.23%</b>    | <b>4.39%</b>     |
| Taxation  | -               | 0.00            | 0.06            | 0.12            | 0.58             |
| PROFIT (After Tax)                              | 1.15            | 2.54            | 3.59            | 4.72            | 6.68             |

**4.16. BREAK EVEN POINT ANALYSIS**

| <b>BREAK EVEN POINT ANALYSIS</b>              |               |               |               |               |               |
|---|---------------|---------------|---------------|---------------|---------------|
| <b>Year</b>                                   | <b>I</b>      | <b>II</b>     | <b>III</b>    | <b>IV</b>     | <b>V</b>      |
| <b>Net Sales &amp; Other Income</b>           | 108.35        | 124.96        | 137.15        | 149.75        | 165.29        |
| Less : Op. WIP Goods                          | -             | 4.80          | 5.25          | 5.71          | 6.19          |
| Add : Cl. WIP Goods                           | 4.80          | 5.25          | 5.71          | 6.19          | 6.82          |
| <b>Total Sales</b>                            | <b>113.14</b> | <b>125.41</b> | <b>137.61</b> | <b>150.23</b> | <b>165.92</b> |
| <b>Variable &amp; Semi Variable Exp.</b>      |               |               |               |               |               |
| Raw Material Consumed                         | 58.08         | 64.03         | 69.12         | 74.40         | 81.12         |
| Electricity Exp/Coal Consumption at 85%       | 5.10          | 5.87          | 6.74          | 7.76          | 8.53          |
| Wages & Salary at 60%                         | 16.06         | 18.50         | 21.74         | 25.00         | 27.69         |
| Selling & administrative Expenses 80%         | 3.47          | 3.90          | 3.84          | 3.95          | 3.44          |
| Interest on working Capital                   | 0.77          | 0.77          | 0.77          | 0.77          | 0.77          |
| Repair & maintenance                          | 2.71          | 3.12          | 3.43          | 3.74          | 4.13          |
| Packaging                                     | 7.15          | 6.12          | 5.49          | 4.49          | 5.79          |
| <b>Total Variable &amp; Semi Variable Exp</b> | <b>93.33</b>  | <b>102.32</b> | <b>111.13</b> | <b>120.12</b> | <b>131.46</b> |
| <b>Contribution</b>                           | <b>19.81</b>  | <b>23.09</b>  | <b>26.48</b>  | <b>30.11</b>  | <b>34.45</b>  |
| <b>Fixed &amp; Semi Fixed Expenses</b>        |               |               |               |               |               |
| Electricity Exp/Coal Consumption at 15%       | 0.90          | 1.04          | 1.19          | 1.37          | 1.51          |
| Wages & Salary at 40%                         | 10.70         | 12.34         | 14.49         | 16.67         | 18.46         |
| Interest on Term Loan                         | 0.72          | 0.63          | 0.46          | 0.28          | 0.10          |
| Depreciation                                  | 1.87          | 1.60          | 1.38          | 1.18          | 1.01          |
| Selling & administrative Expenses 20%         | 0.87          | 0.97          | 0.96          | 0.99          | 0.86          |
| Rent  | 3.60          | 3.96          | 4.36          | 4.79          | 5.27          |
| <b>Total Fixed Expenses</b>                   | <b>18.66</b>  | <b>20.54</b>  | <b>22.83</b>  | <b>25.27</b>  | <b>27.20</b>  |
| <b>Capacity Utilization</b>                   | <b>55%</b>    | <b>58%</b>    | <b>60%</b>    | <b>62%</b>    | <b>65%</b>    |
| <b>OPERATING PROFIT</b>                       | <b>1.15</b>   | <b>2.54</b>   | <b>3.65</b>   | <b>4.84</b>   | <b>7.25</b>   |
| <b>BREAK EVEN POINT</b>                       | <b>52%</b>    | <b>52%</b>    | <b>52%</b>    | <b>52%</b>    | <b>51%</b>    |
| <b>BREAK EVEN SALES</b>                       | <b>106.59</b> | <b>111.58</b> | <b>118.64</b> | <b>126.08</b> | <b>131.00</b> |

**4.17. PROJECTED BALANCE SHEET**

| <b><u>PROJECTED BALANCE SHEET</u></b> |                 |                 |                 |                 |                 | <b>(in Lacs)</b> |
|---------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|
| <b>PARTICULARS</b>                    | <b>1st year</b> | <b>2nd year</b> | <b>3rd year</b> | <b>4th year</b> | <b>5th year</b> |                  |
| <b><u>Liabilities</u></b>             |                 |                 |                 |                 |                 |                  |
| Capital                               |                 |                 |                 |                 |                 |                  |
| opening balance                       |                 | 7.91            | 9.95            | 12.55           | 15.27           |                  |
| Add:- Own Capital                     | 2.10            |                 |                 |                 |                 |                  |
| Add:- Retained Profit                 | 1.15            | 2.54            | 3.59            | 4.72            | 6.68            |                  |
| Less:- Drawings                       | -               | 0.50            | 1.00            | 2.00            | 3.00            |                  |
| Subsidy/grant                         | 4.66            |                 |                 |                 |                 |                  |
| Closing Balance                       | 7.91            | 9.95            | 12.55           | 15.27           | 18.95           |                  |
| Term Loan                             | 6.51            | 4.88            | 3.26            | 1.63            | -               |                  |
| Working Capital Limit                 | 7.00            | 7.00            | 7.00            | 7.00            | 7.00            |                  |
| Sundry Creditors                      | 1.94            | 2.13            | 2.30            | 2.48            | 2.70            |                  |
| Provisions & Other Liab               | 0.40            | 0.50            | 0.60            | 0.72            | 0.86            |                  |
| <b>TOTAL :</b>                        | <b>23.76</b>    | <b>24.47</b>    | <b>25.71</b>    | <b>27.10</b>    | <b>29.51</b>    |                  |
| <b><u>Assets</u></b>                  |                 |                 |                 |                 |                 |                  |
| <b>Fixed Assets ( Gross)</b>          | 13.32           | 13.32           | 13.32           | 13.32           | 13.32           |                  |
| Gross Dep.                            | 1.87            | 3.48            | 4.85            | 6.03            | 7.04            |                  |
| <b>Net Fixed Assets</b>               | <b>11.45</b>    | <b>9.84</b>     | <b>8.47</b>     | <b>7.29</b>     | <b>6.28</b>     |                  |
| <b>Current Assets</b>                 |                 |                 |                 |                 |                 |                  |
| Sundry Debtors                        | 2.17            | 2.50            | 2.74            | 2.99            | 3.31            |                  |
| Stock in Hand                         | 7.70            | 8.45            | 9.17            | 9.91            | 10.88           |                  |
| Cash and Bank                         | 2.44            | 3.68            | 5.33            | 6.90            | 9.05            |                  |
| <b>TOTAL :</b>                        | <b>23.76</b>    | <b>24.47</b>    | <b>25.71</b>    | <b>27.10</b>    | <b>29.51</b>    |                  |

**4.18. CASH FLOW STATEMENT**

| <b><u>PROJECTED CASH FLOW STATEMENT</u></b> |                     |                     |                     |                     | <b>(in Lacs)</b> |
|---|---------------------|---------------------|---------------------|---------------------|------------------|
| <b>PARTICULARS</b>                          | <b>1st<br/>year</b> | <b>2nd<br/>year</b> | <b>3rd<br/>year</b> | <b>4th<br/>year</b> | <b>5th year</b>  |
| <b><u>SOURCES OF FUND</u></b>               |                     |                     |                     |                     |                  |
| Own Margin                                  | 2.10                |                     |                     |                     |                  |
| Net Profit                                  | 1.15                | 2.54                | 3.65                | 4.84                | 7.25             |
| Depriciation & Exp. W/off                   | 1.87                | 1.60                | 1.38                | 1.18                | 1.01             |
| Increase in Cash Credit                     | 7.00                | -                   | -                   | -                   | -                |
| Increase In Term Loan                       | 7.33                | -                   | -                   | -                   | -                |
| Increase in Creditors                       | 1.94                | 0.20                | 0.17                | 0.18                | 0.22             |
| Increase in Provisions & Oth lib            | 0.40                | 0.10                | 0.10                | 0.12                | 0.14             |
| Sunsidy/grant                               | 4.66                |                     |                     |                     |                  |
| <b>TOTAL :</b>                              | <b>26.44</b>        | <b>4.45</b>         | <b>5.30</b>         | <b>6.32</b>         | <b>8.63</b>      |
| <b><u>APPLICATION OF FUND</u></b>           |                     |                     |                     |                     |                  |
| Increase in Fixed Assets                    | 13.32               |                     |                     |                     |                  |
| Increase in Stock                           | 7.70                | 0.75                | 0.72                | 0.75                | 0.96             |
| Increase in Debtors                         | 2.17                | 0.33                | 0.24                | 0.25                | 0.31             |
| Repayment of Term Loan                      | 0.81                | 1.63                | 1.63                | 1.63                | 1.63             |
| Drawings                                    | -                   | 0.50                | 1.00                | 2.00                | 3.00             |
| Taxation                                    | -                   | 0.00                | 0.06                | 0.12                | 0.58             |
| <b>TOTAL :</b>                              | <b>24.00</b>        | <b>3.21</b>         | <b>3.65</b>         | <b>4.74</b>         | <b>6.48</b>      |
| Opening Cash & Bank Balance                 | -                   | 2.44                | 3.68                | 5.33                | 6.90             |
| Add : Surplus                               | 2.44                | 1.24                | 1.65                | 1.57                | 2.15             |
| Closing Cash & Bank Balance                 | <b>2.44</b>         | <b>3.68</b>         | <b>5.33</b>         | <b>6.90</b>         | <b>9.05</b>      |



**4.19. DEBT SERVICE COVERAGE RATIO**

| <b><u>CALCULATION OF D.S.C.R</u></b>   |                     |                     |                     |                     |                     |
|--|---------------------|---------------------|---------------------|---------------------|---------------------|
| <b>PARTICULARS</b>                     | <b>1st<br/>year</b> | <b>2nd<br/>year</b> | <b>3rd<br/>year</b> | <b>4th<br/>year</b> | <b>5th<br/>year</b> |
| CASH ACCRUALS                          | 3.02                | 4.15                | 4.97                | 5.90                | 7.69                |
| Interest on Term Loan                  | 0.72                | 0.63                | 0.46                | 0.28                | 0.10                |
| <b>Total</b>                           | <b>3.74</b>         | <b>4.78</b>         | <b>5.42</b>         | <b>6.18</b>         | <b>7.78</b>         |
| <b><u>REPAYMENT</u></b>                |                     |                     |                     |                     |                     |
| Instalment of Term Loan                | 0.81                | 1.63                | 1.63                | 1.63                | 1.63                |
| Interest on Term Loan                  | 0.72                | 0.63                | 0.46                | 0.28                | 0.10                |
| <b>Total</b>                           | <b>1.53</b>         | <b>2.26</b>         | <b>2.08</b>         | <b>1.90</b>         | <b>1.73</b>         |
| <b>DEBT SERVICE COVERAGE<br/>RATIO</b> | <b>2.44</b>         | <b>2.11</b>         | <b>2.60</b>         | <b>3.25</b>         | <b>4.51</b>         |
| <b>AVERAGE D.S.C.R.</b>                | <b>2.98</b>         |                     |                     |                     |                     |