

# **Model Detailed Project Report**

**MAI E FLOUR MILL**

**Prepared by**

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**Ministry of Food Processing Industries, Government of India**

## 1. 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. 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.

## **3. PRODUCT DESCRIPTION**

### **3.1 PRODUCT BENEFITS**

- According to a report of maize meal nutrition, maize contains rich fiber, no starch, and fat, which make it converted carbohydrates that is easily to be digested by our body. A lot of fiber accelerates the gastrointestinal peristalsis to help digestion and defecation. It is good to prevent constipation.
- A special carbohydrate in maize meal gives you a full sense and burns much fat than you eat. It means that you will not get hunger and meanwhile, have no worry of getting weight. Janine Higgins, PhD of nutrition said carbohydrate avoids the liver from using carbohydrate as fuel and meanwhile, it burns the body fat more than you eat. Maize flour's benefits of weight-losing are especially favored by girls.
- Maize meal is said to be helpful to prevent cancer by a variety of anti-cancer factors such as Magesium, xanthophyll, and others. The anti-cancer factors can prevent the expansion of cancer cell. Furthermore, maize meal can also keep your skin smooth and prevent skin irritations.

### **3.2 RAW MATERIAL**

- Maize Corn are the raw material;
- Packaging material

### **3.3 MANUFACTURING PROCESS**

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.





## **4. PROJECT COMPONENTS**

### **4.1 Land & Building**

The approximate total area required for complete factory setup is 4000-5000 Sq. ft. approximately smooth production including storage area.

### **4.2 Plant & Machinery**

<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>	

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

**Note:** Approx. Total Machinery cost shall be Rs 28.80 lakhs including equipment's but excluding GST and Transportation Cost.

### **4.3 Power Requirement**

The borrower shall require power load of 25 KW which shall be applied with Power Corporation.

### **4.4 Manpower Requirement**

18 Manpower are required for the Maize Flour Mill Business.

Includes:

1 Plant Operator

1 Supervisor

4 Skilled Labour

8 Unskilled Labour

1 Manager

2 Administrative Staffs

1 Accountant



## 5. FINANCIALS

### 5.1 Cost of Project

COST OF PROJECT	
(in Lacs)	
PARTICULARS	Amount
Land & Building	Owned/Rented
Plant & Machinery	28.80
Miscellaneous Assets	0.75
Working capital	10.00
<b>Total</b>	<b>39.55</b>

### 5.2 Means of Finance

MEANS OF FINANCE	
PARTICULARS	AMOUNT
Own Contribution (min 10%)	4.30
Subsidy @35%(Max. Rs 10 Lac)	10.00
Term Loan @ 55%	16.25
Working Capital (bank Finance)	9.00
<b>Total</b>	<b>39.55</b>

### 5.3 Projected Balance Sheet

<b>PROJECTED BALANCE SHEET</b>					(in 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><u>Liabilities</u></b>					
Capital					
opening balance		11.78	17.67	23.92	31.81
Add:- Own Capital	4.30				
Add:- Retained Profit	7.48	10.89	14.25	17.89	22.56
Less:- Drawings	-	5.00	8.00	10.00	12.00
Closing Balance	11.78	17.67	23.92	31.81	42.37
Subsidy/grant	10.00	10.00	10.00	10.00	10.00
Term Loan	14.45	10.84	7.22	3.61	-
Working Capital Limit	9.00	9.00	9.00	9.00	9.00
Sundry Creditors	1.10	1.27	1.44	1.63	1.82
Provisions & Other Liab	0.40	0.50	0.60	0.72	0.86
<b>TOTAL :</b>	<b>46.73</b>	<b>49.27</b>	<b>52.19</b>	<b>56.77</b>	<b>64.05</b>
<b><u>Assets</u></b>					
<b>Fixed Assets ( Gross)</b>	29.55	29.55	29.55	29.55	29.55
Gross Dep.	4.40	8.13	11.32	14.02	16.33
<b>Net Fixed Assets</b>	<b>25.16</b>	<b>21.42</b>	<b>18.23</b>	<b>15.53</b>	<b>13.22</b>
Subsidy FD in Lien	10.00	10.00	10.00	10.00	10.00
<b>Current Assets</b>					
Sundry Debtors	2.99	3.60	4.10	4.62	5.27
Stock in Hand	8.29	9.44	10.66	11.97	13.35
Cash and Bank	0.29	4.81	9.19	14.66	22.21
<b>TOTAL :</b>	<b>46.73</b>	<b>49.27</b>	<b>52.19</b>	<b>56.77</b>	<b>64.05</b>

#### 5.4 Projected Cash Flow

<b>PROJECTED CASH FLOW STATEMENT</b>					(in Lacs)
<b>PARTICULARS</b>	<b>1st year</b>	<b>2nd year</b>	<b>3rd year</b>	<b>4th year</b>	<b>5th year</b>

**SOURCES OF FUND**

Own Margin	4.30				
Net Profit	7.88	12.13	15.66	20.86	26.73
Depriciation & Exp. W/off	4.40	3.74	3.18	2.71	2.30
Increase in Cash Credit	9.00	-	-	-	-
Increase In Term Loan	16.25	-	-	-	-
Increase in Creditors	1.10	0.17	0.18	0.19	0.20
Increase in Provisions & Oth lib	0.40	0.10	0.10	0.12	0.14
Subsidy/grant	10.00				

<b>TOTAL :</b>	<b>53.32</b>	<b>16.13</b>	<b>19.12</b>	<b>23.87</b>	<b>29.38</b>
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**APPLICATION OF FUND**

Increase in Fixed Assets	29.55				
Increase in Stock	8.29	1.16	1.22	1.30	1.38
Increase in Debtors	2.99	0.61	0.50	0.52	0.65
Repayment of Term Loan	1.81	3.61	3.61	3.61	3.61
Subsidy/grant	10.00				
Drawings	-	5.00	8.00	10.00	12.00
Taxation	0.39	1.24	1.41	2.97	4.18

<b>TOTAL :</b>	<b>53.03</b>	<b>11.62</b>	<b>14.74</b>	<b>18.41</b>	<b>21.82</b>
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Opening Cash & Bank Balance	-	0.29	4.81	9.19	14.66
Add : Surplus	0.29	4.52	4.38	5.46	7.56
Closing Cash & Bank Balance	<b>0.29</b>	<b>4.81</b>	<b>9.19</b>	<b>14.66</b>	<b>22.21</b>

## 5.5 Projected Profitability

<b>PROJECTED PROFITABILITY STATEMENT</b>					(in Lacs)
<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>50%</b>	<b>55%</b>	<b>60%</b>	<b>65%</b>	<b>70%</b>
<b><u>SALES</u></b>					
<b>Gross Sale</b>					
Maize Flour	128.25	154.40	175.67	198.14	225.99
<b>Total</b>	<b>128.25</b>	<b>154.40</b>	<b>175.67</b>	<b>198.14</b>	<b>225.99</b>
<b>COST OF SALES</b>					
Raw Material Consumed	66.00	75.90	86.40	97.50	109.20
Electricity Expenses	6.00	6.90	7.94	9.13	10.04
Depreciation	4.40	3.74	3.18	2.71	2.30
Wages & labour	18.12	19.93	21.93	24.12	26.53
Repair & maintenance	3.21	3.86	4.39	4.95	5.65
Packaging	6.41	7.72	8.78	9.91	11.30
<b>Cost of Production</b>	<b>104.13</b>	<b>118.05</b>	<b>132.62</b>	<b>148.31</b>	<b>165.02</b>
<b>Add: Opening Stock /WIP</b>	-	5.21	5.90	6.63	7.42
<b>Less: Closing Stock /WIP</b>	5.21	5.90	6.63	7.42	8.25
Cost of Sales	98.93	117.36	131.89	147.53	164.19
<b>GROSS PROFIT</b>	<b>29.32</b>	<b>37.04</b>	<b>43.78</b>	<b>50.61</b>	<b>61.80</b>
	<b>22.86%</b>	<b>23.99%</b>	<b>24.92%</b>	<b>25.54%</b>	<b>27.35%</b>
Salary to Staff	5.64	6.20	6.82	7.51	8.26

Interest on Term Loan	1.60	1.41	1.01	0.61	0.22
Interest on working Capital	0.99	0.99	0.99	0.99	0.99
Rent	3.60	3.96	4.36	4.79	5.27
selling & adm exp	9.62	12.35	14.93	15.85	20.34
<b>TOTAL</b>	<b>21.45</b>	<b>24.91</b>	<b>28.11</b>	<b>29.75</b>	<b>35.07</b>
NET PROFIT	7.88	12.13	15.66	20.86	26.73
	<b>6.14%</b>	<b>7.85%</b>	<b>8.92%</b>	<b>10.53%</b>	<b>11.83%</b>
Taxation	0.39	1.24	1.41	2.97	4.18
PROFIT (After Tax)	7.48	10.89	14.25	17.89	22.56

## 5.6 Production and Yield

<b><u>COMPUTATION OF PRODUCTION OF MAIZE FLOUR</u></b>			
<b>Items to be Manufactured</b>			
Maize Flour			
Machine capacity Per hour		250	KG
Total working Hours		8	
Machine capacity Per Day		2,000	KG
working days in amonth		25	Days
working days per annum		300	
machine capacity per annum		600000	KG

<b>Production of Maize Flour</b>		
<b>Production</b>	<b>Capacity</b>	<b>KG</b>
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

<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	50%	22.00	66.00
2nd year	55%	23.00	75.90
3rd year	60%	24.00	86.40
4th year	65%	25.00	97.50
5th year	70%	26.00	109.20

## **5.7 Sales Revenue**

<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	-	15,000	16,500	18,000	19,500
Production	300,000	330,000	360,000	390,000	420,000
Less : Closing Stock	15,000	16,500	18,000	19,500	21,000
<b>Net Sale</b>	<b>285,000</b>	<b>328,500</b>	<b>358,500</b>	<b>388,500</b>	<b>418,500</b>
sale price per KG	45.00	47.00	49.00	51.00	54.00
<b>Sales (in Lacs)</b>	<b>128.25</b>	<b>154.40</b>	<b>175.67</b>	<b>198.14</b>	<b>225.99</b>

## 5.8 Working Capital Assessment

<b>COMPUTATION OF CLOSING STOCK &amp; WORKING CAPITAL</b>					(in 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><u>Finished Goods</u></b>					
	5.21	5.90	6.63	7.42	8.25
<b><u>Raw Material</u></b>					
	3.08	3.54	4.03	4.55	5.10
<b>Closing Stock</b>	<b>8.29</b>	<b>9.44</b>	<b>10.66</b>	<b>11.97</b>	<b>13.35</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	8.29			
Less : Creditors	1.10			
<b>Paid stock</b>	<b>7.19</b>	<b>10%</b>	<b>0.72</b>	<b>90%</b> <b>6.47</b>
<b>Sundry Debtors</b>	<b>2.99</b>	<b>10%</b>	<b>0.30</b>	<b>90%</b> <b>2.69</b>
	<b>10.18</b>		<b>1.02</b>	<b>9.16</b>
<b>MPBF</b>				<b>9.16</b>
<b>WORKING CAPITAL LIMIT DEMAND ( from Bank)</b>				<b>9.00</b>
<b>Working Capital Margin</b>				<b>1.00</b>

## 5.9 Power, Salary & Wages Calculation

<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.

<b><u>BREAK UP OF LABOUR CHARGES</u></b>			
<b>Particulars</b>	<b>Wages Rs. per Month</b>	<b>No of Employees</b>	<b>Total Salary</b>
Plant Operator	15,000	1	15,000
Supervisor	20,000	1	20,000
Skilled (in thousand rupees)	12,000	4	48,000
Unskilled (in thousand rupees)	8,500	8	68,000
<b>Total salary per month</b>			<b>151,000</b>
<b>Total annual labour charges</b>	<b>(in lacs)</b>		<b>18.12</b>

<b><u>BREAK UP OF STAFF SALARY CHARGES</u></b>			
<b>Particulars</b>	<b>Salary Rs. per Month</b>	<b>No of Employees</b>	<b>Total Salary</b>
Administrative Staff	6,000	2	12,000
Manager	20,000	1	20,000
Accountant	15,000	1	15,000
<b>Total salary per month</b>			<b>47,000</b>
<b>Total annual Staff charges</b>	<b>(in lacs)</b>		<b>5.64</b>



## 5.10 DSCR

<b><u>CALCULATION OF D.S.C.R</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>
CASH ACCRUALS	11.88	14.63	17.43	20.60	24.86
Interest on Term Loan	1.60	1.41	1.01	0.61	0.22
<b>Total</b>	<b>13.48</b>	<b>16.04</b>	<b>18.44</b>	<b>21.21</b>	<b>25.07</b>
<b><u>REPAYMENT</u></b>					
Instalment of Term Loan	1.81	3.61	3.61	3.61	3.61
Interest on Term Loan	1.60	1.41	1.01	0.61	0.22
<b>Total</b>	<b>3.40</b>	<b>5.02</b>	<b>4.62</b>	<b>4.22</b>	<b>3.83</b>
<b>DEBT SERVICE COVERAGE RATIO</b>	<b>3.96</b>	<b>3.20</b>	<b>3.99</b>	<b>5.02</b>	<b>6.55</b>
<b>AVERAGE D.S.C.R.</b>	<b>4.54</b>				

## 5.11 Depreciation

<b><u>COMPUTATION OF DEPRECIATION</u></b>			(in Lacs)
<b>Description</b>	<b>Plant &amp; Machinery</b>	<b>Miss. Assets</b>	<b>TOTAL</b>
Rate of Depreciation	<b>15.00%</b>	<b>10.00%</b>	
<b>Opening Balance</b>	-	-	-
Addition	28.80	0.75	29.55
Total	28.80	0.75	29.55
Less : Depreciation	4.32	0.08	4.40
<b>WDV at end of Year</b>	<b>24.48</b>	<b>0.68</b>	<b>25.16</b>

Additions During The Year	-	-	-
Total	24.48	0.68	25.16
Less : Depreciation	3.67	0.07	3.74
<b>WDV at end of Year</b>	<b>20.81</b>	<b>0.61</b>	<b>21.42</b>
Additions During The Year	-	-	-
Total	20.81	0.61	21.42
Less : Depreciation	3.12	0.06	3.18
<b>WDV at end of Year</b>	<b>17.69</b>	<b>0.55</b>	<b>18.23</b>
Additions During The Year	-	-	-
Total	17.69	0.55	18.23
Less : Depreciation	2.65	0.05	2.71
<b>WDV at end of Year</b>	<b>15.03</b>	<b>0.49</b>	<b>15.53</b>
Additions During The Year	-	-	-
Total	15.03	0.49	15.53
Less : Depreciation	2.26	0.05	2.30
<b>WDV at end of Year</b>	<b>12.78</b>	<b>0.44</b>	<b>13.22</b>

## 5.12 Repayment schedule

REPAYMENT SCHEDULE OF TERM LOAN								
							Interest	11.00%
Year	Particulars	Amount	Addition	Total	Interest	Repayment	Closing Balance	
ist	Opening Balance							
	1st month	-	16.25	16.25	-	-	16.25	
	2nd month	16.25	-	16.25	0.15	-	16.25	
	3rd month	16.25	-	16.25	0.15	-	16.25	
	4th month	16.25	-	16.25	0.15	-	16.25	
	5th month	16.25	-	16.25	0.15	-	16.25	
	6th month	16.25	-	16.25	0.15	-	16.25	
	7th month	16.25	-	16.25	0.15	0.30	15.95	

	8th month	15.95	-	15.95	0.15	0.30	15.65
	9th month	15.65	-	15.65	0.14	0.30	15.35
	10th month	15.35	-	15.35	0.14	0.30	15.05
	11th month	15.05	-	15.05	0.14	0.30	14.75
	12th month	14.75	-	14.75	0.14	0.30	14.45
					1.60	1.81	
<b>2nd</b>	Opening Balance						
	1st month	14.45	-	14.45	0.13	0.30	14.15
	2nd month	14.15	-	14.15	0.13	0.30	13.84
	3rd month	13.84	-	13.84	0.13	0.30	13.54
	4th month	13.54	-	13.54	0.12	0.30	13.24
	5th month	13.24	-	13.24	0.12	0.30	12.94
	6th month	12.94	-	12.94	0.12	0.30	12.64
	7th month	12.64	-	12.64	0.12	0.30	12.34
	8th month	12.34	-	12.34	0.11	0.30	12.04
	9th month	12.04	-	12.04	0.11	0.30	11.74
	10th month	11.74	-	11.74	0.11	0.30	11.44
	11th month	11.44	-	11.44	0.10	0.30	11.14
	12th month	11.14	-	11.14	0.10	0.30	10.84
					1.41	3.61	
<b>3rd</b>	Opening Balance						
	1st month	10.84	-	10.84	0.10	0.30	10.53
	2nd month	10.53	-	10.53	0.10	0.30	10.23
	3rd month	10.23	-	10.23	0.09	0.30	9.93

	4th month	9.93	-	9.93	0.09	0.30	9.63
	5th month	9.63	-	9.63	0.09	0.30	9.33
	6th month	9.33	-	9.33	0.09	0.30	9.03
	7th month	9.03	-	9.03	0.08	0.30	8.73
	8th month	8.73	-	8.73	0.08	0.30	8.43
	9th month	8.43	-	8.43	0.08	0.30	8.13
	10th month	8.13	-	8.13	0.07	0.30	7.83
	11th month	7.83	-	7.83	0.07	0.30	7.52
	12th month	7.52	-	7.52	0.07	0.30	7.22
					<b>1.01</b>	<b>3.61</b>	
<b>4th</b>	Opening Balance						
	1st month	7.22	-	7.22	0.07	0.30	6.92
	2nd month	6.92	-	6.92	0.06	0.30	6.62
	3rd month	6.62	-	6.62	0.06	0.30	6.32
	4th month	6.32	-	6.32	0.06	0.30	6.02
	5th month	6.02	-	6.02	0.06	0.30	5.72
	6th month	5.72	-	5.72	0.05	0.30	5.42
	7th month	5.42	-	5.42	0.05	0.30	5.12
	8th month	5.12	-	5.12	0.05	0.30	4.82
	9th month	4.82	-	4.82	0.04	0.30	4.51
	10th month	4.51	-	4.51	0.04	0.30	4.21
	11th month	4.21	-	4.21	0.04	0.30	3.91
	12th month	3.91	-	3.91	0.04	0.30	3.61
					<b>0.61</b>	<b>3.61</b>	

<b>5th</b>	Opening Balance						
1st month	3.61	-	3.61	0.03	0.30	3.31	
2nd month	3.31	-	3.31	0.03	0.30	3.01	
3rd month	3.01	-	3.01	0.03	0.30	2.71	
4th month	2.71	-	2.71	0.02	0.30	2.41	
5th month	2.41	-	2.41	0.02	0.30	2.11	
6th month	2.11	-	2.11	0.02	0.30	1.81	
7th month	1.81	-	1.81	0.02	0.30	1.50	
8th month	1.50	-	1.50	0.01	0.30	1.20	
9th month	1.20	-	1.20	0.01	0.30	0.90	
10th month	0.90	-	0.90	0.01	0.30	0.60	
11th month	0.60	-	0.60	0.01	0.30	0.30	
12th month	0.30	-	0.30	0.00	0.30	-	
				<b>0.22</b>	<b>3.61</b>		
DOOR TO DOOR	60	MONTHS					
MORATORIUM PERIOD	6	MONTHS					
REPAYMENT PERIOD	54	MONTHS					

### 5.13 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>	128.25	154.40	175.67	198.14	225.99
Less : Op. WIP Goods	-	5.21	5.90	6.63	7.42
Add : Cl. WIP Goods	5.21	5.90	6.63	7.42	8.25

<b>Total Sales</b>	<b>133.46</b>	<b>155.09</b>	<b>176.39</b>	<b>198.92</b>	<b>226.83</b>
<b>Variable &amp; Semi Variable Exp.</b>					
Raw Material Consumed	66.00	75.90	86.40	97.50	109.20
Electricity Exp/Coal Consumption at 85%	5.10	5.87	6.74	7.76	8.53
Wages & Salary at 60%	14.26	15.68	17.25	18.97	20.87
Selling & administrative Expenses 80%	7.70	9.88	11.95	12.68	16.27
Interest on working Capital	0.99	0.99	0.99	0.99	0.99
Repair & maintenance	3.21	3.86	4.39	4.95	5.65
Packaging	6.41	7.72	8.78	9.91	11.30
<b>Total Variable &amp; Semi Variable Exp</b>	<b>103.66</b>	<b>119.90</b>	<b>136.50</b>	<b>152.76</b>	<b>172.81</b>
<b>Contribution</b>	<b>29.80</b>	<b>35.19</b>	<b>39.89</b>	<b>46.16</b>	<b>54.01</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%	9.50	10.45	11.50	12.65	13.91
Interest on Term Loan	1.60	1.41	1.01	0.61	0.22
Depreciation	4.40	3.74	3.18	2.71	2.30
Selling & administrative Expenses 20%	1.92	2.47	2.99	3.17	4.07
Rent	3.60	3.96	4.36	4.79	5.27
<b>Total Fixed Expenses</b>	<b>21.92</b>	<b>23.07</b>	<b>24.22</b>	<b>25.30</b>	<b>27.28</b>
<b>Capacity Utilization</b>	<b>50%</b>	<b>55%</b>	<b>60%</b>	<b>65%</b>	<b>70%</b>
<b>OPERATING PROFIT</b>	<b>7.88</b>	<b>12.13</b>	<b>15.66</b>	<b>20.86</b>	<b>26.73</b>
<b>BREAK EVEN POINT</b>	<b>37%</b>	<b>36%</b>	<b>36%</b>	<b>36%</b>	<b>35%</b>
<b>BREAK EVEN SALES</b>	<b>98.18</b>	<b>101.65</b>	<b>107.12</b>	<b>109.03</b>	<b>114.56</b>

## **6. LICENSE & APPROVALS**

- Obtain the GST registration.
- Additionally, obtain the Udyog Aadhar registration Number.
- Fire/pollution license as required.
- FSSAI License
- Factory License
- Choice of a Brand Name of the product and secure the name with Trademark if required.

## **7. ASSUMPTIONS**

1. Production Capacity of Maize flour is 250 kg per day. First year, Capacity has been taken @ 50%.
2. Working shift of 8 hours per day has been considered.
3. Raw Material stock is for 14 days and Finished goods Closing Stock has been taken for 15 days.
4. Credit period to Sundry Debtors has been given for 7 days.
5. Credit period by the Sundry Creditors has been provided for 5 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.

## **Limitations of the Model DPR and Guidelines for Entrepreneurs**

### **Limitations of the Model DPR**

- i. This model DPR has provided only the basic standard components and methodology to be adopted by an entrepreneur while submitting a proposal under the Formalization of Micro Food Processing Enterprises Scheme of MoFPI.
- ii. This is a model DPR made to provide general methodological structure not for specific entrepreneur/crops/location. Therefore, information on the entrepreneur, forms and structure (proprietorship/partnership/cooperative/ FPC/joint stock company) of his business, details of proposed DPR, project location, raw material base/contract sourcing, entrepreneurs own SWOT analysis, detailed market research, rationale of the project for specific location, community advantage/benefit from the project, employment generation and many more detailed aspects not included.
- iii. The present DPR is based on certain assumptions on cost, prices, interest, capacity utilization, output recovery rate and so on. However, these assumptions in reality may vary across places, markets and situations; thus the resultant calculations will also change accordingly.