

# **Model Detailed Project Report**

**DAL MILL(TUR DAL)**

**Prepared by**

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## 1. INTRODUCTION



Pulses refer to the dried, edible seeds of leguminous crops. Pulses play a fundamental role as a low-fat source of protein and an essential component of traditional food baskets. These are most essential element for a well-balanced diet and major source of protein to vegetarian people of India. There are several varieties of pulses in India. Most of them are produced and consumed locally. Chickpeas (Chana), pigeon peas (Arhar / Toor Dal), Urad (Urad Dal), Mung (Moong) and red lentils (Masoor) are the top five pulses grown in India. These pulses account for over 80 per cent of the total production in the country. The conversion of pulses seed into Dal is done through the process of milling. A Dal mill should be located in rural or semi-urban area which have excess production of pulses and connected to market. The project deals with variety of dal such as Masoor Dal, Chana Dal, Urad Dal, etc.

## 2. MARKET POTENTIAL:

Pulses are generally used along with rice and Chapatti as Dal. Dal, garnished with onions, tomatoes and spices is an indispensable nibble in household. The various pulses are part of the normal diet of all vegetarians and are also used frequently by non-vegetarians too. They are the main sources of protein. The pulses are used for preparing hot dishes, sweet dishes and other varieties. Pulses are the most common diet part of Indian families. Dal is dry cereal, which is taken to fulfill the requirements of protein for a normal human being. Due to the high content of proteins pulses are mixed in other cereal foods to increase the quality of proteins to be injected in the body.

India pulses market reached a volume of 27.5 Million Tons in 2019. The market for pulses/Dal is present largely in India where ninety per cent of the produce is consumed locally. Pulses are now increasingly being used in the processing of ready-to-eat (RTE) food products. As a result of rapid urbanization, changing lifestyle and hectic work schedules, healthy snack foods are becoming popular amongst the working population. The demand for pulses will never end but will increase in a increasing rate and rise in population also drives the demand for pulses.

### **3. PRODUCT DESCRIPTION**

#### **3.1 PRODUCT BENEFITS**

- Provides energy
- Excellent source of vegetarian protein
- Keeps your heart healthy
- Diabetic friendly
- Improves Insulin Response
- Lowers Blood Pressure
- High Fiber
- Weight loss

#### **3.2 RAW MATERIAL**

Basic raw material that is used in Dal mill is pigeon peas that are directly procured from farmers and packing material used to pack finished product.

#### **3.3 MANUFACTURING PROCESS**

The Pigeon Pea crop is purchased from suppliers and unloaded in an unloading bin which is a bin with a rod or pipe grit to prevent large stones, branches and any other similarly large agent from entering the Pulse Milling Plant.

Escalators carry the Pigeon Peas into the storage tank of milling plant, from here the pigeon peas are feed to cyclone separator which simply cleans these pigeon peas by removing dust, the pigeon peas are feed to Destoner while the dust is collected in a large dust collection bin.

Destoner simply removes stones from pigeon peas, the stone fall of in a separate tank while pigeon peas fall into a silo, from where they are feed uniformly to various Emery Roll DE husker which simply utilize their respective emery roller set to remove husk of pigeon peas so as to obtain whole tur dal.

This whole tur dal is elevated to a higher level by an elevator where it's feed to another silo which, in turn supplies it to various Classifier Separator, which simply remove any impurities like leaves, sand, other lighter grains etc. from tur dal.

This whole tur dal is now feed to a Lentil Splitting Machine which simply splits the whole tur dal into two pieces generating the final product; which falls in a separate silo; from these silos tur dal are feed to Pulse grader which simply utilizes its vibration and grading trays to separate good tur dal from slightly broken dal, completely broken dal and remaining dirt, all these sorted components fall in separate silos while dirt is collected in a separate bin, with their own feeder arrangement.





The feeder of these silos is opened after placing a sack in its open end so as to fill the sack with tur dal. These sacks are then stitched utilizing a sack stitching machine, weighed to verify the weight content and are then sent for sale.





## **4. PROJECT COMPONENTS**


### **4.1 Land & Building**

The approximate total area required for complete small-scale factory setup is 1200-1500 Sq. ft. approximately smooth production

## 4.2 Plant & Machinery

<b>Horizontal Cyclone Separator</b>	It's used to separate particulate matter within an air suspension using their weight difference.	 A horizontal cyclone separator, a cylindrical machine with a hopper at the bottom and a discharge pipe at the top, mounted on a metal frame.
<b>Destoner</b>	It's a machine designed to remove stones from the given product, which in this case are pulses.	 A destoner machine, a white and blue machine with a hopper at the top and a discharge chute at the bottom.
<b>Emery Roll Dehusker</b>	It's a machine which utilizes emery rollers to remove outer skin of pulses	 An emery roll dehusker, a machine with a hopper at the top and a discharge chute at the bottom, featuring a green roller.
<b>Classifier Separator</b>	It's a machine which is used to separate whole dehusked pulse from husk.	 A classifier separator, a machine with a hopper at the top and a discharge chute at the bottom, featuring a green frame.

<p><b>Lentil Splitting Machine</b></p>	<p>It's a machine designed to split the whole dehusked pulse into two halves, locally called as chakki.</p>	
<p><b>Pulse Grader</b></p>	<p>It's a machine used to separate pulses into unbroken, partially broken &amp; broken dal.</p>	
<p><b>Unloading Bin</b></p>	<p>These are large bins designed for unloading of grains &amp; similar product, they are equipped with large rod mess to prevent big impurities from entering system.</p>	
<p><b>Dust Collection Bin</b></p>	<p>These are large bins usually used in dust collection system to efficiently store the removed dirt from system or product.</p>	

<b>Silos</b>	These equipments are class of storage equipments which are specifically designed for dry grain raw material of small granule composition. Usually used to store grains but can also be used to store cement & aggregate.	
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**Note:** Approx. Total Machinery cost shall be Rs 26.00 lakhs excluding GST and Transportation Cost.

#### **4.3 Power Requirement**

The borrower shall require power load of 15 KW which shall be applied with Power Corporation. However, for standby power arrangement the borrower shall purchase DG Set.

#### **4.4 Manpower Requirement**

8 Manpower are required for the Gram Based Dal Mill

Includes:

1 Plant Operator

1 Skilled Labour

3 Unskilled Labour

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	26.00
miscellaneous Assets	1.20
Working capital	7.78
<b>Total</b>	<b>34.98</b>

### 5.2 Means of Finance

MEANS OF FINANCE	
PARTICULARS	AMOUNT
Own Contribution (min 10%)	3.50
Subsidy @35% (Max. Rs 10 Lac)	9.52
Term Loan @ 55%	14.96
Working Capital (bank Finance)	7.00
<b>Total</b>	<b>34.98</b>



### 5.3 Projected Balance Sheet

<b>PROJECTED BALANCE SHEET</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		13.03	13.01	13.75	16.48	
Add:- Own Capital	3.50					
Add:- Retained Profit	2.01	3.98	5.74	8.73	11.50	
Less:- Drawings	2.00	4.00	5.00	6.00	8.00	
Subsidy/grant	9.52					
Closing Balance	13.03	13.01	13.75	16.48	19.98	
Term Loan	13.30	9.97	6.65	3.32	-	
Working Capital Limit	7.00	7.00	7.00	7.00	7.00	
Sundry Creditors	1.18	1.36	1.55	1.75	1.96	
Provisions & Other Liab	0.40	0.50	0.60	0.72	0.86	
<b>TOTAL :</b>	<b>34.90</b>	<b>31.84</b>	<b>29.54</b>	<b>29.27</b>	<b>29.80</b>	
<b><u>Assets</u></b>						
<b>Fixed Assets ( Gross)</b>	27.20	27.20	27.20	27.20	27.20	
Gross Dep.	4.02	7.44	10.36	12.84	14.96	
<b>Net Fixed Assets</b>	<b>23.18</b>	<b>19.76</b>	<b>16.84</b>	<b>14.36</b>	<b>12.24</b>	
<b>Current Assets</b>						
Sundry Debtors	3.99	4.86	5.59	6.37	7.20	
Stock in Hand	5.13	5.85	6.62	7.44	8.30	
Cash and Bank	2.60	1.37	0.49	1.10	2.07	
<b>TOTAL :</b>	<b>34.90</b>	<b>31.84</b>	<b>29.54</b>	<b>29.27</b>	<b>29.80</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>
<b><u>SOURCES OF FUND</u></b>					
Own Margin	3.50				
Net Profit	2.01	3.98	5.82	9.18	12.81
Depriciation & Exp. W/off	4.02	3.42	2.91	2.48	2.11
Increase in Cash Credit	7.00	-	-	-	-
Increase In Term Loan	14.96	-	-	-	-
Increase in Creditors	1.18	0.18	0.19	0.20	0.21
Increase in Provisions & Oth lib	0.40	0.10	0.10	0.12	0.14
Sunsidy/grant	9.52				
<b>TOTAL :</b>	<b>42.58</b>	<b>7.68</b>	<b>9.03</b>	<b>11.98</b>	<b>15.28</b>
<b><u>APPLICATION OF FUND</u></b>					
Increase in Fixed Assets	27.20				
Increase in Stock	5.13	0.72	0.76	0.82	0.86
Increase in Debtors	3.99	0.87	0.73	0.78	0.83
Repayment of Term Loan	1.66	3.32	3.32	3.32	3.32
Drawings	2.00	4.00	5.00	6.00	8.00
Taxation	-	-	0.09	0.45	1.31
<b>TOTAL :</b>	<b>39.98</b>	<b>8.92</b>	<b>9.91</b>	<b>11.37</b>	<b>14.32</b>
Opening Cash & Bank Balance	-	2.60	1.37	0.49	1.10

Add : Surplus	2.60	(1.24)	(0.88)	0.61	0.96
Closing Cash & Bank Balance	<b>2.60</b>	<b>1.37</b>	<b>0.49</b>	<b>1.10</b>	<b>2.07</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>						
Tur Dal	79.80	97.24	111.85	127.43	143.96	
<b>Total</b>	<b>79.80</b>	<b>97.24</b>	<b>111.85</b>	<b>127.43</b>	<b>143.96</b>	
<b><u>COST OF SALES</u></b>						
Raw Material Consumed	50.40	58.08	66.24	74.88	84.00	
Electricity Expenses	3.60	4.14	4.76	5.48	6.02	
Depreciation	4.02	3.42	2.91	2.48	2.11	
Wages & labour	5.76	6.34	6.97	7.67	8.43	
Repair & maintenance	2.00	2.43	2.80	3.19	3.60	
Packaging	3.19	3.89	4.47	5.10	5.76	
<b>Cost of Production</b>	<b>68.97</b>	<b>78.30</b>	<b>88.16</b>	<b>98.79</b>	<b>109.93</b>	
<b>Add: Opening Stock /WIP</b>	-	3.45	3.91	4.41	4.94	
<b>Less: Closing Stock /WIP</b>	3.45	3.91	4.41	4.94	5.50	

Cost of Sales	65.52	77.83	87.66	98.26	109.37
<b>GROSS PROFIT</b>	<b>14.28</b>	<b>19.40</b>	<b>24.19</b>	<b>29.17</b>	<b>34.59</b>
	<b>17.90%</b>	<b>19.95%</b>	<b>21.63%</b>	<b>22.89%</b>	<b>24.03%</b>
Salary to Staff	3.24	3.56	3.92	4.31	4.74
Interest on Term Loan	1.47	1.30	0.93	0.56	0.20
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	3.19	5.83	8.39	9.56	10.80
<b>TOTAL</b>	<b>12.27</b>	<b>15.42</b>	<b>18.36</b>	<b>19.99</b>	<b>21.78</b>
NET PROFIT	2.01	3.98	5.82	9.18	12.81
	<b>2.52%</b>	<b>4.09%</b>	<b>5.21%</b>	<b>7.20%</b>	<b>8.90%</b>
Taxation			0.09	0.45	1.31
PROFIT (After Tax)	2.01	3.98	5.74	8.73	11.50

## 5.6 Production and Yield

<b><u>COMPUTATION OF PRODUCTION OF TUR DAL</u></b>	
<b>Items to be Manufactured</b>	
Tur Dal	
Machine capacity Per hour	100 KG
Total working Hours	8
Machine capacity Per Day	800
working days in amonth	25 Days
working days per annum	300
machine capacity per annum	240000 KG

Production of Tur Dal		
Production	Capacity	KG
1st year	50%	120,000
2nd year	55%	132,000
3rd year	60%	144,000
4th year	65%	156,000
5th year	70%	168,000

Raw Material Cost			
Year	Capacity Utilisation	Rate (per KG)	Amount (Rs. in lacs)
1st year	50%	42.00	50.40
2nd year	55%	44.00	58.08
3rd year	60%	46.00	66.24
4th year	65%	48.00	74.88
5th year	70%	50.00	84.00

## 5.7 Sales Revenue

<u>COMPUTATION OF SALE</u>					
Particulars	1st year	2nd year	3rd year	4th year	5th year
Op Stock	-	6,000	6,600	7,200	7,800
Production	120,000	132,000	144,000	156,000	168,000
Less : Closing Stock	6,000	6,600	7,200	7,800	8,400
<b>Net Sale</b>	<b>114,000</b>	<b>131,400</b>	<b>143,400</b>	<b>155,400</b>	<b>167,400</b>
sale price per KG	70.00	74.00	78.00	82.00	86.00
<b>Sales (in Lacs)</b>	<b>79.80</b>	<b>97.24</b>	<b>111.85</b>	<b>127.43</b>	<b>143.96</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>						
	3.45	3.91	4.41	4.94	5.50	
<b><u>Raw Material</u></b>						
	1.68	1.94	2.21	2.50	2.80	
<b>Closing Stock</b>	<b>5.13</b>	<b>5.85</b>	<b>6.62</b>	<b>7.44</b>	<b>8.30</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	5.13					
Less : Creditors	1.18					
<b>Paid stock</b>	<b>3.95</b>	<b>10%</b>	<b>0.40</b>	<b>90%</b>	<b>3.56</b>	
<b>Sundry Debtors</b>	<b>3.99</b>	<b>10%</b>	<b>0.40</b>	<b>90%</b>	<b>3.59</b>	
	<b>7.94</b>		<b>0.79</b>		<b>7.15</b>	
<b>MPBF</b>					<b>7.15</b>	
<b>WORKING CAPITAL LIMIT DEMAND ( from Bank)</b>					<b>7.00</b>	
<b>Working Capital Margin</b>					<b>0.78</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	15	KWH
consumption per day	120	units
Consumption per month	3,000	units
Rate per Unit	10	Rs.
power Bill per month	30,000	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
Skilled (in thousand rupees)	12,000	1	12,000
Unskilled (in thousand rupees)	7,000	3	21,000
<b>Total salary per month</b>			<b>48,000</b>
<b>Total annual labour charges</b>	<b>(in lacs)</b>		<b>5.76</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
Accountant	15,000	1	15,000
<b>Total salary per month</b>			<b>27,000</b>
<b>Total annual Staff charges</b>	<b>(in lacs)</b>		<b>3.24</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	6.03	7.40	8.65	11.21	13.62
Interest on Term Loan	1.47	1.30	0.93	0.56	0.20
<b>Total</b>	<b>7.50</b>	<b>8.70</b>	<b>9.58</b>	<b>11.78</b>	<b>13.82</b>
<b><u>REPAYMENT</u></b>					
Instalment of Term Loan	1.66	3.32	3.32	3.32	3.32
Interest on Term Loan	1.47	1.30	0.93	0.56	0.20
<b>Total</b>	<b>3.13</b>	<b>4.62</b>	<b>4.25</b>	<b>3.89</b>	<b>3.52</b>
<b>DEBT SERVICE COVERAGE RATIO</b>	<b>2.39</b>	<b>1.88</b>	<b>2.25</b>	<b>3.03</b>	<b>3.92</b>
<b>AVERAGE D.S.C.R.</b>	<b>2.70</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	26.00	1.20	27.20
Total	26.00	1.20	27.20
Less : Depreciation	3.90	0.12	4.02
<b>WDV at end of Year</b>	<b>22.10</b>	<b>1.08</b>	<b>23.18</b>
Additions During The Year	-	-	-
Total	22.10	1.08	23.18
Less : Depreciation	3.32	0.11	3.42
<b>WDV at end of Year</b>	<b>18.79</b>	<b>0.97</b>	<b>19.76</b>
Additions During The Year	-	-	-
Total	18.79	0.97	19.76
Less : Depreciation	2.82	0.10	2.91
<b>WDV at end of Year</b>	<b>15.97</b>	<b>0.87</b>	<b>16.84</b>
Additions During The Year	-	-	-
Total	15.97	0.87	16.84
Less : Depreciation	2.40	0.09	2.48
<b>WDV at end of Year</b>	<b>13.57</b>	<b>0.79</b>	<b>14.36</b>
Additions During The Year	-	-	-
Total	13.57	0.79	14.36
Less : Depreciation	2.04	0.08	2.11
<b>WDV at end of Year</b>	<b>11.54</b>	<b>0.71</b>	<b>12.24</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	-	14.96	14.96	-	-	14.96	
	2nd month	14.96	-	14.96	0.14	-	14.96	
	3rd month	14.96	-	14.96	0.14	-	14.96	
	4th month	14.96	-	14.96	0.14	-	14.96	

	5th month	14.96	-	14.96	0.14		14.96
	6th month	14.96	-	14.96	0.14		14.96
	7th month	14.96	-	14.96	0.14	0.28	14.68
	8th month	14.68	-	14.68	0.13	0.28	14.41
	9th month	14.41	-	14.41	0.13	0.28	14.13
	10th month	14.13	-	14.13	0.13	0.28	13.85
	11th month	13.85	-	13.85	0.13	0.28	13.57
	12th month	13.57	-	13.57	0.12	0.28	13.30
					1.47	1.66	
<b>2nd</b>	Opening Balance						
	1st month	13.30	-	13.30	0.12	0.28	13.02
	2nd month	13.02	-	13.02	0.12	0.28	12.74
	3rd month	12.74	-	12.74	0.12	0.28	12.47
	4th month	12.47	-	12.47	0.11	0.28	12.19
	5th month	12.19	-	12.19	0.11	0.28	11.91
	6th month	11.91	-	11.91	0.11	0.28	11.64
	7th month	11.64	-	11.64	0.11	0.28	11.36
	8th month	11.36	-	11.36	0.10	0.28	11.08
	9th month	11.08	-	11.08	0.10	0.28	10.80
	10th month	10.80	-	10.80	0.10	0.28	10.53
	11th month	10.53	-	10.53	0.10	0.28	10.25
	12th month	10.25	-	10.25	0.09	0.28	9.97
					<b>1.30</b>	<b>3.32</b>	
<b>3rd</b>	Opening Balance						

	1st month	9.97	-	9.97	0.09	0.28	9.70
	2nd month	9.70	-	9.70	0.09	0.28	9.42
	3rd month	9.42	-	9.42	0.09	0.28	9.14
	4th month	9.14	-	9.14	0.08	0.28	8.87
	5th month	8.87	-	8.87	0.08	0.28	8.59
	6th month	8.59	-	8.59	0.08	0.28	8.31
	7th month	8.31	-	8.31	0.08	0.28	8.03
	8th month	8.03	-	8.03	0.07	0.28	7.76
	9th month	7.76	-	7.76	0.07	0.28	7.48
	10th month	7.48	-	7.48	0.07	0.28	7.20
	11th month	7.20	-	7.20	0.07	0.28	6.93
	12th month	6.93	-	6.93	0.06	0.28	6.65
					<b>0.93</b>	<b>3.32</b>	
<b>4th</b>	Opening Balance						
	1st month	6.65	-	6.65	0.06	0.28	6.37
	2nd month	6.37	-	6.37	0.06	0.28	6.09
	3rd month	6.09	-	6.09	0.06	0.28	5.82
	4th month	5.82	-	5.82	0.05	0.28	5.54
	5th month	5.54	-	5.54	0.05	0.28	5.26
	6th month	5.26	-	5.26	0.05	0.28	4.99
	7th month	4.99	-	4.99	0.05	0.28	4.71
	8th month	4.71	-	4.71	0.04	0.28	4.43
	9th month	4.43	-	4.43	0.04	0.28	4.16

	10th month	4.16	-	4.16	0.04	0.28	3.88
	11th month	3.88	-	3.88	0.04	0.28	3.60
	12th month	3.60	-	3.60	0.03	0.28	3.32
					<b>0.56</b>	<b>3.32</b>	
<b>5th</b>	Opening Balance						
	1st month	3.32	-	3.32	0.03	0.28	3.05
	2nd month	3.05	-	3.05	0.03	0.28	2.77
	3rd month	2.77	-	2.77	0.03	0.28	2.49
	4th month	2.49	-	2.49	0.02	0.28	2.22
	5th month	2.22	-	2.22	0.02	0.28	1.94
	6th month	1.94	-	1.94	0.02	0.28	1.66
	7th month	1.66	-	1.66	0.02	0.28	1.39
	8th month	1.39	-	1.39	0.01	0.28	1.11
	9th month	1.11	-	1.11	0.01	0.28	0.83
	10th month	0.83	-	0.83	0.01	0.28	0.55
	11th month	0.55	-	0.55	0.01	0.28	0.28
	12th month	0.28	-	0.28	0.00	0.28	-
					<b>0.20</b>	<b>3.32</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>	79.80	97.24	111.85	127.43	143.96
Less : Op. WIP Goods	-	3.45	3.91	4.41	4.94
Add : Cl. WIP Goods	3.45	3.91	4.41	4.94	5.50
<b>Total Sales</b>	<b>83.25</b>	<b>97.70</b>	<b>112.34</b>	<b>127.96</b>	<b>144.52</b>
<b>Variable &amp; Semi Variable Exp.</b>					
Raw Material Consumed	50.40	58.08	66.24	74.88	84.00
Electricity Exp/Coal Consumption at 85%	3.06	3.52	4.05	4.65	5.12
Wages & Salary at 60%	5.40	5.94	6.53	7.19	7.91
Selling & administrative Expenses 80%	2.55	4.67	6.71	7.65	8.64
Interest on working Capital	0.77	0.77	0.77	0.77	0.77
Repair & maintenance	2.00	2.43	2.80	3.19	3.60
Packaging	3.19	3.89	4.47	5.10	5.76
<b>Total Variable &amp; Semi Variable Exp</b>	<b>67.37</b>	<b>79.30</b>	<b>91.57</b>	<b>103.42</b>	<b>115.79</b>
<b>Contribution</b>	<b>15.88</b>	<b>18.41</b>	<b>20.77</b>	<b>24.54</b>	<b>28.73</b>
<b>Fixed &amp; Semi Fixed Expenses</b>					
Electricity Exp/Coal Consumption at 15%	0.54	0.62	0.71	0.82	0.90
Wages & Salary at 40%	3.60	3.96	4.36	4.79	5.27
Interest on Term Loan	1.47	1.30	0.93	0.56	0.20
Depreciation	4.02	3.42	2.91	2.48	2.11
Selling & administrative Expenses 20%	0.64	1.17	1.68	1.91	2.16
Rent	3.60	3.96	4.36	4.79	5.27
<b>Total Fixed Expenses</b>	<b>13.87</b>	<b>14.43</b>	<b>14.95</b>	<b>15.36</b>	<b>15.92</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>2.01</b>	<b>3.98</b>	<b>5.82</b>	<b>9.18</b>	<b>12.81</b>
<b>BREAK EVEN POINT</b>	<b>44%</b>	<b>43%</b>	<b>43%</b>	<b>41%</b>	<b>39%</b>
<b>BREAK EVEN SALES</b>	<b>72.72</b>	<b>76.58</b>	<b>80.85</b>	<b>80.10</b>	<b>80.07</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 Toor Dal is 800 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 10 days and Finished goods Closing Stock has been taken for 15 days.
4. Credit period to Sundry Debtors has been given for 15 days.
5. Credit period by the Sundry Creditors has been provided for 7 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 15 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.