



## **Model Detailed Project Report**

### **SOYA CHUNK UNIT**

**Prepared by**

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## 1. INTRODUCTION

### SOYA CHUNK



In the world of health and nutrition, protein-rich foods are creating a buzz lately. Protein stands out to be one of the most important nutrients that must be included in diet daily. Dietary protein not only helps build and repair muscles but also induces a feeling of satiety, which facilitates weight loss by keeping uncontrolled bingeing at bay.

Soya Chunk is replete with protein content. Made from soybean, soya chunks are popularly known as vegetarian meat for its meaty taste and fibrous texture. Being abundantly dense in protein, soya chunks are widely used in Indian household kitchens as part of curries and snacks items.

Soy is full of polyunsaturated fats, proteins and omega 3 fatty acids. 100 grams of uncooked soya chunks have 345 calories with 52 grams of protein, 0.5 grams total fat, 33 grams carbohydrates and 13 grams dietary fibre. They are also rich in calcium and iron while providing no extra sugar or sodium to the body. Soya chunks are also popularly known as meal maker is a textured or texturized vegetable protein which is also known as textured soy protein or soya meat or a nutritious meat extender made from defatted soy flour, a by-product of extracting soybean oil.

## **2. MARKET POTENTIAL:**

The soya Chunks market is segmented on the basis of nature, packaging, and distribution channel. On the basis of nature type, the global soya Chunks market can be segmented into organic soya Chunks, and conventional soya Chunks. On the basis of packaging, the soya Chunks market is segmented into carton packaging, cans and pouches. The mode of packaging chosen depends on the region in which the product is offered.

On the basis of the distribution channel, the soya Chunks market is segmented into direct and indirect sales. The indirect sales segment can be further segmented into store-based retailing and online retailing. Store-based retailing can be further classified into modern grocery retailers and traditional grocery retailers. Modern grocery retailers can be further sub-segmented into a convenience store, mom and pop stores, discount stores, and hypermarkets or supermarkets. The traditional grocery retailers can be further sub-segmented into food & drink specialty stores, independent small groceries, and others. The soya Chunks are easily available in local markets, which provides an ease to consumers to use the benefits offered by the product.

The soya nugget market in India is growing at a rate of 25% to 30% which are prompting companies to become more active. The Global Textured Soy Protein Market to exhibit a CAGR of 7.9% during the period 2019-2024.

Soybean meal market is segmented on the basis of process of production as normal soybean meal, De-hulled [min 50% protein] Hipro Soybean meal, and DE hulled [min. 48% protein] Hipro Soybean meal, Defatted soya flour toasted, and de-fatted soya flakes toasted are available in the market.

### **3. PRODUCT DESCRIPTION**

#### **3.1 PRODUCT BENEFITS & TYPES**

Soya Nuggets are as good as original meat. They possess similar properties in terms protein content. They are also similar chewy characteristics on soaking in water. Also, they are free from cholesterol, and thus heavily used as meat substitutes. These nuggets can be used in preparing various food products in households as well as in restaurants and can be important because of its high nutritional value.

#### **Types of Soya Chunk**

Two types of soya chunks are available in market.

1. Normal size soya chunks
2. Mini soya chunks

#### **3.2 RAW MATERIAL**

Following raw materials are used as basic raw material for soya chunk manufacturing unit:

- Soya Flour
- Water

#### **3.3 MANUFACTURING PROCESS**

##### **Soya Chunk manufacturing Process**

- Raw material is procured from the local vendor
- All raw materials are placed in the inventory

- The soy flour is fed to the flour mixer with water
- Mixer forms a thick slurry of Soy Flour
- This slurry is fed to Soy Nugget Extruder
- It's a cooking extruder with inbuilt cutter at die end
- Soy Flour slurry is then cooked within barrel of extruder
- Barrel heater provides necessary heat for the process
- Thick cooked soy paste at this point is extruded through die
- A cutter quickly cuts extruded soy nuggets
- Due to cooking water vapors generated are at high pressure
- Thus after extrusion these vapors escape to surrounding
- This generates texture of soy nuggets
- Soy nuggets are then simply fed to a dryer
- The dryer further removes the moisture present in nuggets
- These dried nuggets are then checked for quality
- Soy nuggets are then packed & sent for sale.

## **4. PROJECT COMPONENTS**

### **4.1 Land**

Land required 1500 square feet

Approximate rent for the same is Rs.20,000 – 30,000 per month.

### **4.2 Plant & Machinery**

Following plant & machinery are required for soya chunk manufacturing unit.

- Starting Panel In All Motor.
- Mixer (SS Body) 7.5 HP Motor Gear Box

- Extruder with 50 HP Motor Gear Box, Cutter, Peaces Diameter In (2 Pease Gol Badi) + (2 Pease Mini Chunks)
- 2 Belt Conveyer with 1 HP Motor Gear Box.
- 3 Stage Dryer with Motor Ms Belt Conveyer.
- Two Screw Conveyor with 2 HP Motor Gear Box
- Two Belt Conveyor with 2 HP Motor
- Heat Exchanger With Gear and Motor and Control Panel

Particular	Description	Image
<b>Mixer</b>	Used for mixing of soy flour with water	
<b>Extruder</b>	It's a cooking extruder with inbuilt cutter at die end.	

<p><b>Screw conveyor</b></p>		
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Note: total cost of the plant & machinery is Rs.15, 50, 000 excluding GST and other transportation cost.

#### **4.3 Misc. Assets**

<b>S.N.</b>	<b>Item Description</b>	<b>Rate</b>
1	Electricity fittings & equipment's	1,00,000
2	Furniture and equipment's	50,000

#### **4.4 Power Requirement**

The borrower shall require power load of 50 HP which shall be applied with Power Corporation. However, for standby power arrangement the borrower shall also purchase DG Set.

#### **4.5 Manpower Requirement**

7-8 Manpower are required for the soya chunk manufacturing unit.

Includes:

2 Skilled Labour

2-3 Unskilled Labour

2 Helper &

1 Supervisor

## 5. FINANCIALS

### 5.1 Cost of Project

COST OF PROJECT			
(in Lacs)			
PARTICULARS	AMOUNT	Own Contribution	Bank Finance
		25.00%	75.00%
Land & Building		Owned /rented	
Plant & Machinery	15.50	3.88	11.63
Furniture & Fixtures and Other Assets	1.50	0.38	1.13
Working capital	10.00	2.50	7.50
<b>Total</b>	<b>27.00</b>	<b>6.75</b>	<b>20.25</b>

### 5.2 Means of Finance

PARTICULARS	AMOUNT
Own Contribution	6.75
Bank Loan	12.75
Working capital Limit	7.50
<b>Total</b>	<b>27.00</b>

### 5.3 Projected Balance Sheet

(in Lacs)					
<b>PROJECTED BALANCE SHEET</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		7.15	9.79	12.79	16.46
Add:- Own Capital	6.75				
Add:- Retained Profit	2.65	5.54	7.50	10.67	13.32
Less:- Drawings	2.25	2.90	4.50	7.00	9.50
Closing Balance	7.15	9.79	12.79	16.46	20.28
Term Loan	11.33	8.50	5.67	2.83	-
Working Capital Limit	7.50	7.50	7.50	7.50	7.50
Sundry Creditors	2.96	3.43	3.94	4.47	5.04
Provisions & Other Liab	0.30	0.38	0.45	0.54	0.65
<b>TOTAL :</b>	<b>29.25</b>	<b>29.60</b>	<b>30.34</b>	<b>31.81</b>	<b>33.47</b>
<b><u>Assets</u></b>					
<b>Fixed Assets ( Gross)</b>	17.00	17.00	17.00	17.00	17.00
Gross Dep.	2.48	4.59	6.39	7.92	9.24
<b>Net Fixed Assets</b>	<b>14.53</b>	<b>12.41</b>	<b>10.61</b>	<b>9.08</b>	<b>7.76</b>
<b>Current Assets</b>					
Sundry Debtors	3.80	4.64	5.35	6.11	6.92
Stock in Hand	9.67	11.20	12.80	14.51	16.33
Cash and Bank	1.26	1.34	1.57	2.11	2.45
<b>TOTAL :</b>	<b>29.25</b>	<b>29.60</b>	<b>30.34</b>	<b>31.81</b>	<b>33.47</b>

## 5.4 Projected Cash Flow

(in Lacs)					
<b><u>PROJECTED CASH FLOW STATEMENT</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>
<b><u>SOURCES OF FUND</u></b>					
Own Margin	6.75				
Net Profit	2.65	5.60	7.80	10.99	14.08
Depriciation & Exp. W/off	2.48	2.11	1.80	1.54	1.31
Increase in Cash Credit	7.50	-	-	-	-
Increase In Term Loan	12.75	-	-	-	-
Increase in Creditors	2.96	0.47	0.50	0.54	0.57
Increase in Provisions & Oth lib	0.30	0.08	0.08	0.09	0.11
<b>TOTAL :</b>	<b>35.39</b>	<b>8.26</b>	<b>10.18</b>	<b>13.15</b>	<b>16.07</b>
<b><u>APPLICATION OF FUND</u></b>					
Increase in Fixed Assets	17.00				
Increase in Stock	9.67	1.53	1.60	1.71	1.82
Increase in Debtors	3.80	0.84	0.71	0.76	0.81
Repayment of Term Loan	1.42	2.83	2.83	2.83	2.83
Drawings	2.25	2.90	4.50	7.00	9.50
Taxation	-	0.06	0.31	0.32	0.76
<b>TOTAL :</b>	<b>34.13</b>	<b>8.17</b>	<b>9.95</b>	<b>12.62</b>	<b>15.72</b>
Opening Cash & Bank Balance	-	1.26	1.34	1.57	2.11
Add : Surplus	1.26	0.09	0.23	0.53	0.34
Closing Cash & Bank Balance	<b>1.26</b>	<b>1.34</b>	<b>1.57</b>	<b>2.11</b>	<b>2.45</b>

## 5.5 Projected Profitability

(in Lacs)					
<b>PROJECTED PROFITABILITY STATEMENT</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 Utilization %	<b>50%</b>	<b>55%</b>	<b>60%</b>	<b>65%</b>	<b>70%</b>
<b>SALES</b>					
<b>Gross Sale</b>					
Soya Chunk	114.00	139.28	160.61	183.37	207.58
<b>Total</b>	<b>114.00</b>	<b>139.28</b>	<b>160.61</b>	<b>183.37</b>	<b>207.58</b>
<b>COST OF SALES</b>					
Raw Material Consumed	88.80	102.96	118.08	134.16	151.20
Electricity Expenses	4.56	5.24	6.03	6.94	7.98
Depreciation	2.48	2.11	1.80	1.54	1.31
Wages & labour	5.28	5.81	6.39	7.03	7.73
Repair & maintenance	3.42	4.87	5.62	6.42	7.27
<b>Cost of Production</b>	<b>104.54</b>	<b>121.00</b>	<b>137.92</b>	<b>156.08</b>	<b>175.48</b>
<b>Add: Opening Stock /WIP</b>	<b>-</b>	<b>5.23</b>	<b>6.05</b>	<b>6.90</b>	<b>7.80</b>
<b>Less: Closing Stock /WIP</b>	<b>5.23</b>	<b>6.05</b>	<b>6.90</b>	<b>7.80</b>	<b>8.77</b>
Cost of Sales	99.31	120.18	137.08	155.17	174.51
<b>GROSS PROFIT</b>	<b>14.69</b>	<b>19.11</b>	<b>23.53</b>	<b>28.20</b>	<b>33.06</b>
Salary to Staff	3.48	3.83	4.21	4.63	5.10
Interest on Term Loan	1.25	1.10	0.79	0.48	0.17
Interest on working Capital	0.83	0.83	0.83	0.83	0.83

Rent	4.20	4.62	5.08	5.59	6.15
selling & adm exp	2.28	3.13	4.82	5.68	6.75
<b>TOTAL</b>	<b>12.04</b>	<b>13.51</b>	<b>15.73</b>	<b>17.21</b>	<b>18.98</b>
NET PROFIT	2.65	5.60	7.80	10.99	14.08
Taxation		0.06	0.31	0.32	0.76
PROFIT (After Tax)	2.65	5.54	7.50	10.67	13.32

## 5.6 Production and Yield

<b>COMPUTATION OF PRODUCTION OF SOYA CHUNK</b>		
<b>Items to be Manufactured</b>		
Soya Chunk		
Machine Production capacity per Hour	200	KG
Working hours in a day	8	
Production Per Day	1,600	KG
No of Working Days in Month	25	
No of Working Days in a Year	300	
machine capacity per annum	480,000	KG

<b>Production of Soya Chunk</b>		
<b>Production</b>	<b>Capacity</b>	<b>KG</b>
1st year	50%	240,000
2nd year	55%	264,000
3rd year	60%	288,000
4th year	65%	312,000
5th year	70%	336,000

<b>Raw Material Cost</b>			
<b>Year</b>	<b>Capacity Utilization</b>	<b>Rate (per KG)</b>	<b>Amount (Rs. in lacs)</b>
1st year	50%	37.00	88.80
2nd year	55%	39.00	102.96
3rd year	60%	41.00	118.08
4th year	65%	43.00	134.16
5th year	70%	45.00	151.20

## 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	-	12,000	13,200	14,400	15,600
Production	240,000	264,000	288,000	312,000	336,000
Less : Closing Stock	12,000	13,200	14,400	15,600	16,800
<b>Net Sale</b>	<b>228,000</b>	<b>262,800</b>	<b>286,800</b>	<b>310,800</b>	<b>334,800</b>
sale price per KG	50.00	53.00	56.00	59.00	62.00
<b>Sales (in Lacs)</b>	<b>114.00</b>	<b>139.28</b>	<b>160.61</b>	<b>183.37</b>	<b>207.58</b>

## 5.8 Working Capital Assessment

(in Lacs)					
<b>COMPUTATION OF CLOSING STOCK &amp; WORKING CAPITAL</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>Finished Goods</u></b>					
	5.23	6.05	6.90	7.80	8.77
<b><u>Raw Material</u></b>					
	4.44	5.15	5.90	6.71	7.56
<b>Closing Stock</b>	<b>9.67</b>	<b>11.20</b>	<b>12.80</b>	<b>14.51</b>	<b>16.33</b>

<b>COMPUTATION OF WORKING CAPITAL REQUIREMENT</b>					
(in Lacs)					
<b>TRADITIONAL METHOD</b>					
<b>Particulars</b>	<b>Amount</b>	<b>Own Margin</b>		<b>Bank Finance</b>	
Finished Goods & Raw Material	9.67				
Less : Creditors	2.96				
<b>Paid stock</b>	<b>6.71</b>	<b>25%</b>	<b>1.68</b>	<b>75%</b>	<b>5.03</b>
<b>Sundry Debtors</b>	<b>3.80</b>	<b>25%</b>	<b>0.95</b>	<b>75%</b>	<b>2.85</b>
	<b>10.51</b>		<b>2.63</b>		<b>7.88</b>
<b>WORKING CAPITAL LIMIT DEMAND ( from Bank)</b>					
				<b>7.50</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	38	KWH
consumption per day	304	units
Consumption per month	7,600	units
Rate per Unit	10	Rs.
power Bill per month	76,000	Rs.

<b><u>BREAK UP OF LABOUR CHARGES</u></b>			
<b>Particulars</b>	<b>Wages</b>	<b>No of</b>	<b>Total</b>
	<b>Rs. per Month</b>	<b>Employees</b>	<b>Salary</b>
Skilled (in thousand rupees)	13,000	2	26,000
Unskilled (in thousand rupees)	9,000	2	18,000
<b>Total salary per month</b>			<b>44,000</b>
<b>Total annual labour charges</b>	<b>(in lacs)</b>		<b>5.28</b>

<b><u>BREAK UP OF Staff Salary CHARGES</u></b>			
<b>Particulars</b>	<b>Salary</b>	<b>No of</b>	<b>Total</b>
	<b>Rs. per Month</b>	<b>Employees</b>	<b>Salary</b>
helper	7,000	2	14,000
Supervisor	15,000	1	15,000
<b>Total salary per month</b>			<b>29,000</b>
<b>Total annual Staff charges</b>	<b>(in lacs)</b>		<b>3.48</b>

## 5.10 Depreciation

			(in Lacs)
<b>COMPUTATION OF DEPRECIATION</b>			
Description	Plant & Machinery	Furniture	TOTAL
Rate of Depreciation	<b>15.00%</b>	<b>10.00%</b>	
<b>Opening Balance</b>	-	-	-
Addition	15.50	1.50	17.00
Total	15.50	1.50	17.00
Less : Depreciation	2.33	0.15	2.48
<b>WDV at end of Year</b>	<b>13.18</b>	<b>1.35</b>	<b>14.53</b>
Additions During The Year	-	-	-
Total	13.18	1.35	14.53
Less : Depreciation	1.98	0.14	2.11
<b>WDV at end of Year</b>	<b>11.20</b>	<b>1.22</b>	<b>12.41</b>
Additions During The Year	-	-	-
Total	11.20	1.22	12.41
Less : Depreciation	1.68	0.12	1.80
<b>WDV at end of Year</b>	<b>9.52</b>	<b>1.09</b>	<b>10.61</b>
Additions During The Year	-	-	-
Total	9.52	1.09	10.61
Less : Depreciation	1.43	0.11	1.54
<b>WDV at end of Year</b>	<b>8.09</b>	<b>0.98</b>	<b>9.08</b>
Additions During The Year	-	-	-
Total	8.09	0.98	9.08
Less : Depreciation	1.21	0.10	1.31
<b>WDV at end of Year</b>	<b>6.88</b>	<b>0.89</b>	<b>7.76</b>

## 5.11 Repayment schedule

REPAYMENT SCHEDULE OF TERM LOAN							
						Interest	11.00%
Year	Particulars	Amount	Addition	Total	Interest	Repayment	Closing Balance
<b>1st</b>	Opening Balance						
	1st month	-	12.75	12.75	-	-	12.75
	2nd month	12.75	-	12.75	0.12	-	12.75
	3rd month	12.75	-	12.75	0.12	-	12.75
	4th month	12.75	-	12.75	0.12	-	12.75
	5th month	12.75	-	12.75	0.12	-	12.75
	6th month	12.75	-	12.75	0.12	-	12.75
	7th month	12.75	-	12.75	0.12	0.24	12.51
	8th month	12.51	-	12.51	0.11	0.24	12.28
	9th month	12.28	-	12.28	0.11	0.24	12.04
	10th month	12.04	-	12.04	0.11	0.24	11.81
	11th month	11.81	-	11.81	0.11	0.24	11.57
	12th month	11.57	-	11.57	0.11	0.24	11.33
					1.25	1.42	
<b>2nd</b>	Opening Balance						
	1st month	11.33	-	11.33	0.10	0.24	11.10
	2nd month	11.10	-	11.10	0.10	0.24	10.86
	3rd month	10.86	-	10.86	0.10	0.24	10.63
	4th month	10.63	-	10.63	0.10	0.24	10.39
	5th month	10.39	-	10.39	0.10	0.24	10.15
	6th month	10.15	-	10.15	0.09	0.24	9.92
	7th month	9.92	-	9.92	0.09	0.24	9.68
	8th month	9.68	-	9.68	0.09	0.24	9.44
	9th month	9.44	-	9.44	0.09	0.24	9.21
	10th month	9.21	-	9.21	0.08	0.24	8.97
	11th month	8.97	-	8.97	0.08	0.24	8.74
	12th month	8.74	-	8.74	0.08	0.24	8.50
					1.10	2.83	
<b>3rd</b>	Opening Balance						
	1st month	8.50	-	8.50	0.08	0.24	8.26
	2nd month	8.26	-	8.26	0.08	0.24	8.03
	3rd month	8.03	-	8.03	0.07	0.24	7.79
	4th month	7.79	-	7.79	0.07	0.24	7.56
	5th month	7.56	-	7.56	0.07	0.24	7.32
	6th month	7.32	-	7.32	0.07	0.24	7.08
	7th month	7.08	-	7.08	0.06	0.24	6.85
	8th month	6.85	-	6.85	0.06	0.24	6.61

	9th month	6.61	-	6.61	0.06	0.24	6.38
	10th month	6.38	-	6.38	0.06	0.24	6.14
	11th month	6.14	-	6.14	0.06	0.24	5.90
	12th month	5.90	-	5.90	0.05	0.24	5.67
					<b>0.79</b>	<b>2.83</b>	
<b>4th</b>	Opening Balance						
	1st month	5.67	-	5.67	0.05	0.24	5.43
	2nd month	5.43	-	5.43	0.05	0.24	5.19
	3rd month	5.19	-	5.19	0.05	0.24	4.96
	4th month	4.96	-	4.96	0.05	0.24	4.72
	5th month	4.72	-	4.72	0.04	0.24	4.49
	6th month	4.49	-	4.49	0.04	0.24	4.25
	7th month	4.25	-	4.25	0.04	0.24	4.01
	8th month	4.01	-	4.01	0.04	0.24	3.78
	9th month	3.78	-	3.78	0.03	0.24	3.54
	10th month	3.54	-	3.54	0.03	0.24	3.31
	11th month	3.31	-	3.31	0.03	0.24	3.07
	12th month	3.07	-	3.07	0.03	0.24	2.83
					<b>0.48</b>	<b>2.83</b>	
<b>5th</b>	Opening Balance						
	1st month	2.83	-	2.83	0.03	0.24	2.60
	2nd month	2.60	-	2.60	0.02	0.24	2.36
	3rd month	2.36	-	2.36	0.02	0.24	2.13
	4th month	2.13	-	2.13	0.02	0.24	1.89
	5th month	1.89	-	1.89	0.02	0.24	1.65
	6th month	1.65	-	1.65	0.02	0.24	1.42
	7th month	1.42	-	1.42	0.01	0.24	1.18
	8th month	1.18	-	1.18	0.01	0.24	0.94
	9th month	0.94	-	0.94	0.01	0.24	0.71
	10th month	0.71	-	0.71	0.01	0.24	0.47
	11th month	0.47	-	0.47	0.00	0.24	0.24
	12th month	0.24	-	0.24	0.00	0.24	-
					<b>0.17</b>	<b>2.83</b>	
	DOOR TO DOOR	60	MONTHS				
	MORATORIUM PERIOD	6	MONTHS				
	REPAYMENT PERIOD	54	MONTHS				

## 5.12 Financial Indicators

<b>FINANCIAL INDICATORS</b>					
<b>PARTICULARS</b>	<b>1st year</b>	<b>2nd year</b>	<b>3rd year</b>	<b>4th year</b>	<b>5th year</b>
TURNOVER	114.00	139.28	160.61	183.37	207.58
GROSS PROFIT	14.69	19.11	23.53	28.20	33.06
<b>G.P. RATIO</b>	<b>12.89%</b>	<b>13.72%</b>	<b>14.65%</b>	<b>15.38%</b>	<b>15.93%</b>
NET PROFIT	2.65	5.60	7.80	10.99	14.08
<b>N.P. RATIO</b>	<b>2.33%</b>	<b>4.02%</b>	<b>4.86%</b>	<b>5.99%</b>	<b>6.78%</b>
CURRENT ASSETS	14.72	17.18	19.73	22.73	25.70
CURRENT LIABILITIES	10.76	11.31	11.89	12.51	13.19
<b>CURRENT RATIO</b>	<b>1.37</b>	<b>1.52</b>	<b>1.66</b>	<b>1.82</b>	<b>1.95</b>
TERM LOAN	11.33	8.50	5.67	2.83	-
TOTAL NET WORTH	7.15	9.79	12.79	16.46	20.28
<b>DEBT/EQUITY</b>	<b>1.58</b>	<b>0.87</b>	<b>0.44</b>	<b>0.17</b>	<b>-</b>
TOTAL NET WORTH	7.15	9.79	12.79	16.46	20.28
TOTAL OUTSIDE LIABILITIES	22.09	19.81	17.55	15.35	13.19
<b>TOL/TNW</b>	<b>3.09</b>	<b>2.02</b>	<b>1.37</b>	<b>0.93</b>	<b>0.65</b>
PBDIT	7.21	9.64	11.22	13.83	16.38
INTEREST	2.08	1.93	1.62	1.31	0.99
<b>INTEREST COVERAGE RATIO</b>	<b>3.47</b>	<b>5.00</b>	<b>6.94</b>	<b>10.60</b>	<b>16.49</b>
WDV	14.53	12.41	10.61	9.08	7.76
TERM LOAN	11.33	8.50	5.67	2.83	-
<b>FACR</b>	<b>1.28</b>	<b>1.46</b>	<b>1.87</b>	<b>3.20</b>	<b>-</b>

### 5.13 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	5.13	7.65	9.30	12.21	14.63
Interest on Term Loan	1.25	1.10	0.79	0.48	0.17
<b>Total</b>	<b>6.38</b>	<b>8.75</b>	<b>10.09</b>	<b>12.69</b>	<b>14.80</b>
<b><u>REPAYMENT</u></b>					
Instalment of Term Loan	1.42	2.83	2.83	2.83	2.83
Interest on Term Loan	1.25	1.10	0.79	0.48	0.17
Total	2.67	3.94	3.63	3.31	3.00
<b>DEBT SERVICE COVERAGE RATIO</b>	<b>2.39</b>	<b>2.22</b>	<b>2.78</b>	<b>3.83</b>	<b>4.93</b>
<b>AVERAGE D.S.C.R.</b>	<b>3.23</b>				

## 5.14 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>	114.00	139.28	160.61	183.37	207.58
Less : Op. WIP Goods	-	5.23	6.05	6.90	7.80
Add : Cl. WIP Goods	5.23	6.05	6.90	7.80	8.77
<b>Total Sales</b>	<b>119.23</b>	<b>140.11</b>	<b>161.45</b>	<b>184.28</b>	<b>208.55</b>
<b>Variable &amp; Semi Variable Exp.</b>					
Raw Material Consumed	88.80	102.96	118.08	134.16	151.20
Electricity Exp/Coal Consumption at 85%	3.88	4.46	5.13	5.89	6.78
Wages & Salary at 60%	5.26	5.78	6.36	7.00	7.70
Selling & administrative Expenses 80%	1.82	2.51	3.85	4.55	5.40
Interest on working Capital	0.825	0.825	0.825	0.825	0.825
Repair & maintenance	3.42	4.87	5.62	6.42	7.27
<b>Total Variable &amp; Semi Variable Exp</b>	<b>104.00</b>	<b>121.41</b>	<b>139.87</b>	<b>158.84</b>	<b>179.16</b>
<b>Contribution</b>	<b>15.23</b>	<b>18.70</b>	<b>21.59</b>	<b>25.44</b>	<b>29.38</b>
<b>Fixed &amp; Semi Fixed Expenses</b>					
Electricity Exp/Coal Consumption at 15%	0.68	0.79	0.90	1.04	1.20
Wages & Salary at 40%	3.50	3.85	4.24	4.66	5.13
Interest on Term Loan	1.25	1.10	0.79	0.48	0.17
Depreciation	2.48	2.11	1.80	1.54	1.31

Selling & administrative Expenses 20%	0.46	0.63	0.96	1.14	1.35
Rent	4.20	4.62	5.08	5.59	6.15
<b>Total Fixed Expenses</b>	<b>12.57</b>	<b>13.10</b>	<b>13.78</b>	<b>14.45</b>	<b>15.31</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>2.65</b>	<b>5.60</b>	<b>7.80</b>	<b>10.99</b>	<b>14.08</b>
<b>BREAK EVEN POINT</b>	<b>41%</b>	<b>39%</b>	<b>38%</b>	<b>37%</b>	<b>36%</b>
<b>BREAK EVEN SALES</b>	<b>98.45</b>	<b>98.17</b>	<b>103.09</b>	<b>104.67</b>	<b>108.63</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.

### Implementation Schedule

S.N.	Activity	Time Required (in Months)
1	Acquisition Of premises	1-2
2	Procurement & installation of Plant & Machinery	1-2
3	Arrangement of Finance	1-2
4	Requirement of required Manpower	1
	Total time Required (some activities shall run concurrently)	5-6 Months

## **7. ASSUMPTIONS**

1. Production Capacity of soya chunk is 1600 Kgs 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 15 days and Finished goods Closing Stock has been taken for 15 days.
4. Credit period to Sundry Debtors has been given for 10 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 38-40 KW.
10. Selling Prices & Raw material costing has been increased by 5% & 5% respectively in the subsequent years.

## 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.