

**UP MSME 1-Connect**

# PROJECT REPORT

**PROJECT: SOYA CHUNKS**

# PROJECT REPORT

Of

# SOYA CHUNKS

## PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding **Soya Chunks**.

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

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

**PROJECT AT A GLANCE**

- 1 Name of the Entrepreneur : xxxxxxxxxxxx
- 2 Constitution (legal Status) : xxxxxxxxxxxx
- 3 Father / Spouse Name : xxxxxxxxxxxx
- 4 Unit Address : xxxxxxxxxxxxxxxxxxxxxxxx
- District : xxxxxxxx  
Pin: xxxxxxxx State: xxxxxxxxxxxx  
Mobile xxxxxxxx
- 5 Product and By Product : **SOYA CHUNKS**
- 6 Name of the project / business activity proposed : **SOYA CHUNKS MANUFACTURING UNIT**
- 7 Cost of Project : Rs.22.55 Lakhs
- 8 Means of Finance  
Term Loan Rs.15.3 Lakhs  
Own Capital Rs.2.26 Lakhs  
Working Capital Rs.5 Lakhs
- 9 Debt Service Coverage Ratio : 2.32
- 10 Pay Back Period : 5 Years
- 11 Project Implementation Period : 5-6 Months
- 12 Break Even Point : 38%
- 13 Employment : 14 Persons
- 14 Power Requirement : 40 KW
- 15 Major Raw materials : Soya Flour, Water etc
- Estimated Annual Sales Turnover (Max Utilized Capacity)  
16 Capacity : 121.51 Lakhs
- 17 Detailed Cost of Project & Means of Finance

**COST OF PROJECT**

(Rs. In Lakhs)

Particulars	Amount
Land	Own/Rented
Building /Shed 2000 Sq ft	Own/Rented
Plant & Machinery	15.50
Furniture & Fixtures	1.50
Working Capital	5.55
<b>Total</b>	<b>22.55</b>

**MEANS OF FINANCE**

Particulars	Amount
Own Contribution	2.26
Term Loan	15.30
Working Capital	5.00
<b>Total</b>	<b>22.55</b>

## 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.

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**

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.

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

Two types of soya chunks are available in market.

1. Normal size soya chunks
2. Mini soya chunks

#### **3.3 RAW MATERIAL**

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

- Soya Flour
- Water

#### **3.4 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.

**PROJECTED BALANCE SHEET**

<b>PARTICULARS</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>
<b><u>SOURCES OF FUND</u></b>					
<b>Capital Account</b>					
Opening Balance	-	3.34	4.72	7.03	10.09
Add: Additions	2.26	-	-	-	-
Add: Net Profit	2.08	3.39	6.31	9.06	11.74
Less: Drawings	1.00	2.00	4.00	6.00	8.00
<b>Closing Balance</b>	<b>3.34</b>	<b>4.72</b>	<b>7.03</b>	<b>10.09</b>	<b>13.83</b>
CC Limit	5.00	5.00	5.00	5.00	5.00
Term Loan	13.60	10.20	6.80	3.40	-
Sundry Creditors	<u>0.77</u>	<u>0.89</u>	<u>1.02</u>	<u>1.16</u>	<u>1.31</u>
<b>TOTAL :</b>	<b><u>22.70</u></b>	<b><u>20.81</u></b>	<b><u>19.85</u></b>	<b><u>19.64</u></b>	<b><u>20.14</u></b>
<b><u>APPLICATION OF FUND</u></b>					
<b>Fixed Assets ( Gross)</b>	17.00	17.00	17.00	17.00	17.00
Gross Dep.	<u>2.48</u>	<u>4.59</u>	<u>6.39</u>	<u>7.92</u>	<u>9.24</u>
Net Fixed Assets	14.53	12.41	10.61	9.08	7.76
<b>Current Assets</b>					
Sundry Debtors	2.30	2.74	3.14	3.57	4.05
Stock in Hand	4.03	4.54	5.15	5.81	6.52
Cash and Bank	1.85	1.11	0.94	1.19	1.80
<b>TOTAL :</b>	<b><u>22.70</u></b>	<b><u>20.81</u></b>	<b><u>19.85</u></b>	<b><u>19.64</u></b>	<b><u>20.14</u></b>
	-	-	-	-	-

**PROJECTED PROFITABILITY STATEMENT**

<b>PARTICULARS</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>
<b><u>A) SALES</u></b>					
Gross Sale	68.88	82.25	94.24	106.98	121.51
<b>Total (A)</b>	<b><u>68.88</u></b>	<b><u>82.25</u></b>	<b><u>94.24</u></b>	<b><u>106.98</u></b>	<b><u>121.51</u></b>
<b><u>B) COST OF SALES</u></b>					
Raw Mateiral Consumed	33.00	38.12	43.65	49.63	56.07
Electricity Expenses	4.05	4.45	4.86	5.26	5.67
Repair & Maintenance	0.34	0.41	0.47	0.53	0.61
Labour & Wages	13.66	15.03	16.53	18.18	20.00
Depreciation	2.48	2.11	1.80	1.54	1.31
Packaging Cost	1.38	1.65	1.88	2.14	2.43
<b>Cost of Production</b>	<b><u>54.91</u></b>	<b><u>61.76</u></b>	<b><u>69.20</u></b>	<b><u>77.29</u></b>	<b><u>86.09</u></b>
<b>Add: Opening Stock /WIP</b>	-	1.83	2.00	2.24	2.50
<b>Less: Closing Stock /WIP</b>	1.83	2.00	2.24	2.50	2.78
Cost of Sales (B)	53.08	61.60	68.96	77.03	85.81
<b>C) GROSS PROFIT (A-B)</b>	15.80	20.65	25.28	29.95	35.70
	<b>22.94%</b>	<b>25.11%</b>	<b>26.83%</b>	<b>28.00%</b>	<b>29.38%</b>
D) Bank Interest (Term Loan )	1.66	1.36	0.98	0.61	0.23
ii) Interest On Working Capital	0.55	0.55	0.55	0.55	0.55
E) Salary to Staff	4.62	5.08	5.59	6.15	6.76
F) Selling & Adm Expenses Exp.	6.89	10.28	11.78	13.37	15.19
<b>TOTAL (D+E)</b>	<b><u>13.72</u></b>	<b><u>17.27</u></b>	<b><u>18.90</u></b>	<b><u>20.68</u></b>	<b><u>22.74</u></b>
<b>H) NET PROFIT</b>	2.08	3.39	6.38	9.27	12.97
	<b>3.0%</b>	<b>4.1%</b>	<b>6.8%</b>	<b>8.7%</b>	<b>10.7%</b>
I) Taxation	-	-	0.07	0.21	1.22
<b>J) PROFIT (After Tax)</b>	2.08	3.39	6.31	9.06	11.74

**PROJECTED CASH FLOW STATEMENT**

<b>PARTICULARS</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>
<b><u>SOURCES OF FUND</u></b>					
Own Contribution	2.26	-			
Net Profit	2.08	3.39	6.38	9.27	12.97
Depreciation & Exp. W/off	2.48	2.11	1.80	1.54	1.31
Increase In Cash Credit	5.00				
Increase In Term Loan	15.30	-	-	-	-
Increase in Creditors	<u>0.77</u>	<u>0.12</u>	<u>0.13</u>	<u>0.14</u>	<u>0.15</u>
<b>TOTAL :</b>	<b><u>27.88</u></b>	<b><u>5.62</u></b>	<b><u>8.31</u></b>	<b><u>10.95</u></b>	<b><u>14.43</u></b>
<b><u>APPLICATION OF FUND</u></b>					
Increase in Fixed Assets	17.00	-	-	-	-
Increase in Stock	4.03	0.51	0.61	0.66	0.71
Increase in Debtors	2.30	0.45	0.40	0.42	0.48
Repayment of Term Loan	1.70	3.40	3.40	3.40	3.40
Taxation	-	-	0.07	0.21	1.22
Drawings	<u>1.00</u>	<u>2.00</u>	<u>4.00</u>	<u>6.00</u>	<u>8.00</u>
<b>TOTAL :</b>	<b><u>26.03</u></b>	<b><u>6.35</u></b>	<b><u>8.48</u></b>	<b><u>10.70</u></b>	<b><u>13.82</u></b>
Opening Cash & Bank Balance	-	1.85	1.11	0.94	1.19
Add : Surplus	1.85	- 0.74	- 0.17	0.25	0.61
Closing Cash & Bank Balance	<b><u>1.85</u></b>	<b><u>1.11</u></b>	<b><u>0.94</u></b>	<b><u>1.19</u></b>	<b><u>1.80</u></b>

## COMPUTATION OF SOYA CHUNKS MANUFACTURING UNIT

### Items to be Manufactured SOYA CHUNKS

Manufacturing Capacity per Day	500.00	kg
No. of Working Hour	8	
No of Working Days per month	25	
No. of Working Day per annum	300	
Total Production per Annum	150,000	kg

Year	SOYA CHUNKS MANUFACTURING UNIT	
	Capacity Utilisation	
I	50%	75,000
II	55%	82,500
III	60%	90,000
IV	65%	97,500
V	70%	105,000

## COMPUTATION OF RAW MATERIAL

Item Name	Quantity of Raw Material	Unit	Unit Rate of	Total Cost Per Annum (100%)
Raw Material Consumed Total	165,000.00	kg	40.00	6,600,000.00 6,600,000.00

Total Raw material in Rs lacs	at 100% Capacity			66.0
Average Cost per kg				44.0
Raw Material Consumed	Capacity Utilisation	Rate	Amount (Rs.)	(In Rs)
I	50%	44.00	33.00	
II	55%	46.20	38.12	
III	60%	48.50	43.65	
IV	65%	50.90	49.63	
V	70%	53.40	56.07	

**COMPUTATION OF SALE**

Particulars	I	II	III	IV	V
Op Stock	-	2,500.00	2,750.00	3,000.00	3,250.00
Production	75,000.00	82,500.00	90,000.00	97,500.00	105,000.00
Less : Closing Stock(10 Days)	75,000.00 2,500.00	85,000.00 2,750.00	92,750.00 3,000.00	100,500.00 3,250.00	108,250.00 3,500.00
Net Sale	72,500.00	82,250.00	89,750.00	97,250.00	104,750.00
Avg Sale Price per kg	95.00	100.00	105.00	110.00	116.00
<b>Sale (in Lacs)</b>	<b>68.88</b>	<b>82.25</b>	<b>94.24</b>	<b>106.98</b>	<b>121.50</b>

**COMPUTATION OF CLOSING STOCK & WORKING CAPITAL**

<b>PARTICULARS</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>
<b><u>Finished Goods</u></b>					
(10 Days requirement)	1.83	2.00	2.24	2.50	2.78
<b><u>Raw Material</u></b>					
(20 Days requirement)	2.20	2.54	2.91	3.31	3.74
<b>Closing Stock</b>	<b>4.03</b>	<b>4.54</b>	<b>5.15</b>	<b>5.81</b>	<b>6.52</b>

**COMPUTATION OF WORKING CAPITAL REQUIREMENT**

<b>Particulars</b>	<b>Amount</b>	<b>Margin(10%)</b>	<b>Net Amount</b>
Stock in Hand	4.03		
Less:			
Sundry Creditors	0.77		
<b>Paid Stock</b>	<b>3.26</b>	<b>0.33</b>	<b>2.93</b>
Sundry Debtors	2.30	0.23	2.07
<b>Working Capital Requirement</b>			<b>5.00</b>
<b>Margin</b>			0.56
<b>MPBF</b>			<b>5.00</b>
<b>Working Capital Demand</b>			<b>5.00</b>

**BREAK UP OF LABOUR**

Particulars	Wages	No of	Total
	Per Month	Employees	Salary
Supervisor	20,000.00	1	20,000.00
Plant Operator	15,000.00	1	15,000.00
Unskilled Worker	8,500.00	6	51,000.00
Helper	5,000.00	2	10,000.00
Security Guard	7,500.00	1	7,500.00
			103,500.00
Add: 10% Fringe Benefit			10,350.00
Total Labour Cost Per Month			113,850.00
Total Labour Cost for the year ( In Rs. Lakhs)		11	13.66

**BREAK UP OF SALARY**

Particulars	Salary	No of	Total
	Per Month	Employees	Salary
Accountant cum store keeper	10,000.00	1	10,000.00
Administrative Staffs	12,500.00	2	25,000.00
Total Salary Per Month			35,000.00
Add: 10% Fringe Benefit			3,500.00
Total Salary for the month			38,500.00
Total Salary for the year ( In Rs. Lakhs)		3	4.62

**COMPUTATION OF DEPRECIATION**

Description	Land	Building/shed	Plant & Machinery	Furniture	TOTAL
Rate of Depreciation			15.00%	10.00%	
<b>Opening Balance</b>	Own/Rented		-	-	-
Addition	-		15.50	1.50	17.00
	-		15.50	1.50	17.00
TOTAL		-	15.50	1.50	17.00
Less : Depreciation	-	-	2.33	0.15	2.48
WDV at end of Ist year	-	-	13.18	1.35	14.53
Additions During The Year	-	-	-	-	-
	-	-	13.18	1.35	14.53
Less : Depreciation	-	-	1.98	0.14	2.11
WDV at end of IIInd Year	-	-	11.20	1.22	12.41
Additions During The Year	-	-	-	-	-
	-	-	11.20	1.22	12.41
Less : Depreciation	-	-	1.68	0.12	1.80
WDV at end of IIIrd year	-	-	9.52	1.09	10.61
Additions During The Year	-	-	-	-	-
	-	-	9.52	1.09	10.61
Less : Depreciation	-	-	1.43	0.11	1.54
WDV at end of IV year	-	-	8.09	0.98	9.08
Additions During The Year	-	-	-	-	-
	-	-	8.09	0.98	9.08
Less : Depreciation	-	-	1.21	0.10	1.31
WDV at end of Vth year	-	-	6.88	0.89	7.76

**REPAYMENT SCHEDULE OF TERM LOAN**

11.0%

Year	Particulars	Amount	Addition	Total	Interest	Repayment	CI Balance
<b>I</b>	Opening Balance						
	Ist Quarter	-	15.30	15.30	0.42	-	15.30
	Iind Quarter	15.30	-	15.30	0.42	-	15.30
	IIIrd Quarter	15.30	-	15.30	0.42	0.85	14.45
	Ivth Quarter	14.45	-	14.45	0.40	0.85	13.60
					1.66	1.70	
<b>II</b>	Opening Balance						
	Ist Quarter	13.60	-	13.60	0.37	0.85	12.75
	Iind Quarter	12.75	-	12.75	0.35	0.85	11.90
	IIIrd Quarter	11.90	-	11.90	0.33	0.85	11.05
	Ivth Quarter	11.05		11.05	0.30	0.85	10.20
				1.36	3.40		
<b>III</b>	Opening Balance						
	Ist Quarter	10.20	-	10.20	0.28	0.85	9.35
	Iind Quarter	9.35	-	9.35	0.26	0.85	8.50
	IIIrd Quarter	8.50	-	8.50	0.23	0.85	7.65
	Ivth Quarter	7.65		7.65	0.21	0.85	6.80
				0.98	3.40		
<b>IV</b>	Opening Balance						
	Ist Quarter	6.80	-	6.80	0.19	0.85	5.95
	Iind Quarter	5.95	-	5.95	0.16	0.85	5.10
	IIIrd Quarter	5.10	-	5.10	0.14	0.85	4.25
	Ivth Quarter	4.25		4.25	0.12	0.85	3.40
				0.61	3.40		
<b>V</b>	Opening Balance						
	Ist Quarter	3.40	-	3.40	0.09	0.85	2.55
	Iind Quarter	2.55	-	2.55	0.07	0.85	1.70
	IIIrd Quarter	1.70	-	1.70	0.05	0.85	0.85
	Ivth Quarter	0.85		0.85	0.02	0.85	0.00
				0.23	3.40		

Door to Door Period      60 Months  
Moratorium Period        6 Months  
Repayment Period         54 Months

**CALCULATION OF D.S.C.R**

<b>PARTICULARS</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>
<b><u>CASH ACCRUALS</u></b>	4.56	5.50	8.11	10.60	13.06
Interest on Term Loan	1.66	1.36	0.98	0.61	0.23
Total	6.22	6.85	9.09	11.20	13.29
<b><u>REPAYMENT</u></b>					
Repayment of Term Loan	1.70	3.40	3.40	3.40	3.40
Interest on Term Loan	1.66	1.36	0.98	0.61	0.23
Total	3.36	4.76	4.38	4.01	3.63
<b>DEBT SERVICE COVERAGE RATIO</b>	<b>1.85</b>	<b>1.44</b>	<b>2.08</b>	<b>2.80</b>	<b>3.66</b>
<b>AVERAGE D.S.C.R.</b>			<b>2.32</b>		

**COMPUTATION OF ELECTRICITY****(A) POWER CONNECTION**

Total Working Hour per day	Hours	8	
Electric Load Required	KW	40	
Load Factor			
Electricity Charges	per unit	7.50	
Total Working Days		300	
<b>Electricity Charges</b>			7.20
Add : Minimim Charges (@ 10%)			

**(B) DG set**

No. of Working Days		300	days
No of Working Hours		0.5	Hour per day
Total no. of Hour		150	
Diesel Consumption per Hour		8	
Total Consumption of Diesel		1,200	
Cost of Diesel		65.00	Rs. /Ltr
Total cost of Diesel		0.78	
Add : Lube Cost @15%		0.12	
Total		<b>0.90</b>	
Total cost of Power & Fuel at 100%			8.10

Year	Capacity	Amount (in Lacs)
I	50%	4.05
II	55%	4.45
III	60%	4.86
IV	65%	5.26
V	70%	5.67

**DISCLAIMER**

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