

# PROJECT REPORT

Of

# PANEER

## PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding **Paneer**.

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.]



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**PROJECT AT A GLANCE**

- 1 Name of the Entrepreneur : xxxxxxxxx
- 2 Constitution (legal Status) : xxxxxxxxx
- 3 Father / Spouse Name : xxxxxxxxx
- 4 Unit Address : xxxxxxxxxxxxxxxxxxxxxxxxx
- District : xxxxxxx  
Pin: xxxxxxx State: xxxxxxxxx  
Mobile xxxxxxx
- 5 Product and By Product : **PANEER**
- 6 Name of the project / business activity proposed : **PANEER PRODUCTION UNIT**
- 7 Cost of Project : Rs.17.77 Lakhs
- 8 Means of Finance  
Term Loan Rs.12 Lakhs  
Own Capital Rs.1.78 Lakhs  
Working capital Rs.4 Lakhs
- 9 Debt Service Coverage Ratio : 2.80
- 10 Pay Back Period : 5 Years
- 11 Project Implementation Period : 5-6 Months
- 12 Break Even Point : 25%
- 13 Employment : 8 Persons
- 14 Power Requirement : 30.00 HP
- 15 Major Raw materials : Milk, Citric Acid and Packing Material
- 16 Estimated Annual Sales Turnover (Max Capacity) : 109.06 Lakhs
- 17 Detailed Cost of Project & Means of Finance

**COST OF PROJECT**

(Rs. In Lakhs)

Particulars	Amount
	Own/Rented
Land	5.00
Building / Shed 1000 Sq ft	7.33
Plant & Machinery	1.00
Furniture & Fixtures	4.44
Working Capital	17.77
<b>Total</b>	<b>17.77</b>

**MEANS OF FINANCE**

Particulars	Amount
Own Contribution	1.78
Working Capital(Finance)	4.00
Term Loan	12.00
<b>Total</b>	<b>17.77</b>

# **PANEER PRODUCTION**

**Introduction:** Paneer is a South Asian variety of soft cheese obtained by acid and heat coagulation of milk. It is a popular indigenous dairy product of India, is similar to an unripened variety of soft cheese which is used in the preparation of a variety of culinary dishes and snacks. It is obtained by heat and acid coagulation of milk, entrapping almost all the fat, casein complexed with denatured whey proteins and a portion of salts and lactose. It is a rich source of high quality animal protein, fat, minerals and vitamins. The production of paneer has been largely confined to the unorganized dairy sector which employs traditional, inefficient methods of manufacture.



**Uses & Market Potential:** Paneer is a staple ingredient in many Indian dishes and can be used fresh or deep fried. Paneer is commonly used in sweets, snacks or with vegetables. Various other uses are follows:

- Paneer can be included in curries, particularly with tomatoes, potatoes or peas.

- Cubes of paneer can be added to soup to provide texture.
- Fresh paneer can be boiled in sugar syrup and served as a sweet.
- Paneer itself has a rather bland flavour but it can act as a flavour carrier. Therefore it is excellent marinated or used in a curry or sauce.

The paneer market in India grew at a CAGR of 12.5% during 2014-2019. As a considerable part of population consists of vegetarians, paneer emerges as a viable option. Apart from this, factors such as increasing population, urbanisation rates, improved cold supply chain and growing deep freezer penetration are also influencing the market growth. We can expect the market to exhibit strong growth during 2020-2025.

**Machinery Requirement:** Basic machinery & equipments required are as follows:

S No.	Machine	Unit	Price
1.	Milk Pasteurizer	1	125000
2.	IBT Type Chilling Machine	1	145000
3.	Pumps	1	18000
4.	Paneer Press	1	65000
5.	Weighing machine	1	15000
6.	Milk Storage Tank	1	35000
7.	Paneer Coagulation tank	2	70000
8.	Balance Tank	1	15000
9.	Boiler	1	165000
10.	Other machinery & equipments	1	80000
	<b>Total Amount</b>		<b>733000</b>

**Raw Material:** Basic raw material requirement are as follows:

1. Milk
2. Citric Acid
3. Packing Material

**Manufacturing Process:** The milk is procured from vendors and stored in storage tanks prior to primary processing of milk, boiler is utilized to generate steam which is utilized in various process of plant which generally includes heating of milk in this case.

This steam is utilized in pasteurizer to heat the milk for pasteurization at temperature ranging from 80 to 90 degree Celsius, after appropriate holding time which is 5 minutes at high temperature steady state, milk is sent to another holding tank which stores the milk so as to cool it to 80 to 75 degree Celsius. As cooling curve for milk is exponential, it does not require any significant cooling time even without any addition cooling arrangement. If a faster cooling is to be achieved ambient water circulation through jackets of holding tanks sufficient.

After this temperature is achieved, the milk is pumped into coagulation tank, which has steam jackets to maintain temperature of milk, once steady state temperature is achieved which is 70 degree Celsius for buffalo milk and 80 degree Celsius for cow milk, coagulant is added citric acid, lactic acid etc. The milk is stirred gently and manually till whey separates out.

The mixture is allowed to settle and excess whey is drained out, till it reaches close to top surface of coagulated mass. This coagulated mass is fed to paneer press, which essentially presses the paneer in order to drain out most of water within coagulated mass, in order to obtain a large block of paneer.

This paneer block is manually cut in required sizes, checked for required weight, packed and stored in IBT Chilling Machine prior to dispatch, which is essential in order to reduce bacterial growth as well as allows paneer to be stored till dispatch.

### **Area:**

The industrial setup requires space for Inventory, workshop or manufacturing area, space for power supply utilities and auxiliary like Generator setup. Also some of the area of building is required for office staff facilities,

documentation, office furniture, etc. Thus, the approximate total area required for complete industrial setup is 1000 to 1400Sqft. Civil work cost will be around 5 Lac Rs. (Approx.)

**Power Requirement:** The power consumption required to run all the machinery could be approximated as 30hp.

**Manpower Requirement:** There are requirement of skilled machine operators to run the machine set. Experience quality engineers are required for desired quality control. Some helpers are also required to transfer the material from one work station to other. Office staffs are required to maintain the documentation. The approximate manpower required is 8 including 1 Supervisor, 1 Plant operator, 1 unskilled worker, 1 Helper and 1 Security guard. 3 Skilled worker including Accountant, Manager and Sales person.

**Bank Term Loan:** Rate of Interest is assumed to be at 11%

**Depreciation:** Depreciation has been calculated as per the Provisions of Income Tax Act, 1961

### **Approvals & Registration Requirement:**

Basic registration required in this project:

- GST Registration
- Udyog Aadhar Registration (Optional)
- Choice of a Brand Name of the product and secure the name with Trademark if require
- FSSAI Registration

### **Implementation Schedule:**

S No.	Activity	Time required
1.	Acquisition of premises	1-2 Months
2.	Procurement & installation of Plant & Machinery	1-2 Months
3.	Arrangement of Finance	1.5-2 Months
4.	Requirement of required Manpower	1 Month
5.	Commercial Trial Runs	1 Month
	Total time Required (some activities shall run concurrently)	5-6 Months

## **FINANCIALS**

<b>PROJECTED CASH FLOW STATEMENT</b>					
<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	1.78	-			
Reserve & Surplus	4.20	6.11	8.16	10.76	13.95
Depriciation & Exp. W/off	1.70	1.47	1.28	1.11	0.97
Increase In Cash Credit	4.00				
Increase In Term Loan	12.00	-	-	-	-
Increase in Creditors	0.70	0.12	0.08	0.08	0.08
<b>TOTAL :</b>	<b>24.37</b>	<b>7.71</b>	<b>9.52</b>	<b>11.96</b>	<b>15.00</b>
<b><u>APPLICATION OF FUND</u></b>					
Increase in Fixed Assets	13.33	-	-	-	-
Increase in Stock	1.20	0.19	0.19	0.19	0.20
Increase in Debtors	4.25	0.74	0.72	0.76	0.80
Repayment of Term Loan	1.33	2.67	2.67	2.67	2.67
Taxation	-	0.61	1.22	3.23	4.18
Drawings	2.50	3.00	4.00	5.00	7.00
<b>TOTAL :</b>	<b>22.61</b>	<b>7.21</b>	<b>8.80</b>	<b>11.85</b>	<b>14.85</b>
Opening Cash & Bank Balance	-	1.76	2.26	2.98	3.09
Add : Surplus	1.76	0.49	0.73	0.11	0.14
Closing Cash & Bank Balance	<b>1.76</b>	<b>2.26</b>	<b>2.98</b>	<b>3.09</b>	<b>3.24</b>



<b>PROJECTED BALANCE SHEET</b>					
<b>PARTICULARS</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>
<b>SOURCES OF FUND</b>					
<b>Capital Account</b>					
Opening Balance	-	3.48	5.98	8.92	11.45
Add: Additions	1.78	-	-	-	-
Add: Net Profit	4.20	5.50	6.94	7.54	9.76
Less: Drawings	2.50	3.00	4.00	5.00	7.00
<b>Closing Balance</b>	<b>3.48</b>	<b>5.98</b>	<b>8.92</b>	<b>11.45</b>	<b>14.21</b>
CC Limit	4.00	4.00	4.00	4.00	4.00
Term Loan	10.66	8.00	5.33	2.66	0.00
Sundry Creditors	0.70	0.82	0.90	0.98	1.06
<b>TOTAL :</b>	<b>18.84</b>	<b>18.79</b>	<b>19.15</b>	<b>19.10</b>	<b>19.28</b>
<b>APPLICATION OF FUND</b>					
<b>Fixed Assets ( Gross)</b>	13.33	13.33	13.33	13.33	13.33
Gross Dep.	1.70	3.17	4.45	5.57	6.53
Net Fixed Assets	11.63	10.16	8.88	7.76	6.80
<b>Current Assets</b>					
Sundry Debtors	4.25	4.99	5.71	6.47	7.27
Stock in Hand	1.20	1.39	1.58	1.77	1.97
Cash and Bank	1.76	2.26	2.98	3.09	3.24
<b>TOTAL :</b>	<b>18.84</b>	<b>18.79</b>	<b>19.15</b>	<b>19.10</b>	<b>19.28</b>

<b>PROJECTED PROFITABILITY STATEMENT</b>					
<b>PARTICULARS</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>
<b>A) SALES</b>					
Gross Sale	63.72	74.88	85.67	97.07	109.06
<b>Total (A)</b>	<b>63.72</b>	<b>74.88</b>	<b>85.67</b>	<b>97.07</b>	<b>109.06</b>
<b>B) COST OF SALES</b>					
Raw Material Consumed	42.08	49.09	54.00	58.91	63.81
Electricity Expenses	2.05	2.28	2.51	2.74	2.97
Repair & Maintenance	3.19	4.49	6.00	7.57	8.72
Labour & Wages	4.79	5.08	5.53	6.09	6.69
Depreciation	1.70	1.47	1.28	1.11	0.97
<b>Cost of Production</b>	<b>53.80</b>	<b>62.41</b>	<b>69.32</b>	<b>76.41</b>	<b>83.17</b>
<b>Add: Opening Stock /WIP</b>	<b>-</b>	<b>0.44</b>	<b>1.06</b>	<b>1.22</b>	<b>1.38</b>
<b>Less: Closing Stock /WIP</b>	<b>0.44</b>	<b>1.06</b>	<b>1.22</b>	<b>1.38</b>	<b>1.55</b>
<b>Cost of Sales (B)</b>	<b>53.36</b>	<b>61.79</b>	<b>69.16</b>	<b>76.25</b>	<b>83.00</b>
<b>C) GROSS PROFIT (A-B)</b>	<b>10.36</b>	<b>13.08</b>	<b>16.51</b>	<b>20.81</b>	<b>26.06</b>
	<b>16.25%</b>	<b>17.47%</b>	<b>19.27%</b>	<b>21.44%</b>	<b>23.90%</b>
D) Bank Interest (Term Loan )	1.30	1.06	0.77	0.48	0.18
ii) Interest On Working Capital	0.44	0.44	0.44	0.44	0.44
E) Salary to Staff	3.78	3.97	4.56	5.25	6.04
F) Selling & Adm Expenses Exp.	0.64	1.50	2.57	3.88	5.45
<b>TOTAL (D+E)</b>	<b>6.16</b>	<b>6.97</b>	<b>8.34</b>	<b>10.05</b>	<b>12.11</b>
<b>H) NET PROFIT</b>	<b>4.20</b>	<b>6.11</b>	<b>8.16</b>	<b>10.76</b>	<b>13.95</b>
<b>I) Taxation</b>	<b>-</b>	<b>0.61</b>	<b>1.22</b>	<b>3.23</b>	<b>4.18</b>
<b>J) PROFIT (After Tax)</b>	<b>4.20</b>	<b>5.50</b>	<b>6.94</b>	<b>7.54</b>	<b>9.76</b>

<b>COMPUTATION OF MAKING OF PANEER</b>			
<b>Item to be Manufactured Paneer</b>			
Manufacturing Capacity per day		200	kg
No. of Working Hour		8	
No of Working Days per month		25	
No. of Working Day per annum		300	
Total Production per Annum		60,000	kg
Total Production per Annum		1,20,000	Packet of 500gm each
Year		Capacity	PANEER
		Utilisation	
I		45%	54,000.00
II		50%	60,000.00
III		55%	66,000.00
IV		60%	72,000.00
V		65%	78,000.00

**COMPUTATION OF RAW MATERIAL**

Item Name	Quantity of Raw Material	Unit	Unit Rate of	Total CostPer Annum (100%)
Milk	3,00,000.00	Ltr.	30	90,00,000.00
Packing material and Citric Acid	Lumsum			3,50,000.00
<b>Total</b>				<b>93,50,000.00</b>
Total Raw material in Rs lacs				93.50

Raw Material Consumed	Capacity Utilisation	Amount (Rs.)	
I	45%	42.08	
II	50%	49.09	5% Increase in Cost
III	55%	54.00	5% Increase in Cost
IV	60%	58.91	5% Increase in Cost
V	65%	63.81	5% Increase in Cost

<b>COMPUTATION OF SALE</b>					
Particulars	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>
Op Stock	-	900.00	1,000.00	1,100.00	1,200.00
Production	54,000.00	60,000.00	66,000.00	72,000.00	78,000.00
	54,000.00	60,900.00	67,000.00	73,100.00	79,200.00
Less : Closing Stock(5 Days)	900.00	1,000.00	1,100.00	1,200.00	1,300.00
Net Sale	53,100.00	59,900.00	65,900.00	71,900.00	77,900.00
Sale Price per packet of 500 gm	120.00	125.00	130.00	135.00	140.00
<b>Sale (in Lacs)</b>	<b>63.72</b>	<b>74.88</b>	<b>85.67</b>	<b>97.07</b>	<b>109.06</b>

<b>COMPUTATION OF CLOSING STOCK &amp; WORKING CAPITAL</b>					
<b>PARTICULARS</b>	<b>I</b>	<b>II</b>	<b>III</b>	<b>IV</b>	<b>V</b>
<b>Finished Goods</b>					
(5 Days requirement)	0.92	1.06	1.22	1.38	1.55
<b>Raw Material</b>					
(2 Days requirement)	0.28	0.33	0.36	0.39	0.43
<b>Closing Stock</b>	<b>1.20</b>	<b>1.39</b>	<b>1.58</b>	<b>1.77</b>	<b>1.97</b>

<b>COMPUTATION OF WORKING CAPITAL REQUIREMENT</b>			
<b>Particulars</b>	<b>Amount</b>	<b>Margin(10%)</b>	<b>Net Amount</b>
Stock in Hand	1.20		
Less:			
Sundry Creditors	0.70		
<b>Paid Stock</b>	<b>0.50</b>	<b>0.05</b>	<b>0.45</b>
Sundry Debtors	4.25	0.42	3.82
<b>Working Capital Requirement</b>			<b>4.27</b>
<b>Margin</b>			0.47
<b>MPBF</b>			<b>4.27</b>
<b>Working Capital Demand</b>			<b>4.00</b>

<b>BREAK UP OF LABOUR</b>				
Particulars	Wages	No of	Total	
	Per Month	Employees	Salary	
Supervisor	12,000.00	1	12,000.00	
Plant Operator	10,000.00	1	10,000.00	
Unskilled Worker	6,000.00	1	6,000.00	
Helper	4,000.00	1	4,000.00	
Security Guard	6,000.00	1	6,000.00	
			38,000.00	
Add: 5% Fringe Benefit			1,900.00	
Total Labour Cost Per Month			39,900.00	
Total Labour Cost for the year ( In Rs. Lakhs)		5	4.79	

<b>BREAK UP OF SALARY</b>				
Particulars	Salary	No of	Total	
	Per Month	Employees	Salary	
Manager	12,000.00	1	12,000.00	
Accountant cum store keeper	10,000.00	1	10,000.00	
Sales	8,000.00	1	8,000.00	
Total Salary Per Month			30,000.00	
Add: 5% Fringe Benefit			1,500.00	
Total Salary for the month			31,500.00	
Total Salary for the year ( In Rs. Lakhs)		3	3.78	

<b>COMPUTATION OF DEPRECIATION</b>					
Description	Land	Building/shed	Plant & Machinery	Furniture	TOTAL
Rate of Depreciation		10.00%	15.00%	10.00%	
<b>Opening Balance</b>	Leased		-	-	-
Addition	-	5.00	7.33	1.00	13.33
	-	5.00	7.33	1.00	13.33
		-	-	-	
<b>TOTAL</b>		5.00	7.33	1.00	13.33
Less : Depreciation	-	0.50	1.10	0.10	1.70
WDV at end of Ist year	-	4.50	6.23	0.90	11.63
Additions During The Year	-	-	-	-	-
	-	4.50	6.23	0.90	11.63
Less : Depreciation	-	0.45	0.93	0.09	1.47
WDV at end of IInd Year	-	4.05	5.30	0.81	10.16
Additions During The Year	-	-	-	-	-
	-	4.05	5.30	0.81	10.16
Less : Depreciation	-	0.41	0.79	0.08	1.28
WDV at end of IIIrd year	-	3.65	4.50	0.73	8.88
Additions During The Year	-	-	-	-	-
	-	3.65	4.50	0.73	8.88
Less : Depreciation	-	0.36	0.68	0.07	1.11
WDV at end of IV year	-	3.28	3.83	0.66	7.76
Additions During The Year	-	-	-	-	-
	-	3.28	3.83	0.66	7.76
Less : Depreciation	-	0.33	0.57	0.07	0.97
WDV at end of Vth year	-	2.95	3.25	0.59	6.80

REPAYMENT SCHEDULE OF TERM LOAN						11.0%	
Year	Particulars	Amount	Addition	Total	Interest	Repayment	CI Balance
<b>I</b>	Opening Balance						
	Ist Quarter	-	12.00	12.00	0.33	-	12.00
	IInd Quarter	12.00	-	12.00	0.33	-	12.00
	IIIRD Quarter	12.00	-	12.00	0.33	0.67	11.33
	Ivth Quarter	11.33	-	11.33	0.31	0.67	10.67
					1.30	1.33	
<b>II</b>	Opening Balance						
	Ist Quarter	10.67	-	10.67	0.29	0.67	10.00
	IInd Quarter	10.00	-	10.00	0.28	0.67	9.33
	IIIRD Quarter	9.33	-	9.33	0.26	0.67	8.67
	Ivth Quarter	8.67		8.67	0.24	0.67	8.00
					1.06	2.67	
<b>III</b>	Opening Balance						
	Ist Quarter	8.00	-	8.00	0.22	0.67	7.33
	IInd Quarter	7.33	-	7.33	0.20	0.67	6.67
	IIIRD Quarter	6.67	-	6.67	0.18	0.67	6.00
	Ivth Quarter	6.00		6.00	0.17	0.67	5.33
					0.77	2.67	
<b>IV</b>	Opening Balance						
	Ist Quarter	5.33	-	5.33	0.15	0.67	4.67
	IInd Quarter	4.67	-	4.67	0.13	0.67	4.00
	IIIRD Quarter	4.00	-	4.00	0.11	0.67	3.33
	Ivth Quarter	3.33		3.33	0.09	0.67	2.67
					0.48	2.67	
<b>V</b>	Opening Balance						
	Ist Quarter	2.67	-	2.67	0.07	0.67	2.00
	IInd Quarter	2.00	-	2.00	0.06	0.67	1.33
	IIIRD Quarter	1.33	-	1.33	0.04	0.67	0.67
	Ivth Quarter	0.67		0.67	0.02	0.67	0.00
					0.18	2.67	

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>	5.90	6.98	8.22	8.65	10.73
Interest on Term Loan	1.30	1.06	0.77	0.48	0.18
Total	7.20	8.04	8.99	9.12	10.92
<b><u>REPAYMENT</u></b>					
Repayment of Term Loan	1.33	2.67	2.67	2.67	2.67
Interest on Term Loan	1.30	1.06	0.77	0.48	0.18
Total	2.64	3.73	3.44	3.14	2.85
<b>DEBT SERVICE COVERAGE RATIO</b>	<b>2.73</b>	<b>2.16</b>	<b>2.62</b>	<b>2.90</b>	<b>3.83</b>
<b>AVERAGE D.S.C.R.</b>			<b>2.80</b>		

<b>COMPUTATION OF ELECTRICITY</b>			
<b>(A) POWER CONNECTION</b>			
Total Working Hour per day		Hours	8
Electric Load Required		HP	30
Load Factor			0.7460
Electricity Charges		per unit	7.50
Total Working Days			300
<b>Electricity Charges</b>			<b>4,02,840.00</b>
Add : Minimim Charges (@ 10%)			
<b>(B) DG set</b>			
No. of Working Days			300 days
No of Working Hours			0.3 Hour per day
Total no of Hour			90
Diesel Consumption per Hour			8
Total Consumption of Diesel			720
Cost of Diesel			65.00 Rs. /Ltr
Total cost of Diesel			0.47
Add : Lube Cost @15%			0.07
Total			<b>0.54</b>
Total cost of Power & Fuel at 100%			4.57
<b>Year</b>		<b>Capacity</b>	<b>Amount (in Lacs)</b>
I		45%	2.05
II		50%	2.28
III		55%	2.51
IV		60%	2.74
V		65%	2.97

## **DISCLAIMER**

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