

PROJECT REPORT

Of

CHAPATI MAKING MACHINE

PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding **Chapati Making Machine**.

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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CHAPATI MAKING MACHINE

Introduction

Chapati also known as roti, safati, shabaati, phulka and roshi, is an unleavened flatbread originating from the Indian subcontinent and staple in India, Nepal, Bangladesh, Pakistan, Sri Lanka, East Africa and the Caribbean. Chapatis are made of whole wheat flour known as atta, mixed into dough with water, edible oil and optional salt in a mixing utensil called a parat, and is cooked on a tava (flat skillet).

It is a common staple in the Indian subcontinent as well as amongst expatriates from the Indian subcontinent throughout the world. Chapatis were also introduced to other parts of the world by immigrants from the Indian subcontinent, particularly by Indian merchants to Central Asia, Southeast Asia, East Africa, and the Caribbean islands.

Cooking

Chapatis are made using a soft dough comprising wheat flour, salt and water. It is more finely ground than most western-style whole wheat flours. Traditionally, roti (and rice) are prepared without salt to provide a bland background for spiced dishes.

Chapati dough is typically prepared with flour, salt and water, kneaded with the knuckles of the hand made into a fist and left to proof for at least 10 or 15 minutes to an hour for the gluten in the dough to develop. After proofing, the dough becomes softer and more pliable. Small portions of the dough are pinched off and formed into round balls that are pressed between the two palms to form discs which are then dipped into flour and rolled out on a circular rolling board (a chakla), using a rolling pin known as a velan or belan, into a flat disc. There are also automatic roti makers which automate the whole process

Ingredients

important ingredients of Chapati include – Flour, Water.

Health Benefit of Chapati

A plain roti is an excellent source of soluble fibre, which helps lower blood cholesterol levels, prevents constipation and helps keep our digestive system healthy. Loaded with complex carbohydrates that give you sustained energy and it can keep you satiated for hours. Other benefits of chapatis are as follow:

1. Enriched with nutrients.
2. Good for skin.
3. Power packed with energy
4. It prevent diseases.
5. Maintain haemoglobin level.

Description of Chapati Making Machine

Machinery for Chapati includes the following:

- Dough Mixer
- Main Chapati making machine

Chapati making machine is mainly used to produce final eatable chapati from the dough prepared in the dough mixer. With the help of this machine the work of Rolling, heating completes in a very short span.

Chapati Market Analysis

Chapati, a traditional staple food of Indians, is unleavened flat bread made from whole wheat flour. With rapidly changing lifestyles, changing socio-economic trends and increasing urbanization and consumerism there is a rising demand for convenience foods which require minimum or no preparation time particularly the ready-to-eat, because of all these reasons machines for chapatti has been evolved, which make it easy to prepare chapatti.

In India Around 70% of population eat chapati on daily basis in every meal. Manufacturers are introducing different types of machinery in

different sizes and ranges, targeting consumers from low-income groups, so that chapatti can be prepared easily.

Chapati Making Machine Manufacturing Process

- Firstly, pour the Flour and water in proportionate ratio into the dough mixer.
- After that start the mixer so that dough can be prepared properly.
- Then put the dough into the Chapati machine for rolling of chapatti.
- After that rolled chapatti is moved towards heater/flat Tava, which heat the chapatti to make a final product.

Machinery & Equipment's required:

Name	Cost
Dough Mixer	30000
Chapati Machine	300000
Total	3,00,000

- ❖ Cost of the machine is exclusive of GST & value of the machine varies with the change in batch size.

Land & Building required:

Land required 500 Square Feet (approx.)

Approximate rent for the same is 10000.

Labour Requirement:

2-3 Manpower is required for the chapatti machine.

Includes:

1 skilled Labour

1-2 Unskilled Labour

Raw Material Requirement of chapati

- ❖ Flour
- ❖ Water
- ❖ Salt (if required)

Average raw material cost per KG: Rs. 25-30

Chapati Unit License & registration

For Proprietor:

- Obtain the GST registration.
- FSSAI License.
- Fire/ Pollution Registration as required.
- 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	Construction (if Applicable)	1- 2 Months
3	Procurement & installation of Plant & Machinery	1
4	Arrangement of Finance	1
5	Requirement of required Manpower	1
	Total time Required (some activities shall run concurrently)	2-3 Months

Conclusion:

After completion of manufacturing process, product is ready to sell in the market. This machine can be installed with low investment & one can earn a good Margin of profit by doing this business.

PROJECT AT A GLANCE

- 1** Name of the Entrepreneur **XX**
- 2** Constitution (legal Status) : **XX**
- 3** Father's/Spouce's Name **XX**
- 4** Unit Address :
- Taluk/Block: **XX**
- District : **XX**
- Pin:
- E-Mail : **XX**
- Mobile **XX**
- 5** Product and By Product : Chapati
- 6** Name of the project / business activity proposed :
- 7** Cost of Project : **Rs.** 4.39
- 8 Means of Finance**
- Term Loan **Rs.** 3.95 Lacs
25% of 4.39 Lacs
- KVIC Margin Money **Rs.** (1.10Lacs)
- Own Capital **Rs.** 0.55 Lacs
- 9** Debt Service Coverage Ratio :
- 10** Pay Back Period : 4 years
- 11** Project Implementation Period : 6 months
- 12** Employment :
- 3 KW
- 13** Power Requirement : Connection
- 14** Major Raw materials : Flour, water
- 14.34 Lacs (at 50% capacity)
- 15** Estimated Annual Sales Turnover :

16 Detailed Cost of Project & Means of Finance

COST OF PROJECT

(Rs. In Lacs)

Particulars	Amount
Land	
Building & Civil Work	-

MEANS OF FINANCE

Plant & Machinery	3.89
Furniture & Fixtures	0.50
Pre-operative Expenses	
Contingencies	
Working Capital Requirement	1.11
Total	5.51

Particulars	Amount
Own Contribution	0.55
Bank Finance	3.95
working capital from bank	1.00
Total	5.51

KVIC Margin (25% of 4.39)
Monery Rs. 1,09,750

FINANCIAL ASSISTANCE REQUIRED

Term Loan of Rs. 3.95 Lacs and Working Capital limit of Rs. 1.00 Lacs

COST OF PROJECT

PARTICULARS	AMOUNT	AMOUNT	AMOUNT
Building Civil Work		10.00%	90.00%
Plant & Machinery	3.89	0.39	3.50
Furniture & Fixtures and Other Assets	0.50	0.05	0.45
Working capital	1.11	0.11	1.00
Total	5.51	0.65	4.95

MEANS OF FINANCE

PARTICULARS	AMOUNT
Own Contribution	0.55
Bank Loan	3.95
Working capital Limit	1.00
Total	5.51

COMPUTATION OF PRODUCTION OF CHAPATI

Items to be Manufactured		
Chapati		
Machine Capacity	800	Chapati Per Hour
machine capacity per day	4800	Chapati
machine capacity per annum	1152000	Chapati
1 KG of Dough Consists	35.00	Chapatti
total dough required	32,914	KG

Production of chapati		
Production	Capacity	Chapati
1st year	50%	576,000
2nd year	55%	633,600
3rd year	60%	691,200
4th year	65%	748,800
5th year	70%	806,400

Raw Material Cost			
Year	Capacity Utilisation	KG	Value (Rs. in lacs)
1st year	50%	27.00	4.44
2nd year	55%	27.50	4.98
3rd year	60%	28.00	5.53
4th year	65%	28.50	6.10
5th year	70%	29.00	6.68

<u>COMPUTATION OF SALE</u>					
Particulars	1st year	2nd year	3rd year	4th year	5th year
Op Stock	-	2,400	2,640	2,880	3,120
Production	576,000	633,600	691,200	748,800	806,400
Less : Closing Stock	2,400	2,640	2,880	3,120	3,360
Net Sale	573,600	633,360	690,960	748,560	806,160
sale price per piece	2.50	2.60	2.70	2.80	2.90
Sales (in Lacs)	14.34	16.47	18.66	20.96	23.38

BREAK UP OF LABOUR CHARGES

Particulars	Wages	No of	Total
	Per Month	Employees	Salary
Skilled	14000	1	14000
Unskilled	12000	2	24000
Total Salary Per Month			38000
Total Annual Labour Charges	(in Lacs)		4.56

BREAK UP OF STAFF Charges

Particulars	Wages	No of	Total
	Per Month	Employees	Salary
supervisor	12000	1	12000
Helper	8000	1	8000
Total Salary Per Month			20000
Total Annual Labour Charges	(in Lacs)		2.40

Utility Charges at 100% capacity (per month)

Particulars	value	Description
Power connection required	3	KWH
consumption per day	24	units
Consumption per month	480	units
Rate per Unit	10	Rs.
power Bill per month	4800	Rs.

PROJECTED PROFITABILITY STATEMENT

PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
Capacity Utilisation %	50%	55%	60%	65%	70%
<u>SALES</u>					
Gross Sale					
Chapati	14.34	16.47	18.66	20.96	23.38
Total	14.34	16.47	18.66	20.96	23.38
<u>COST OF SALES</u>					
Raw Material Consumed	4.44	4.98	5.53	6.10	6.68
Electricity Expenses	0.58	0.66	0.76	0.88	1.01
Depreciation	0.63	0.54	0.46	0.40	0.34
Consumables	0.57	0.66	0.75	0.84	0.94
Repair & maintenance	0.29	0.66	0.75	0.84	0.94
other direct expenses	0.29	0.49	0.56	0.63	0.94
Water bill	0.60	0.66	0.73	0.80	0.88
Cost of Production	7.40	8.65	9.53	10.47	11.71
Add: Opening Stock /WIP	-	0.03	0.04	0.04	0.04
Less: Closing Stock /WIP	0.03	0.04	0.04	0.04	0.05
Cost of Sales	7.37	8.65	9.53	10.47	11.71
GROSS PROFIT	6.97	7.82	9.13	10.49	11.67
salary to staff	2.40	2.64	2.90	3.19	3.35
Interest on Term Loan	0.39	0.35	0.25	0.16	-
Interest on working Capital	0.11	0.11	0.11	0.11	0.11
Rent	1.20	1.32	1.45	1.60	1.84
Selling & adm Exp	1.00	1.32	1.49	1.68	2.34

TOTAL	5.10	5.73	6.21	6.74	7.64
NET PROFIT	1.87	2.09	2.92	3.75	4.03
Taxation					
PROFIT (After Tax)	1.87	2.09	2.92	3.75	4.03

PROJECTED BALANCE SHEET

PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
<u>Liabilities</u>					
Capital					
opening balance		1.67	2.25	3.17	4.42
<i>Add:- Own Capital</i>	0.55				
Add:- Retained Profit	1.87	2.09	2.92	3.75	4.03
Less:- Drawings	0.75	1.50	2.00	2.50	3.50
Closing Blance	1.67	2.25	3.17	4.42	4.95
Subsidy Reserve	1.10	1.10	1.10	-	-
Term Loan	3.53	2.69	1.85	0.00	-
Working Capital Limit	1.00	1.00	1.00	1.00	1.00
Sundry Creditors	0.19	0.21	0.23	0.38	0.39
Provisions & Other Liab	0.30	0.40	0.55	0.66	0.83
TOTAL :	7.79	7.65	7.90	6.46	7.17
<u>Assets</u>					
Fixed Assets (Gross)	4.39	4.39	4.39	4.39	4.39
Gross Dep.	0.63	1.18	1.64	2.03	2.37
Net Fixed Assets	3.76	3.22	2.76	2.36	2.02
FD of Subsidy	1.10	1.10	1.10		
Current Assets					
Sundry Debtors	0.60	0.69	0.93	1.31	1.46
Stock in Hand	0.77	0.87	1.19	1.57	1.72
Cash and Bank	1.56	1.78	1.92	1.23	1.97
TOTAL :	7.79	7.65	7.90	6.46	7.17

PROJECTED CASH FLOW STATEMENT

PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
<u>SOURCES OF FUND</u>					
Own Margin	0.55				
Net Profit	1.87	2.09	2.92	3.75	4.03
Depreciation & Exp. W/off	0.63	0.54	0.46	0.40	0.34
Increase in Cash Credit	1.00	-	-	-	-
Increase In Term Loan	3.95	-	-	-	-
Increase in Creditors	0.19	0.02	0.02	0.15	0.01
Increase in Provisions & Oth lib	0.30	0.10	0.15	0.11	0.17
increase in subsidy	1.10				
TOTAL :	9.59	2.75	3.55	4.41	4.55
<u>APPLICATION OF FUND</u>					
Increase in Fixed Assets	4.39				
Increase in Stock	0.77	0.09	0.33	0.38	0.15
Increase in Debtors	0.60	0.09	0.25	0.38	0.15
Repayment of Term Loan	0.42	0.84	0.84	1.85	-
Increase in FD	1.10	-	-		
Drawings	0.75	1.50	2.00	2.50	3.50
Taxation	-	-	-	-	-
TOTAL :	8.03	2.52	3.41	5.10	3.80
Opening Cash & Bank Balance	-	1.56	1.78	1.92	1.23
Add : Surplus	1.56	0.23	0.14	0.70	0.74
Closing Cash & Bank Balance	1.56	1.78	1.92	1.23	1.97

COMPUTATION OF CLOSING STOCK & WORKING CAPITAL

PARTICULARS	1st year	2nd year	3rd year	4th year	5th year
<u>Finished Goods</u>					
	0.03	0.04	0.04	0.04	0.05
<u>Raw Material</u>					
	0.74	0.83	1.15	1.52	1.67
Closing Stock	0.77	0.87	1.19	1.57	1.72

COMPUTATION OF WORKING CAPITAL REQUIREMENT

TRADITIONAL METHOD					
Particulars	Amount	Own Margin		Bank Finance	
Finished Goods & Raw Material	0.77				
Less : Creditors	0.19				
Paid stock	0.59	10%	0.06	90%	0.53
Sundry Debtors	0.60	10%	0.06	90%	0.54
	1.18		0.12		1.07
WORKING CAPITAL LIMIT DEMAND (from Bank)					
				1.00	

2nd Method		
PARTICULARS	1st year	2nd year
Total Current Assets	2.93	3.34
Other Current Liabilities	0.49	0.61
Working Capital Gap	2.44	2.73
Min Working Capital		
25% of WCG	0.61	0.68
Actual NWC	1.44	1.73
item III - IV	1.83	2.05
item III - V	1.00	1.00
MPBF (Lower of VI & VII)	1.00	1.00

3rd Method		
PARTICULARS	1st year	2nd year
Total Current Assets	2.93	3.34
Other Current Liabilities	0.49	0.61
Working Capital Gap	2.44	2.73
Min Working Capital		
25% of Current Assets	0.73	0.83
Actual NWC	1.44	1.73
item III - IV	1.71	1.89
item III - V	1.00	1.00
MPBF (Lower of VI & VII)	1.00	1.00

COMPUTATION OF DEPRECIATION

Description	Plant & Machinery	Furniture	TOTAL
Rate of Depreciation	15.00%	10.00%	
Opening Balance	-	-	-
Addition	3.89	0.50	4.39
Total	3.89	0.50	4.39
Less : Depreciation	0.58	0.05	0.63
WDV at end of Year	3.31	0.45	3.76
Additions During The Year	-	-	-
Total	3.31	0.45	3.76
Less : Depreciation	0.50	0.05	0.54
WDV at end of Year	2.81	0.41	3.22
Additions During The Year	-	-	-
Total	2.81	0.41	3.22
Less : Depreciation	0.42	0.04	0.46
WDV at end of Year	2.39	0.36	2.76
Additions During The Year	-	-	-
Total	2.39	0.36	2.76
Less : Depreciation	0.36	0.04	0.40
WDV at end of Year	2.03	0.33	2.36
Additions During The Year	-	-	-
Total	2.03	0.33	2.36
Less : Depreciation	0.30	0.03	0.34
WDV at end of Year	1.73	0.30	2.02
s	-	-	-

Total	1.73	0.30	2.02
Less : Depreciation	0.26	0.03	0.29
WDV at end of Year	1.47	0.27	1.73
Less : Depreciation	0.22	0.03	0.25
WDV at end of Year	1.25	0.24	1.49
Less : Depreciation	0.19	0.02	0.21
WDV at end of Year	1.06	0.22	1.28

<u>CALCULATION OF D.S.C.R</u>				
PARTICULARS	1st year	2nd year	3rd year	4th year
CASH ACCRUALS	2.50	2.63	3.38	4.15
Interest on Term Loan	0.39	0.35	0.25	0.16
Total	2.89	2.97	3.63	4.31
<u>REPAYMENT</u>				
Instalment of Term Loan	0.42	0.84	0.84	1.85
Interest on Term Loan	0.39	0.35	0.25	0.16
Total	0.81	1.19	1.09	2.01
DEBT SERVICE COVERAGE RATIO	3.57	2.51	3.32	2.14
AVERAGE D.S.C.R.	2.88			

REPAYMENT SCHEDULE OF TERM LOAN

Interest 11.00%

Year	Particulars	Amount	Addition	Total	Interest	Repayment	Closing Balance
1st	Opening Balance						
	1st month	-	3.95	3.95	-	-	3.95
	2nd month	3.95	-	3.95	0.04	-	3.95
	3rd month	3.95	-	3.95	0.04	-	3.95
	4th month	3.95	-	3.95	0.04		3.95
	5th month	3.95	-	3.95	0.04		3.95
	6th month	3.95	-	3.95	0.04		3.95
	7th month	3.95	-	3.95	0.04	0.070	3.88
	8th month	3.88	-	3.88	0.04	0.070	3.81
	9th month	3.81	-	3.81	0.03	0.070	3.74
	10th month	3.74	-	3.74	0.03	0.070	3.67
	11th month	3.67	-	3.67	0.03	0.070	3.60
	12th month	3.60	-	3.60	0.03	0.070	3.53
					0.39	0.420	
2nd	Opening Balance						
	1st month	3.53	-	3.53	0.03	0.070	3.46
	2nd month	3.46	-	3.46	0.03	0.070	3.39
	3rd month	3.39	-	3.39	0.03	0.070	3.32
	4th month	3.32	-	3.32	0.03	0.070	3.25
	5th month	3.25	-	3.25	0.03	0.070	3.18
	6th month	3.18	-	3.18	0.03	0.070	3.11
	7th month	3.11	-	3.11	0.03	0.070	3.04
	8th month	3.04	-	3.04	0.03	0.070	2.97
	9th month	2.97	-	2.97	0.03	0.070	2.90
	10th month	2.90	-	2.90	0.03	0.070	2.83
	11th month	2.83	-	2.83	0.03	0.070	2.76
	12th month	2.76	-	2.76	0.03	0.070	2.69

					0.35	0.840	
3rd	Opening Balance						
	1st month	2.69	-	2.69	0.02	0.070	2.62
	2nd month	2.62	-	2.62	0.02	0.070	2.55
	3rd month	2.55	-	2.55	0.02	0.070	2.48
	4th month	2.48	-	2.48	0.02	0.070	2.41
	5th month	2.41	-	2.41	0.02	0.070	2.34
	6th month	2.34	-	2.34	0.02	0.070	2.27
	7th month	2.27	-	2.27	0.02	0.070	2.20
	8th month	2.20	-	2.20	0.02	0.070	2.13
	9th month	2.13	-	2.13	0.02	0.070	2.06
	10th month	2.06	-	2.06	0.02	0.070	1.99
	11th month	1.99	-	1.99	0.02	0.070	1.92
	12th month	1.92	-	1.92	0.02	0.070	1.85
					0.25	0.840	
4th	Opening Balance						
	1st month	1.85	-	1.85	0.02	0.070	1.78
	2nd month	1.78	-	1.78	0.02	0.070	1.71
	3rd month	1.71	-	1.71	0.02	0.070	1.64
	4th month	1.64	-	1.64	0.02	0.070	1.57
	5th month	1.57	-	1.57	0.01	0.070	1.50
	6th month	1.50	-	1.50	0.01	0.070	1.43
	7th month	1.43	-	1.43	0.01	0.070	1.36
	8th month	1.36	-	1.36	0.01	0.070	1.29
	9th month	1.29	-	1.29	0.01	0.070	1.22
	10th month	1.22	-	1.22	0.01	0.070	1.15
	11th month	1.15	-	1.15	0.01	0.070	1.08
	12th month(Subsidy adjusted)	1.08	-	1.08	0.01	1.080	0.00
					0.16	1.850	
	DOOR TO DOOR	48	MONTHS				
	MORATORIUM PERIOD	6	MONTHS				
	REPAYMENT PERIOD	42	MONTHS				

Supplier Details:

S L Machinery	Address: Plot No. 930, Tyre Wall Gali, Mundka, Delhi.
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