

PROJECT PROFILE

PAPAD MAKING

1. INTRODUCTION

Papad is a popular and tasty food item in the Indian diet since many centuries. It is essentially a wafer like product, round in shape and made from dough of powdered pulses, spice, powdered chilly and salt. Variety of pulses and proportion of pulses and spices varies from region to region depending upon preferences of local people whereas certain varieties are popular on a larger scale. Traditionally, this activity was confined to household papad making but in view of increasing demand and availability of machinery is has now been developed in cottage and small scale sector.

2. OBJECTIVES

The objective of the profiles is to encourage and assist prospective entrepreneurs in MSME sector in and guiding making them aware of the opportunities of this sector. It is also being developed by the Directorate of the Food Processing Industries, Government of West Bengal to help entrepreneurs with knowledge about raw materials availability, knowledge of market, source of technology and plant and machinery suppliers. M/s ITV Agro & Food Technologies Pvt. Ltd., New Delhi has helped in developing the project profile.

3. RAW MATERIAL AVAILABILITY

The all important raw material would be flour of pulses depending upon the product mix. Since annual requirement even at 100% will not be more than 60 tonnes, availability would not be a bottleneck. Other materials like salt, spices, edible oil, preservatives etc. shall be required in small quantity and they will be available locally. Packing material like different sizes of polythene bags and corrugated boxes shall also be available locally.

4. MARKET OPPORTUNITIES

Market for papad is steadily growing across the country. There are not much seasonal fluctuations but demand generally goes up by 10% to 15 % during winter season. There are a couple of national brands but the market is predominantly controlled by the local brands. This activity is yet to pick up in West Bengal and thus, prospects for a new entrant are bright, provided quality is good and prices are competitive. It can be sold through many outlets of provision and departmental stores. Before launching the product, a quick assessment of consumer preference is advisable.

5. PROJECT DESCRIPTION

a) Product & Its uses

Papad is a favourite item with Indians and is used as taste enricher with the main course and as a snack item. Since it is made from pulses, it is easy to digest and nutritious as well. It is a very easy to make instant food item and is either fried in edible oil or simply roasted before serving. Its shelf life is 2.5 to 3 months. This product can be made anywhere in the country. The note envisages location at an appropriate place in West Bengal.

b) Capacity

The proposed capacity of the plant is to manufacture 60 MT / annum of papad.

c) Manufacturing process

Papad can be manufactured from different varieties of pulses or there could be a combination of pulses as well. Adequate quantity of water is added in flour of pulses, common salt, spices and sodium bicarbonate and homogenous mixing is done to obtain dough. After about 30 minutes, small balls weighing around 7-8 grams of dough are made. These balls are then placed in papad making machine or papad press wherein

these balls are pressed and circular papads are made as per the size of mould. These papads are then sun dried but in this note driver with trolley is recommended as sun drying may not be always feasible in West Bengal. Lot of 25 or 50 papads is then packed in polythene bags .

6. PROJECT COMPONENTS & COST

a) *Land & Building*

A plot of land of about 150 sq.mtrs with built -up area of approximately 80 sq. mtrs. shall be adequate to house all the equipments leaving sufficient space for storage and packing. The location need not be at a prominent place as counter sales is not envisaged. The total cost of land is taken at Rs. 75,000 whereas the construction cost is assumed to be Rs. 4.80 lacs.

b) *Plant & Machinery*

It is suggested to have annual rated production capacity of 60 ton / year 300 working days.. To install this capacity, following machinery shall be needed:

Item	Qty	Price (Rs.)
Grinder with electric motor having 30-35 kgs/hr. capacity	1	70,000
Mixer of 20 kgs. per charge capacity with electric motor	1	65,000
Pedal -operated papad press	2	35,000
Drier with trolley and 48 trays with heating element of 9 KW	1	5,00,000
Extra aluminium trays	2	50,000
Sealing Machine	1	20,000
Water storage tank	-	10,000
Laboratory equipment	1	15,000
Weighing		15,000
Total		7,81,000/-

c) Miscellaneous Assets

Some other assets like aluminium top tables, furniture & fixtures, baskets drums, storage racks, aluminium stainless steel utensils etc shall also be required for which a provision of Rs. 1.40 lacs is made.

d) Utilities

The total power requirement shall be 25 HP whereas water required for process and sanitation and other purposes shall be about 2,000 ltrs per day. The annual cost under this head at 100% capacity utilization shall be around Rs. 1.80 lacs.

e) Prel. & Pre Operative Expenses

Expenses like registration & establishment charges, trial run, interest during project implementation etc. will be around Rs. 1.20 lacs

f) Working Capital Assessment

The rated production capacity of the project shall be 60 tons per year but it is assumed that it would operate at 60% in the first year. The working capital needs at this level shall be as under :

(Rs. in lacs)

Particulars	Period	Margin	Total	Bank	Promoters
Stock of Raw Material	½ month	30%	0.63	0.44	0.19
Stock of Finished Goods	½ month	25%	1.17	0.88	0.29
Receivable	1 month	25%	1.50	1.13	0.37
Other expenses			3.30	2.45	0.85

g) *Project cost & Means of Finance*

Item	Amount (Rs. in lacs)
Land and Building	5.50
Plant and Machinery	7.81
Miscellaneous Assets	1.40
P & P Expenses	1.20
Contingencies @ 10% on Building and plant and machinery	1.26
Working capital margin	0.85
Total	18.02
Means of Finance	
Promoters' contribution	7.20
Term loan from Bank FI	10.82
Total	18.02
Debt Equity Ratio	1.5:1
Promoters contribution	40%

Financial assistance in the form of grant is available from the Ministry of Food Processing Industries, Govt. of India, towards expenditure on technical civil works and plant and machinery for eligible projects subject to certain terms and conditions.

7) **PROJECTED PROFITABILITY**

a) *Production Capacity*

The rated production capacity of the plant is 60 tonnes per year whereas actual capacity utilization is expected to be 60% and 75% during 1st year and 2nd year respectively.

b) Sales Revenue at 100%

Product	Qty (Tonnes)	Selling Price (Rs. / Ton)	Sales (Rs. in lacs)
Papad	60	1,00,000	60.00

c) Raw Material Required at 100%

Product	Qty (Tonnes)	Rate (Rs. / Ton)	Value (Rs. in lacs)
Flour of pulses	58	35,000	20.30
Edible oil, salt, spices	-	-	1.00
Preservatives, etc.	-	-	1.50
Packing Material	-	-	2.40
		Total	25.20

d) Projected Profitability

(Rs. in lacs)

S. No.	Particulars	1 st year	2 nd year
A.	Installed capacity	60 Tonnes	
	Capacity Utilisation	60%	75%
	Sales Realisation	36.00	45.00
B.	Cost of Production		
	Raw & packing materials	15.12	18.90
	Utilities	1.08	1.35
	Salaries	5.16	5.67
	Stores and Spares	0.90	1.12
	Repairs and Maintenance	1.20	1.50
	Selling Expenses @ 10%	3.60	4.50

	Administrative Expenses	1.20	1.50
	Total	28.26	34.54
C.	Profit before Interest & Depreciation	7.74	10.46
	Interest on Term Loan	1.08	0.88
	Interest on Working Capital	0.29	0.36
	Depreciation.	1.26	1.14
	Net Profit	5.11	8.08
	Profit after tax	5.11	8.08
	Cash Accruals	6.37	9.22
	Repayment of Term Loan	Nil	2.00

e) Break Even Point Analysis

(Rs. in lacs)

S. No.	Particulars	Amount	
(A)	Sales		45.00
(B)	Variable Costs		
	Raw Material	18.90	
	Utilities(70%)	0.95	
	Salaries (60%)	3.96	
	Stores and Spares	1.12	
	Selling and Distribution Exps (70%)	3.60	
	Admn Expenses (50%)	0.75	
	Interest on WC	0.36	29.64
(C)	Contribution (A) - (B)		15.36
(D)	Fixed Costs		6.13
(E)	Break Even Point		40%

f) Debt Service Coverage Ratio (DSCR)

(Rs. in lacs)

Particulars	1 st year	2 nd year	3 rd year
Cash Accruals	6.37	9.22	11.06
Interest on TL	1.08	0.88	0.68
Total (A)	7.45	10.10	11.74
Interest on TL	1.08	0.88	0.68
Repayment of TL	Nil	2.00	2.00
Total (B)	1.08	2.88	2.68
DSCR (A) / (B)	6.89	3.50	4.38
Average DSCR	4.92		

g) Internal Rate of Return (IRR)

Cost of the project is Rs. 18.02 lacs

(Rs. in lacs)

Year	Cash Accruals	24%	32%
1	6.37	5.13	4.82
2	9.22	5.99	5.29
3	11.06	5.79	4.81
4	11.06	4.67	3.62
Total		21.58	18.50

The IRR is around 32%

h) Manpower requirement

Particulars	Nos.	Monthly	Total Monthly Salary (Rs.)
Skilled workers	2	7,500	15,000
Helpers	4	5,000	20,000
Salesman	1	8,000	8,000
		Total	43,000/-

8. ASSUMPTIONS

- The plant will work for 300 days in a year. :
- The operating capacity is 60% , 75%, 90 % during 1st year , 2nd year and 3rd year respectively.
- The interest on term loan is taken at 10% per annum and on working capital, it is 12% per annum.
- Price of raw material and selling price of finished products is taken at Rs. 35,000 / ton and Rs.1,00,000 / ton respectively.

9. SOURCES OF TECHNOLOGY

CFTRI, Mysore, has successfully developed the technical know-how for the product. BIS has laid down the quality standard. The compliance under FSSAI act is a must.

10. PLANT & MACHINERY SUPPLIERS

1. Gurunanak Engg. Works (P) Ltd.
C-33, Sector – 88, Phase – II, Gautam Budh Nagar (UP)
Ph. : 9810378448 / 120-243674
2. Kailash Engg. Works
H1-81, Napasar RIICO Industrial Area,
Bikaner (Rajasthan)
Ph. 151-2762534
3. Pagariya Food Products P. Ltd.
15/1, 3rd cross, Kasturbanagar,
Mysore Road, Bangalore – 560026
Ph. 09953361350
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