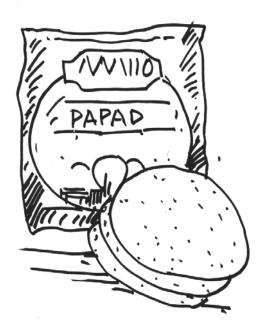
PAPAD MAKING



1.0 INTRODUCTION

Papad is a popular and tasty food item in the Indian diet since many centuries. It is a wafer like product, round in shape, made from dough of powdered pulses, spices, powdered chilly and salt. Traditionally this activity was confined to household papad making but in view of increasing demand and availability of machinery it has now been developed in cottage and small scale sector.

This project profile is for setting up of a Papad making unit with installed processing capacity of 45 Ton per annum, based on 300 working days per annum and 8 working hours per day.

2.0 MARKET POTENTIAL

Market for papad is steadily growing across the country. This activity is yet to be picked up much in the region and thus prospect for a new entrant are bright, provided quality is good and prices are competitive. It can be sold through many outlets of provisional and departmental stores. Before, launching the product, a quick assessment of consumer preferences is advisable. Women entrepreneurs can gainfully take up this papad unit in their houses but proper packing and distribution network is necessary to sell in bulk quantities.

3.0 PROCESS DETAILS

Papad can be made using variety of pulses or there could be a combination of pulses as well. Generally weighed quantity of floor is taken in a mixer. Thereafter adequate quantity of water along with pulses, common salt, spices and sodium bicarbonate are added. The mixture content is kneaded at maximum speed to get a homogeneous lump of the 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 papad are made as per the size of mould. These papads are then dun-dried or dried using dryer machine. Papads are then packed in polythene bags.

The main process steps are:

- i) Mixing of various raw materials in required proportion.
- ii) Dough making after addition of water in measured quantities to mixture.
- iii) Pressing of Dough in papad making machine.
- iv) Sun Drying/Machine Drying of pressed Papads.
- v) Packing in polethene wrappers.

4.0 COST OF THE PROJECT

The estimated project cost is given below:

(Rs. in lacs)

Particulars	Amount (Rs)
Land & site development	Rented
Building & civil works	Rented
Plant & Machinery	1.65
Misc. Fixed assets	0.77
Preliminary & pre-operative expenses	0.51
Contingencies & escalation @ 3%	0.07
Working capital	0.68
TOTAL	3.68

4.1 Land & Site Development: Nil. Covered Area: 500 Sq. Ft.

4.2 Building & Civil Works: Nil.

4.3 Plant & Machinery: Details of plant & machinery are given below.

Particulars	Qty	Amount (Rs)
Grinder with electric motor	1	150000
Mixer with electric motor	1	
Pedal operated Papad Press	1	
Dryer with trolly	1	
Alluminium Trays	30	
Weighing Scale	1	
	Sub total	150000
Add: Installation transportation, etc @ 10%		15000
	TOTAL	165000
	Say (Rs. in lacs)	1.65

4.4 Misc. Fixed assets: Details of miscellaneous fixed assets are given below.

Particulars	Qty	Amount (Rs)
Furniture's including Working Tables & Fixtures	LS	30000
Tools and equipment	LS	25000
Miscellaneous items	LS	15000
	Sub total	70000
Add: Installation, transportation, etc @ 10%		7000
	TOTAL	77000
	Say (Rs. in lacs)	0.77

- **4.5 Contingencies & escalation:** Contingencies & escalation has been assumed at 3% of the cost of land & site development, building & civil works, plant & machinery and miscellaneous fixed assets.
- **4.6 Preliminary & pre-operative expenses:** Details of preliminary & pre-operative expenses are given below.

(Rs. In lacs)

Particulars Particulars	Amount (Rs)
Travelling expenses	10000
Professional & other fees	15000
Interest during implementation	6380
Miscellaneous expenses	20000
TOTAL	51380
Say (Rs. in lacs)	0.51



4.7 Working capital: Details of working capital are given below.

(Rs. in lacs)

	Period	Total Current Assets		
	(Days)	Year 1	Year 2	Year 3
Raw materials	30	0.40	0.46	0.53
Power & Utility	30	0.06	0.07	0.08
Salary	30	0.37	0.38	0.38
Finished Goods	15	0.42	0.46	0.50
Receivables	15	0.44	0.52	0.59
Total		1.69	1.89	2.08
Working capital margin in Year 1 (40%)	0.68			

5.0 MEANS OF FINANCE

The means of finance for the project is estimated as below.

(Rs. in lacs)

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Particulars		Percent	Amount
EQUITY			
A. Equity from Promoters		40%	1.47
B. Subsidy from Central/State Govt.		-	
<u>DEBT</u>			
Term Loan from Banks/Financial Institutions		60%	2.21
	TOTAL	100%	3.68

6.0 PROFITABILITY STATEMENT

(Rs. in lacs)

Particulars	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
A. INCOME					
Production capacity (Ton/annum)	45	45	45	45	45
Capacity utilisation	60%	70%	80%	80%	80%
Production/annum at capacity utilisation	27	32	36	36	36
Total income/annum	10.80	12.60	14.40	14.40	14.40
B. OPERATING EXPENSES					
Raw materials	4.81	5.61	6.41	6.41	6.41
Power & Utility	0.69	0.80	0.92	0.92	0.92
Salary	4.56	4.58	4.61	4.63	4.65
Repair & Maintenance	0.04	0.05	0.05	0.05	0.05
Other Expenses	0.22	0.25	0.29	0.29	0.29
Total Operating Expenses	10.31	11.29	12.26	12.29	12.31
Operating profit	0.49	1.31	2.14	2.11	2.09
C. FINANCIAL EXPENSES					
Depreciation	0.14	0.14	0.14	0.14	0.14
Interest on Term Loan	0.17	0.14	0.10	0.06	0.02
Interest on Working Capital Loan	0.08	0.09	0.10	0.10	0.10
Net Profit	0.10	0.95	1.80	1.82	1.83
Net cash accruals	0.23	1.08	1.94	1.95	1.97
Principal Repayment	0.25	0.49	0.49	0.49	0.49

6.1 Production capacity and Sales Realisation: Total production of spice powder at 100% capacity utilization is estimated as below.

Papad	45 Ton
Total production per annum at 100% capacity (in Ton)	45 Ton

Products	Qnty	Average Rate Per Unit (Rs.)	Amount (Rs)
Papad	45	40000	1800000
Total Sale Turnover per annum at 100% capacity			1800000

6.2 Raw materials: Total expenses on raw materials at 100% capacity utilization are estimated as below.

Particulars	Qnty	Average Rate Per Unit (Rs.)	Amount (Rs)
		14800 Per	
Flour of Pulses	44 Ton	Ton	651200
Edible Oil, Salt, Spices, Sodium Carbonate, preservatives		Rs. 7,500 Per	
etc.	LS	Month	90000
Packaging Material	LS	Rs. 5,000 Per	60000
		Month	
Expenses on raw material at 100% capacity (Rs)			801200

6.3 Power & Utility: Total expenses on power & utility at 100% capacity utilization is estimated as below.

Particulars Particulars		Quantity	Power (Kw)	Total (Kw)
Plant & machinery (Total 15 HP)			11.19	11.19
General Lighting		10	0.10	1.00
	Total	power require	ment/ day (Kw)	12.19
No. of hrs/day		8		
No of days/annum		300		
Annual power requirement (kwh)		29256		
Rate per unit (Rs)		3.50		
Expenses on power (Rs)		102396		
Expenses on Water/Other Utility (Rs)		12000		
Expenses on power & utility at 100% capacity (Rs)		114396		

6.4 Salary: Total expenses on salary in the 1st year are estimated as given below. It is assumed that salary expenses will increase @ 0.5% every subsequent year.

Particulars of Employees	Numbers	Salary/ Month (Rs)	Cost/ annum (Rs)
Manager	1	7000	84000
Store In charge cum Accountant	1	5000	60000
Sales Personnel	2	5000	120000
Machine Operator/Skilled Workers	2	5000	120000
Unskilled workers	2	3000	72000
Expenses on salary in the 1st year (Rs)			456000



6.5 Repair & Maintenance: Total expenses on repair & maintenance in the 1st year is estimated as given below. It is assumed that expenses on repair & maintenance will increase @ 2% every subsequent year.

(Rs. in lacs)

Particulars	Cost (Rs)	Rate	Amount (Rs)
Building & civil works	0.00	1.00%	0.00
Plant & Machinery	1.65	2.00%	0.03
Misc. Fixed assets	0.77	1.50%	0.01
Expenses on repair & maintenance in year 1			0.04

- **6.6** Other Expenses: Other expenses have been assumed at 2% of sales realisation.
- **6.7 Depreciation:** Depreciation has been calculated by straight line method. The details of calculation are given below.

(Rs in lacs)

Description	Cost (Rs)	Rate	Amount/ annum (Rs)
Building & civil works	0.00	3.34%	0.00
Plant & Machinery	1.65	5.28%	0.09
Misc. Fixed assets	0.77	6.33%	0.05
TOTAL			0.14

6.8 Interest on term loan & principal repayment: Interest rate has been assumed at 8%. Duration of Loan repayment has been considered for a period of 5 years including moratorium period of 6 months with equal monthly instalments. The details of calculation are given below.

(Rs in lacs)

						(Ito III Idoo)
Month	Year	1	2	3	4	5
Month 1	Opening balance	2.21	1.96	1.47	0.98	0.49
	Repayment	0.00	0.04	0.04	0.04	0.04
	Interest (8.00%)	0.01	0.01	0.01	0.01	0.00
	Closing balance	2.21	1.92	1.43	0.94	0.45
Month 2	Opening balance	2.21	1.92	1.43	0.94	0.45
	Repayment	0.00	0.04	0.04	0.04	0.04
	Interest	0.01	0.01	0.01	0.01	0.00
	Closing balance	2.21	1.88	1.39	0.90	0.41
Month 3	Opening balance	2.21	1.88	1.39	0.90	0.41
	Repayment	0.00	0.04	0.04	0.04	0.04
	Interest	0.01	0.01	0.01	0.01	0.00
	Closing balance	2.21	1.84	1.35	0.86	0.37
Month 4	Opening balance	2.21	1.84	1.35	0.86	0.37
	Repayment	0.00	0.04	0.04	0.04	0.04
	Interest	0.01	0.01	0.01	0.01	0.00
	Closing balance	2.21	1.80	1.31	0.82	0.33
Month 5	Opening balance	2.21	1.80	1.31	0.82	0.33
	Repayment	0.00	0.04	0.04	0.04	0.04
	Interest	0.01	0.01	0.01	0.01	0.00
	Closing balance	2.21	1.76	1.27	0.78	0.29
Month 6	Opening balance	2.21	1.76	1.27	0.78	0.29
	Repayment	0.00	0.04	0.04	0.04	0.04
	Interest	0.01	0.01	0.01	0.01	0.00
	Closing balance	2.21	1.72	1.23	0.74	0.25
Month 7	Opening balance	2.21	1.72	1.23	0.74	0.25
	Repayment	0.04	0.04	0.04	0.04	0.04
	Interest	0.01	0.01	0.01	0.00	0.00

	Closing balance	2.17	1.68	1.19	0.70	0.20
Month 8	Opening balance	2.17	1.68	1.19	0.70	0.20
	Repayment	0.04	0.04	0.04	0.04	0.04
	Interest	0.01	0.01	0.01	0.00	0.00
	Closing balance	2.13	1.64	1.15	0.65	0.16
Month 9	Opening balance	2.13	1.64	1.15	0.65	0.16
	Repayment	0.04	0.04	0.04	0.04	0.04
	Interest	0.01	0.01	0.01	0.00	0.00
	Closing balance	2.09	1.60	1.11	0.61	0.12
Month 10	Opening balance	2.09	1.60	1.11	0.61	0.12
	Repayment	0.04	0.04	0.04	0.04	0.04
	Interest	0.01	0.01	0.01	0.00	0.00
	Closing balance	2.05	1.56	1.06	0.57	0.08
Month 11	Opening balance	2.05	1.56	1.06	0.57	0.08
	Repayment	0.04	0.04	0.04	0.04	0.04
	Interest	0.01	0.01	0.01	0.00	0.00
	Closing balance	2.01	1.51	1.02	0.53	0.04
Month 12	Opening balance	2.01	1.51	1.02	0.53	0.04
	Repayment	0.04	0.04	0.04	0.04	0.04
	Interest	0.01	0.01	0.01	0.00	0.00
	Closing balance	1.96	1.47	0.98	0.49	0.00

7.0 DEBT SERVICE COVERAGE RATIO (DSCR)

(Rs. in lacs)

Year	1	2	3	4	5
Profit After Tax (Net Profit)	0.10	0.95	1.80	1.82	1.83
Depreciation	0.14	0.14	0.14	0.14	0.14
Interest	0.17	0.14	0.10	0.06	0.02
Total	0.40	1.22	2.04	2.01	1.99
Interest	0.17	0.14	0.10	0.06	0.02
Loan repayment	0.25	0.49	0.49	0.49	0.49
Total	0.42	0.63	0.59	0.55	0.51
DSCR	0.97	1.94	3.44	3.65	3.88

Average DSCR = 2.83

8.0 BREAK EVEN POINT (BEP)

(Rs. in lacs)

		(173: 111 187			
	Year	1	2	3	
A. Net sales		10.80	12.60	14.40	
B. Variable cost					
Raw materials		4.81	5.61	6.41	
Power & Utility		0.69	0.80	0.92	
Other expenses		0.22	0.25	0.29	
Interest on Working Capital Loan		0.08	0.09	0.10	
Total variable cost		5.79	6.75	7.71	
C. Contribution (A-B)		5.01	5.85	6.69	
D. Fixed & Semi-fixed Costs					
Salary		4.56	4.58	4.61	
Repair & maintenance		0.04	0.05	0.05	
Interest on Term Loan		0.17	0.14	0.10	
Depreciation		0.14	0.14	0.14	
Total fixed cost		4.91	4.90	4.89	
E. BREAK EVEN POINT		98.08%	83.84%	73.09%	



F. BEP at operating capacity	58.85%	58.69%	58.47%
G. Cash BEP	57.22%	57.06%	56.85%

9.0 INTERNAL RATE OF RETURN (IRR)

(Rs. in lacs)

					(1/2: 111 19	103)
Year	0	1	2	3	4	5
CASH OUTFLOW						
Capital Expenditure	2.49	0.00	0.00	0.00	0.00	0.00
Working Capital	0.00	1.69	0.19	0.19	0.00	0.00
Total (A)	2.49	1.69	0.19	0.19	0.00	0.00
CASH INFLOW						
Profit After Tax		0.10	0.95	1.80	1.82	1.83
Add: Depreciation		0.14	0.14	0.14	0.14	0.14
Add: Interest		0.17	0.14	0.10	0.06	0.02
Add: Salvage Value						
_						
Total (B)	0.00	0.40	1.22	2.04	2.01	1.99
NET FLOW (B-A)	-2.49	-1.29	1.03	1.84	2.01	1.99

IRR = 28%

SI. No.	Name of the Machinery Suppliers	Communication Address
1.	M/s Pushkar Energy Systems	Patel Spun Factory Compound, Near Char Rasta, P.O. Uttarsanda, Dist. Kheda, Nadiad, Gujarat, Pin-387370.
2.	M/s Aster Techno Pack Systems Pvt. Ltd	Plot No. F-14, Part - A, Phase - 1, Pipeline Road, Ida Jeedimetla, , Hyderabad, Andhra Pradesh, Pin-500055.
3.	M/s Suan Scientific Instruments & Equipment	P-814, Ground Floor, Block-A, Lake Town, Kolkata, West Bengal, Pin-700089.
4.	M/s Master Enterprises	896, Atur Terrace Building, Opp. Pudumji Corner, Quarter Gate/Nana Peth, , Pune, Maharashtra, Pin-425001.