NAMKEEN PAPAD, MATHIYA & CHOLAFALI PLANT

1. INTRODUCTION:

According to Aaj Tak, the women of Uttarsanda village have been making snacks for over 30 years now. During the month of Diwali alone, they dispatch nearly 700 tonnes of snacks, over half of which is exported to other countries. Everyone enjoys 'rags to riches' stories and everyone likes tales of stupendous success achieved through sheer determination. The story of Shri Mahila Griha Udyog Lijjat Papad is all that and much more. Today, Lijjat is more than just a household name for 'papad' (India's most popular crispy bread). Started with a modest loan of Rs 80, the cooperative now has annual sales exceeding Rs 301 crore (Rs 3.1 billion). What's more stunning than its stupendous success is its striking simplicity.

Papad making business is very profitable in food industry considering the investment of low start-up capital. Papad is often served as an appetizer; it is consumed in all parts of India. It's a thin wafer-like product. Variety and proportion of pulses and spices vary from region to region depending upon preferences of local people whereas certain varieties are popular on a larger scale. Papad making business is often associated with the empowerment of women in India but in view of increasing demand and availability of machinery, it has now been developed in small-scale industry. An entrepreneur having knowledge about FMCG marketing can start this business with moderate capital investment. It can be initiated in small scale from home location also.

2. PRODUCT & ITS APPLICATION:

Papad is a favorite 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 very easy to make instant food item and is either fried in edible oil or simply roasted before serving. Its shelf life is $2\frac{1}{2}$ to 3 months. This product can be made anywhere in the country.

Papad can be prepared from different ingredients and methods. Arguably, the most popular recipe uses flour ground from hulled split black grams (urad dal). Black gram flour is mixed with black pepper, salt, and a small amount of vegetable oil and a food-grade alkalai, and the mixture is kneaded. Well-kneaded dough is then flattened into very thin rounds and then dried and stored for later preparation and consumption. Papad may also contain rice, jackfruit, sabudana, etc., as main ingredients. Cracked black pepper, red chilli powder, asafoetida, or cumin or sesame seeds are often used as flavouring agents.

3. DESIRED QUALIFICATIONS FOR PROMOTER:

The promoter does not require any qualification.

4. INDUSTRY LOOKOUT AND TRENDS

Papad is a common Indian food normally taken with meals. Some people take it along with tea also. Papad's are of different types i.e. made from urad dal, potatoes, rice etc. The papad bariyan are not only consumed in houses but also these are consumed in notches, restaurants, Dhabas also the people who are going to Picnic, meals etc. Estimated market for breakfast in India at a modest is Rs 2.5 bn, the market includes cornflakes, muesli, pancakes, oatmeal and porridge. The market is estimated to be growing annually up to 30%, and with modern retail providing new recipes of the contemporary products, Indian and Western, a strong wave of growth is anticipated. The overall size of the snack food market is estimated at Rs 45 to Rs 50 bn. The market is reported to be growing at 7 to 8 % annually. The organized snacks category is sub-divided into the traditional segment (bhujia, chanachur and the like), Western segment (potato chips, cheese balls etc.) and the newly established finger snacks segment. According to a projection, the branded snacks market is growing at a compounded annual growth rate of 14% and reached a value of Rs 35 bn in 2012. PRESENT MANUFACTURERS are Bikaji Marketing Ltd. Desai Brothers Ltd. Empire Spices & Foods Ltd. Madhur Industries Ltd. R C L Foods Ltd. Shri Mahila Griha Udyog Lijjat Papad Sunrise Spices Ltd.

5. MARKET POTENTIAL AND MARKETING ISSUES, IF ANY:

The Word "PAPPAD" is quite familiar with Indians. Pappad is a common Indian food normally taken with meals. Some people take it along with tea also. It is a food which is liked by people of all states, people doing all type of occupations. It is well within the reach of common people. Pappad can be exported to other countries and can earn valuable foreign exchange as people in other countries have also taken interest in this food item. Estimated at a modest Rs 2.5 bn, the market includes cornflakes, muesli, pancakes, oatmeal and porridge. It is growing fast not only because of macro factors, such as acceptance of packaged food and rising household incomes but also because companies have become innovative. The market is estimated to be growing annually up to 30%, and with modern retail providing new recipes of the contemporary products, Indian and Western, a strong wave of growth is anticipated. So any new entrants can venture in to this industry. Few Indian Major Players are as under: - Bikaji Marketing Ltd. Desai Brothers Ltd. Empire Spices & Foods Ltd. Madhur Industries Ltd. R C L Foods Ltd. Shri Mahila Griha Udyoq Lijjat Papad Sunrise Spices Ltd.Papad making business is very profitable in food industry considering the investment of low start-up capital. Papad is often served as an appetizer; it is consumed in all parts of India. It's a thin wafer-like product. Variety and proportion of pulses and spices vary from region to region depending upon preferences of local people whereas certain varieties are popular on a larger scale. Papad making business is often associated with the empowerment of women in India but in view of increasing demand and availability of machinery, it has now been developed in small-scale industry. An entrepreneur having knowledge about FMCG marketing can start this business with moderate capital investment. It can be initiated in small scale from home location also. There is a good demand of papads because it is a food product and commonly consumed commodity in all households and hotels throughout the year and especially during festive seasons. There are a couple of national brands and the market is predominantly controlled by the local brands. Papads are exported to more than 40 countries from India. The major importing countries are UK, USA, UAE, Singapore, Nigeria, Oman, Malaysia, Kuwait, Canada, Bahrain, and Australia. It is important to concentrate on brand development. Establishing a strong a dealer network will definitely help you in getting success. 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 Assam 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 preferences is advisable.

6. RAW MATERIAL REQUIREMENTS:

All important raw materials 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.

7. 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 sundried but in this note drier with trolley is recommended as sun-drying may not be always feasible in Assam. Lot of 25 or 50 papads is then packed in polythene bags. CFTRI, Mysore, has successfully developed papad making press.

8. MANPOWER REQUIREMENT:

The enterprise requires 9 employees as detailed below:

Sr. No.	Designation	SALARY	Salary ₹	Number of Employees				
	Working Staff		PER ANNUM	Year-1	Year-2	Year-3	Year-4	Year-5
1	Production Manager	18000	18000	1	1	1	1	1
2	Operators	12000	12000	1	1	1	2	2
3	Helpers	10000	30000	3	3	3	3	3
			60000	5	5	5	6	6
1	Fixed Staff:							
2	Admin Manager	15000	15000	1	1	1	1	1
3	Accounts/Assistant	12500	12500	1	1	1	1	1
	Office Boy	9000	9000	1	1	1	1	1
	Sub-Total		36500	3	3	3	3	3
	Total		96500	8	8	8	9	9

9. IMPLEMENTATION SCHEDULE:

Sr. No.	Activity	Time Required
,		(in months)
1	Acquisition of premises	2.00
2	Construction (if applicable)	2.50
3	Procurement & installation of Plant & Machinery	2.50
4	Arrangement of Finance	1.00
5	Recruitment of required manpower	1.00
	Total time required (some activities shall run concurrently)	4.00

10. COST OF PROJECT:

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.

Sr. No.	Particulars	₹ in Lacs
1	Land	0.00
2	Building	0.00
3	Plant & Machinery	15.00
4	Furniture, other Misc. Equipments	2.00
5	Other Assets including Preliminary / Pre-operative expenses	1.50
6	Margin for Working Capital	18.75
	Total	37.25

11. MEANS OF FINANCE:

	Particulars	₹ in Lacs
1	Promoter's contribution	9.31
2	Bank Finance	27.94
	Total	37.25

12. WORKING CAPITAL CALCULATION:

The project requires working capital of $\ref{thm:project}$ 18.75 lacs as detailed below:

Sr. No.	Particulars	Gross Amt	Margin %	Margin Amt	Bank Finance
1	Inventories	9.38	0.25	2.34	7.03
2	Receivables	4.69	0.25	1.17	3.52
3	Overheads	4.69	100%	4.69	0.00
4	Creditors	-		0.00	0.00
	Total	18.75		8.20	10.55

13. LIST OF MACHINERY REQUIRED:

It is suggested to have annual rated production capacity with 300 working days and 2 shift working of 60 tonnes. To install this capacity, following machinery shall be needed:

Grinder with electric motor having 30-35 Kgs/hr. Capacity, Mixer of 20 Kgs. per charge capacity with electric motor, Pedal-operated papad press, Drier with trolley and 48 trays with heating element of 9 KW, Extra aluminium trays 50, Sealing Machine 2, Water Storage tank 1, Laboratory Equipments, Weighing Scale 1, The total power requirement shall be 25 HP whereas water required for process and sanitation and other purposes shall be about 700-750 ltrs per day.

Sr No	Particulars	UOM	Qtty	Rate (₹)	Value
31. 140.	raiticulais	UOM	Qity	Rate (X)	(₹ in Lacs)
	Main Plant and Machineries				15.00
	Furniture / Electrical installations				
c)	Office furniture	LS	1	50000	0.50
	Stores Cupboard	LS	02	50,000	1.00
	Computer & Printer	LS	1	50000	0.50
a)	sub total				2.00
	Other Assets				
	Preliminary and preoperative				1.50
	sub-total Other Assets				1.50
	Total				18.50

All the machines and equipments are available from local manufacturers. The entrepreneur needs to ensure proper selection of product mix and proper type of machines and tooling to have modern and flexible designs. It may be worthwhile to look at reconditioned imported machines, dies and tooling. Some of the machinery and dies and tooling suppliers are listed here below:

- Fry-Tech Food Equipments Private Limited
 No. 4, Raviraj Industrial Estate,
 Bhikhubhai Mukhi Ka Kuwa Bharwadvash,
 Ramol, Ahmedabad 380024,
 Gujarat, India
- 2. Hindustan Vibrotech Pvt. Ltd.

Office No. 2, Ground Floor,
Vrindavan Building, Vile Parle East,
Mumbai – 400057,
Maharashtra, India

Electrons cooling systems Pvt. Ltd.
 S-27, SIDCO Industrial Estate
 Kakkalur Industrial Estate
 Tiruvallur – 602003,
 Tamil Nadu, India

4. Springboard Enterprises India Ltd.

1st, 2nd & 3rd Floor,
Plot No. 7, 8 & 9,
Garg Shopping Mall,
Service Centre, Rohini Sector 2
New Delhi – 110085,
Delhi, India

 Flour Tech Engineers Private Limited Plot No. 182, Sector 24, Faridabad - 121005, Haryana, India

6. P Square Technologies

3, Swami Mahal, Gurunanak Nagar, Off. Shankarsheth Road Bhavani Peth, Pune - 411002, Maharashtra, India

7. Ricon Engineers

10 To 13, Bhagwati Estate, Near Amraiwadi Torrent Power, Behind Uttam Dairy, Rakhial, Ahmedabad - 380023, Gujarat, India

8. Kamdhenu Agro Machinery
Plot No. 6, Near Power House,
Wathoda Road Wathoda,
Nagpur - 440035,
Maharashtra, India

14. PROFITABILITY CALCULATIONS:

Sr. No.	Particulars	UOM	Year-1	Year-2	Year-3	Year-4	Year-5
1	Capacity Utilization	%	60%	70%	80%	90%	100%
2	Sales	₹. In Lacs	56.25	65.63	75.00	84.38	93.75
3	Raw Materials & Other direct inputs	₹. In Lacs	33.05	38.55	44.06	49.57	55.08
4	Gross Margin	₹. In Lacs	23.21	27.07	30.94	34.81	38.68
5	Overheads except interest	₹. In Lacs	4.70	5.00	5.59	5.76	5.88
6	Interest @ 10 %	₹. In Lacs	2.79	2.79	1.86	1.40	1.12
7	Depreciation @ 30 %	₹. In Lacs	4.50	3.15	2.30	1.80	1.35
8	Net Profit before tax	₹. In Lacs	11.21	16.13	21.20	25.85	30.33

The basis of profitability calculation:

This unit will have capacity of 75 TONNES PER ANNUM at the rate of 125.00 INR/KG. The growth of selling capacity will be increased 10% per year. (This is assumed by various analysis and study; it can be increased according to the selling strategy.)

Energy Costs are considered at Rs. 7 per Kwh and fuel cost is considered at Rs. 65 per liter. The depreciation of plant is taken at 10-12 % and Interest costs are taken at 14 -15 % depending on type of industry.

15. BREAKEVEN ANALYSIS:

The project shall reach cash break-even at 18.09 % of projected capacity as detailed below:

Sr. No.	Particulars	UOM	Value	
1	Sales at full capacity	₹. In Lacs	93.75	
2	Variable costs	₹. In Lacs	55.08	
3	Fixed costs incl. interest	₹. In Lacs	7.00	
4	$BEP = FC/(SR-VC) \times 100 =$	% of capacity	18.09%	

16. STATUTORY / GOVERNMENT APPROVALS

The Ministry of Food Processing Industries has been operating several plan schemes for the development of processed food sector in the country during the 10th Plan. One of the schemes relates to the Technology Up-gradation/ Establishment/ Modernization of food processing industries.

The Indian food processing industry is regulated by several laws which govern the aspects of sanitation, licensing and other necessary permits that are required to start up and run a food business. The legislation that dealt with food safety in India was the Prevention of Food Adulteration Act, 1954 (hereinafter referred to as "**PFA**"). The PFA had been in place for over five decades and there was a need for change due to varied reasons which include the changing requirements of our food industry. The act brought into force in place of the PFA is the Food Safety and Standards Act, 2006 (hereinafter referred to as "**FSSA**") that overrides all other food related laws.

FSSA initiates harmonization of India's food regulations as per international standards. It establishes a new national regulatory body, the Food Safety and Standards Authority of India (hereinafter referred to as "**FSSAI**"), to develop science based standards for food and to regulate and monitor the manufacture, processing, storage, distribution, sale and import of food so as to ensure the availability of safe and wholesome food for human consumption. Entrepreneur may contact State Pollution Control Board where ever it is applicable.

All food imports will therefore be subject to the provisions of the FSSA and rules and regulations which as notified by the Government on 5th of August 2011 will be applicable.

Key Regulations of FSSA

- A. Packaging and Labelling
- B. Signage and Customer Notices
- C. Licensing Registration and Health and Sanitary Permits

17. BACKWARD AND FORWARD INTEGRATIONS

The objective of the scheme is to provide effective and seamless backward and forward integration for processed food industry by plugging the gaps in supply chain in terms of availability of raw material and linkages with the market. Under the scheme, financial assistance is provided for setting up of primary processing centres/ collection centres at farm gate and modern retail outlets at the front end along with connectivity through insulated/ refrigerated transport.

The Scheme is applicable to perishable horticulture and non-horticulture produce such as, fruits, vegetables, dairy products, meat, poultry, fish, Ready to Cook Food Products, Honey, Coconut, Spices, Mushroom, Retails Shops for Perishable Food Products etc. The Scheme would enable linking of farmers to processors and the market for ensuring remunerative prices for agri produce.

The scheme is implemented by agencies/ organizations such as Govt. / PSUs/ Joint Ventures/ NGOs/ Cooperatives/ SHGs / FPOs / Private Sector / individuals etc.

Backward Linkage:

- Integrated Pack-house(s) (with mechanized sorting & grading line/ packing line/ waxing line/ staging cold rooms/cold storage, etc.)
- Pre Cooling Unit(s)/ Chillers
- Reefer boats
- Machinery & equipment for minimal processing and/or value addition such as cutting, dicing, slicing, pickling, drying, pulping, canning, waxing, etc.
- Machinery & equipment for packing/ packaging.

Forward Linkage:

- Retail chain of outlets including facilities such as frozen storage/ deep freezers/ refrigerated display cabinets/cold room/ chillers/ packing/ packaging, etc.
- Distribution centre associated with the retail chain of outlets with facilities like cold room/ cold storage/ ripening chamber.

18. TRAINING CENTERS AND COURSES

There are few specialised Institutes provide degree certification in Food Technology, few most famous and authenticate Institutions are as follows:

- Indian Institute of Food Science & Technology,
 Plot No.1, Near Maa-Baap ki Dargah,Opp to Nath Seeds,
 Paithan Road Aurangabad
 Aurangabad 431005
 Maharashtra, India
- MIT College of Food Technology, Pune Gate.No.140, Raj Baugh Educational Complex, Pune Solapur Highway, Loni Kalbhor, Pune – 412201

Maharashtra, India

CSIR - Central Food Technological Research Institute (CFTRI)
 Cheluvamba Mansion, Opp. Railway Museum,
 Devaraja Mohalla, CFTRI Campus, Kajjihundi, Mysuru
 Karnataka – 570020

Udyamimitra portal (link : www.udyamimitra.in) can also be accessed for handholding services viz. application filling / project report preparation, EDP, financial Training, Skill Development, mentoring etc.

Entrepreneurship program helps to run business successfully is also available from Institutes like Entrepreneurship Development Institute of India (EDII) and its affiliates all over India.

Disclaimer:

Only few machine manufacturers are mentioned in the profile, although many machine manufacturers are available in the market. The addresses given for machinery manufacturers have been taken from reliable sources, to the best of knowledge and contacts. However, no responsibility is admitted, in case any inadvertent error or incorrectness is noticed therein. Further the same have been given by way of information only and do not carry any recommendation.