

## **FROZEN FOODS: CURRIED VEG, PAROTHA, SNACKS**

### **1. INTRODUCTION:**

Curried Veg, Snacks, Mix Vegetable Paratha is a combination of both nutrition and authentic Indian flavor. These foods come with a filling of assorted vegetables mixed with rich Indian spices. A wholesome breakfast item, these stuffed mix vegetable and parathas are perfect when you are running late as they can be cooked in a matter of a few minutes. And so these frozen foods are also known as ready to eat foods.

### **2. PRODUCT & ITS APPLICATION:**

Ready to eat foods (RTE) are convenience foods, enclosed in aluminum container or pouches that only need to be cut and heated before being served. Instant vegetables in retort pouches fall under this category and find application not only as home meal replacement in working class households but also in fast-food restaurants and multi cuisine food joints. These are handy meals for armed forces and paramilitary forces deployed in remote places. RTE food includes wide range of products viz. vegetarian / non - vegetarian, basic food / delectable desserts, south and north Indian items available from a specialty or multi cuisine restaurant & food joint only.

### **3. DESIRED QUALIFICATIONS FOR PROMOTER:**

Successful running this project does not require any specific qualification.

### **4. MARKET POTENTIAL AND MARKETING ISSUES, IF ANY:**

Domestic market for frozen foods and RTE packaged food industry has estimated the growth rate of 25% and 40% in the metropolitan cities. As per industry estimates by year 2015,

Indian market for frozen and processed foods products will be more than INR 800 Crores, with West India leading in buying, and Mumbai being the biggest market of processed foods valuing around INR 600 Crores followed by North India, targeting Delhi, Delhi-CR and Chandigarh being the biggest target market of processed foods. There are 5 to 6 large size companies, which successfully manufactures and market range of Instant vegetables in retort pouches in domestic and export markets. They are ITC India Limited, Fazlani Export Pvt Ltd, MTR Foods Pvt Ltd, Kohinoor Foods Limited, GITS Food Products Pvt. Ltd, Vimal Agro Product Pvt. Ltd.

## **5. RAW MATERIAL REQUIREMENTS:**

Some important points for frozen foods while handling raw materials:

Stock-of-Raw-Material : Handling of raw materials is important as it prevents cross contamination from the raw material to ready-to-eat food. Contaminants can be biological, chemical or physical hazards and once introduced into the raw material they can remain in the food throughout the preparation and processing procedure. Contamination can also be introduced into the food by raw material handlers. This is the reason why FSSAI has laid down certain guidelines for handling raw material so that ready-to-eat food can be free from bacteria and viruses that result in food borne diseases.

Important precautions to follow for procuring raw material : As a food business operator the most important precaution you must always follow is to use only good quality raw materials and never use low grade raw material. Make sure that you procure your raw material only from licensed dealers and never from unauthorized dealers or illegal slaughter houses. Check the raw materials for any signs of deterioration or unpleasant odour, segregate those materials that show signs of being unfit for human consumption. Check for signs of thawing and deterioration in frozen food like water droplets on the product or any change in texture. Thoroughly examine the product to ensure no physical hazard or contamination has taken place. Look out for signs like change in texture, color or smell which makes the raw material unfit for human consumption and which indicates presence of chemical hazards that can be confirmed with laboratory testing. Purchase only that amount of raw material for which you have adequate capacity to store and keep preserved. Check all packaged food for `expiry

date/ 'best before' /'Use by' date and ensure correct packaging and storage conditions have been maintained by the supplier. Important procedure to follow after raw material has been procured. Even after raw material has been procured unwanted contaminants can enter accidentally or if precautions have not been taken during storage or transportation. Transport and store consumable materials with covers. Separate and store consumable foods, raw materials and nonfood items. Ensure that during transportation pathogen growth and toxin formation is negligible. Control time, temperature and minimize exposure and use safe water for cleaning so contamination is prevented. Receive and store chilled & high risk foods at below 5°C temperature and frozen food at -18°C or below. Use containers made of food grade material to store raw paste and sauces. Keep these properly covered and check them regularly for fungal growth, deterioration etc. Use racks/pallets which are made of non-absorbent material, provided on the floor for keeping raw material. Rotate raw materials as well as finished food material systematically either on a FIFO (First in First Out), FEFO (First Expired First Out) and FMFO (First Manufactured First Out) basis. If you follow these precautions you will be able to serve healthy and safe food to consumers and you will feel proud of your good reputation for being a reliable and responsible food business operator.

## **6. MANUFACTURING PROCESS:**

Raw materials procurement, segregation, dry storage, chill storage, Frozen storage, preparation, sizing, washing, pasteurizing, Biologically treatment, cooking, mixing filling retort packing, cooling drying, etc.

## **7. MANPOWER REQUIREMENT :**

The enterprise requires 10 employees as detailed below:

Sr. No.	Designation	SALARY	Salary ₹	Number of Employees				
				Year-1	Year-2	Year-3	Year-4	Year-5
1	Production Manager	18000	36000	2	2	2	3	3
2	Operators	12000	60000	5	5	5	7	7
3	Helpers	10000	100000	10	10	10	12	12
4	Admin Manager	15000	30000	2	2	2	2	2
5	Accounts/Stores Assistant	12500	50000	4	4	4	4	4
6	Office Boy	9000	27000	3	3	3	3	3
	Total		303000	25	25	25	30	30

## 8. IMPLEMENTATION SCHEDULE:

The project can be implemented in 9 months' time as detailed below:

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 <i>(some activities shall run concurrently)</i>	9.00

## 9. COST OF PROJECT:

The project shall cost ₹ 650.00 lacs as detailed below:

Sr. No.	Particulars	₹ in Lacs
1	Land	100.00
2	Building	180.00
3	Plant & Machinery	250.00
4	Furniture, other Misc. Equipments	5.00
5	Other Assets including Preliminary / Pre-operative expenses	25.00
6	Margin for Working Capital	90.00
	<b>Total</b>	<b>650.00</b>

#### 10. MEANS OF FINANCE:

Bank term loans are assumed @ 75 % of fixed assets.

Sr. No.	Particulars	₹ in Lacs
1	Promoter's contribution	162.50
2	Bank Finance	487.50
	<b>Total</b>	<b>650.00</b>

#### 11. WORKING CAPITAL CALCULATION:

The project requires working capital of ₹ 90.00 lacs as detailed below:

Sr. No.	Particulars	Gross Amt	Margin %	Margin Amt	Bank Finance
1	Inventories	45.00	0.25	11.25	33.75
2	Receivables	22.50	0.25	5.63	16.88
3	Overheads	22.50	100%	22.50	0.00
4	Creditors	-		0.00	0.00
	<b>Total</b>	90.00		39.38	50.63

#### 12. LIST OF MACHINERY REQUIRED:

Land Requirement – 6000 Sq. Mt AND Build Up Area – 1500 Sq. Mt Utilities are WATER 40000 Liters / Day and ELECTRIC POWER 125 HP FUEL Coal (5 MT/Day)

Sr. No.	Particulars	UOM	Qty	Rate (₹)	Value (₹ in Lacs)
	<b>Plant &amp; Machinery / equipments</b>				
<i>a)</i>	<b>Main Machinery</b>				
1	Blancher, Hand Flange Rectifier	Nos	1		55.00
2	Stainless steel vessels	Nos	6		85.00
3	Pulverize, Automatic Slicer	Nos	1		15.00
4	Potato Peeler, Pulper	Nos	1		45.00
5	Utility Equipments		1		21.00
	Installation, Taxes and Transportation				29.00
	<i>sub-total</i>				<b>250.00</b>
	<b>Furniture / Electrical installations</b>				
a)	Office furniture	LS	1	150000	1.50
b)	Stores Cupboard	LS	1	250,000	2.50
c)	Computer & Printer	LS	1	100000	1.00
	<i>sub total</i>				<b>5.00</b>
	<b>Other Assets</b>				
a)	Preliminary and preoperative				25.00
	<i>sub-total Other Assets</i>				25.00
	<b>Total</b>				<b>280.00</b>

### 13. 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	270.00	315.00	360.00	405.00	450.00
3	Raw Materials & Other direct inputs	₹. In Lacs	194.11	226.46	258.82	291.17	323.52
4	Gross Margin	₹. In Lacs	75.89	88.54	101.18	113.83	126.48
5	Overheads except interest	₹. In Lacs	24.67	26.21	29.30	30.22	30.84
6	Interest @ 10 %	₹. In Lacs	48.75	48.75	32.50	24.38	19.50
7	Depreciation @ 30 %	₹. In Lacs	175.00	125.00	87.50	62.50	56.25
8	<b>Net Profit before tax</b>	₹. In Lacs	<b>-172.53</b>	<b>-111.43</b>	<b>-48.11</b>	<b>-3.27</b>	<b>19.89</b>

#### 14. BREAKEVEN ANALYSIS:

The project shall reach cash break-even at 39.80 % of projected capacity as detailed below:

Sr. No.	Particulars	UOM	Value
1	Sales at full capacity	₹. In Lacs	450.00
2	Variable costs	₹. In Lacs	323.52
3	Fixed costs incl. interest	₹. In Lacs	50.34
4	$BEP = FC/(SR-VC) \times 100 =$	% of capacity	39.80%