

INSTANT PICKLE



QUALITY AND STANDARDS : As per FPO specifications

PRODUCTION CAPACITY : 250 tpa

1.0 PRODUCT AND ITS APPLICATIONS

Apart from staple foods, man likes spicy adjuncts to make the food palatable and relishing. In this context, pickle, a spicy preparation, has gained importance in Indian menu. Preparation of pickles is an old art and a variety of these products are made in Indian homes. The basic principle of pickling is curing of fruits and vegetables by salting, acidifying, addition of vinegar and/or oil and spices. However, the taste and method of preparation varies. CFTRI has standardised a process of making instant pickle mix, which can be converted into a palatable pickle at home by simple addition of water and oil. The dry mix is a convenient product to pack, handle and transport.

2.0 MARKET POTENTIAL

The demand for pickles is on the increase both in the domestic and export markets. However, the instant pickle (dry) mix is a comparatively new concept. This may, however, become popular and acceptable due to various reasons e.g. better shelf life, possibility for addition of extra spices at the users end, relatively low cost of production, convenience in handling and reduction in volume of packaging and low transportation cost. Several varieties of dry pickle mix can be developed by using dehydrated mango, lime (lemon), green chillies, tomatoes, carrots, different types of leaves. This is an item of commercial importance that has to be further explored by better effort both in domestic/export markets.



3.0 BASIS AND PRESUMPTIONS

- The unit will work for 300 days per annum on single shift basis.
- The unit can achieve its full capacity utilization during the 3rd year of operation.
- The wages for skilled workers are taken as per prevailing rates in this type of industry.
- Interest rate for total capital investment is calculated @ 12% per annum.
- The entrepreneur is expected to raise 20-25% of the capital as margin money.
- The unit would construct its own building as per F.P.O. specifications.
- Costs of machinery and equipment are based on average prices of machinery manufacturers.



4.0 IMPLEMENTATION SCHEDULE

Project implementation will take a period of 8 months. Break-up of the activities and relative time for each activity is shown below:

❖ Scheme preparation and approval	:	01 month
❖ SSI provisional registration	:	1-2 months
❖ Sanction of financial supports etc.	:	2-5 months

- ❖ Installation of machinery and power connection : 6-8 months
- ❖ Trial run and production : 01 month

5.0 TECHNICAL ASPECTS

5.1 Location

The plant can be located anywhere keeping in view the availability of raw material at economic rates, electricity, power, skilled labour, transport facilities.

5.2 Process of Manufacture

Fully matured fresh raw fruits e.g. limes, mangoes, other fruits and vegetables are washed and cut into uniform size, brine cured at optimal conditions and dried, either under sun or by mechanical drying (vegetable pieces are to be acidified alongwith salt curing). Cleaned and dried spices like red chillies, turmeric and mustard are ground separately and mixed with the cured and dried pieces and packed in polythene bags in required quantities and sealed. The manufacturers have to take a licence under FPO.

5.3 Quality Control and Standards : As per FPO requirements

6.0 POLLUTION CONTROL

There is no major pollution problem associated with this industry except for disposal of waste which should be managed appropriately. The entrepreneurs are advised to take "No Objection Certificate" from the State Pollution Control Board.

7.0 ENERGY CONSERVATION

Proper care should be taken while utilising the power. There should be no leakage in the lines and adequate insulation should be provided.

8.0 PRODUCTION CAPACITY

Quantity	:	75 tpa
Installed capacity	:	250 kg/day
Optimum capacity utilization	:	70%
Working days	:	300/annum
Manpower	:	15

Utilities

Motive Power	:	40 kW
Water	:	5 kL/day

9.0 FINANCIAL ASPECTS

9.1 Fixed Capital

9.1.1 Land & Building

		Amount (Rs. lakh)
Land 400 sq.mtr	:	0.60
Built up Area 100 sq. mtr. @	:	2.50

Total cost of Land and Building		3.10

9.1.2 Machinery and Equipment

Description	Amount (Rs. lakh)
Electrically operated dryer, spice grinding mill, heat sealing machine, frying pan, containers, stainless steel knives, storage barrels, aluminium topped working tables, weighing scales etc.	5.00
Erection and electrification @ 10% of machinery cost	0.50
Office furniture & fixtures	0.70
Total :	----- 6.20

9.1.3 Pre-operative Expenses

Consultancy fee, project report, deposits with electricity department etc.	1.00
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9.1.4 Total Fixed Capital : 10.30 (9.1.1+9.1.2+9.1.3)

9.2 Recurring expenses per annum

9.2.1 Personnel

Designation	No.	Salary Per month	Amount (Rs.lakh)
Factory Manager	1	10,000	1.20
Supervisor	2	6,000	1.44
Office Assistant	2	5,000	1.20
Technician	2	4,500	1.08
Skilled workers	3	3,000	1.08
Unskilled workers	5	2,000	1.20
			7.20
Perquisites @ 15%			1.00
Total :	15		----- 8.20

9.2.2 Raw Material including packaging materials

Particulars	Qty.(MT)	Rate	Amount (Rs. lakh)
Raw fruits	400	7	28.00
Salt	80	7	06.00
Spices	LS	LS	11.00
Packaging material			07.00

Total:			52.00

9.2.3 Utilities		Amount (Rs. lakh)
Power 72,000 kW		1.60
Water 1,500 kL		0.20

Total:		1.80
9.2.4 Other Contingent Expenses		Amount (Rs. lakh)
Repairs and maintenance@10%		0.55
Consumables & spares	}	0.35
Transport & Travel		
Publicity		0.43
Postage & stationery		
Telephone		
Insurance		0.87

Total:		2.20
9.2.5 Total Recurring Expenditure		Amount (Rs. lakh)
(9.2.1+9.2.2+9.2.3+9.2.4)		64.20
9.3 Working Capital		
Recurring Expenditure for 3 months		16.05
9.4 Total Capital Investment		Amount (Rs. lakh)
Fixed capital (Refer 9.1.4)		10.30
Working capital (Refer 9.3)		16.05

Total:		26.35

10.0 FINANCIAL ANALYSIS

10.1 Cost of Production	(per annum)	Amount (Rs. lakh)
Recurring expenses	(Refer 9.2.5)	64.20
Depreciation on building	@5%	00.13
Depreciation on machinery	@10%	00.55
Depreciation on furniture	@20%	00.14
Interest on Capital Investment	@12%	03.16

Total:		68.18

10.2 Sale Proceeds / Annual turnover

Item	Qty. (MT)	Rate per kg	Amount (Rs.lakh)
Instant pickle	75	110	82.50

10.3 Net Profit per year

= Sales - Cost of production

= 82.50 - 68.18

= Rs. 14.32 lakh

10.4 Net Profit Ratio

= $\frac{\text{Net profit} \times 100}{\text{Sales}}$

= $\frac{17.32 \times 100}{82.50}$

= 17.36 %

10.5 Rate of Return on Investment

= $\frac{\text{Net profit} \times 100}{\text{Capital Investment}}$

= $\frac{14.32 \times 100}{26.35}$

= 54.35%

10.6 Annual Fixed Cost

	Amount (Rs. Lakh)
All depreciation	0.80
Interest	3.16
40% of salary, wages, utility, contingency	4.16
Insurance	0.87
Total:	8.99

10.7 Break even Point

= $\frac{\text{Annual Fixed Cost} \times 100}{\text{Annual Fixed Cost} + \text{Profit}}$

= $\frac{8.99 \times 100}{8.99 + 14.32}$

= 34.2%

11.0 ADDRESSES OF MACHINERY AND EQUIPMENT SUPPLIERS

Batliboi Engineers (Bangalore) Pvt. Ltd.
99/2&3, N.R.Road
Bangalore – 560 002

B.Sen Barry & Co.
65/11, New Rohtak Road
New Delhi – 110 005

Gardners Corporation
158 Golf Links,
New Delhi – 110 003

Narene Tulaman Manufacturers Pvt. Ltd.
Balanagar
Hyderabad – 500 037

Raylon Metal Works
Kondivitta Lane
Post Box 17426
J.B.Nagar, Andheri (E)
Mumbai – 400 059

Bajaj Maschinen Pvt. Ltd.
7/20-7/27 Jai Laxmi Industrial Estate, Site IV
Sahibabad Industrial Area - 201010
Dist.Ghaziabad, UP

SSP (Pvt) Ltd.
13th Milestone, Mathura Road
Faridabad – 121003, Haryana

Narangs Corporation
P-25/90 Connaught Place
New Delhi – 110001

Nirmal Services
2254/23 Rajguru Road, Chuna Mandi
Paharganj
New Delhi – 110055

Ganson Ltd.
645 Anna Salai
Chennai – 600006

Grovers Pvt. Ltd.
223, Kaliandas Udyog Bhavan
Prabhadevi
Mumbai – 400 025

Macneill and Magor Ltd.
4, Mangoe Lane
Kolkata – 700 001

D.P.Pulverisers,
Nagindas Master Road, Behind Museum,
Fort
Mumbai – 400 001

Sri Venkateswara Industries,
Yadavgi Industrial Estate,
Mysore – 570 002

12.0 OTHER SPECIAL FEATURES

A careful selection of product mix is necessary based on the local market demand and availability of raw materials. The facilities can also be utilised to manufacture oil pickles, chutneys, dehydrated fruits, vegetables etc. for fuller utilisation of capacity.