PICKLE UNIT: ALL TYPES: SOUR/SWEET ETC.

1. INTRODUCTION:

Pickles are traditional food item in India, and heavily consumed in every household. Pickles become more helpful for single person staying distant from family as pickles come in range of varieties and tastes which can suit anyone. Pickle manufacturing is very simple and any individual with small start-up capital can start this business. With consideration of availability of fruits and vegetables and popularity of tastes and acceptance of certain varieties, business can be very successful.

2. PRODUCT & ITS APPLICATION:

With range of varieties, pickles can become very useful and go with rotis, khakhra, paratha, puris etc. There can be various varieties like Amla, Assorted, Bamboo Shoot, carrot, coconut, fish, garlic, meat, jackfruit, olive, onion, kool, mixed, raw mango, sweet mango, red chilli, tamarind, tomato, sweet sour lemon etc. With these ranges, pickles can be accepted and consumed with any traditional food items on daily basis.

3. DESIRED QUALIFICATIONS FOR PROMOTER:

Successful running this project does not require any specific qualification.

4. INDUSTRY LOOKOUT AND TRENDS

The global pickles and pickle products market valued at USD 10.80 billion in 2016 and is growing at a CAGR of 3.1% in the forecast period. Pickle and pickle products vary as per local taste and preferences and thus, many international, as well as regional players, are succeeding in this market. Large varieties, flavors, and major ingredients make this a huge market.

The market is largely influenced by factors such as health benefits, taste enhancement and demand of food complimentary products. The price variation of raw materials is restricting the market. The rising popularity of non-GMO, organic pickles and the introduction of innovative products with better taste and targeting health concerns are exploitable opportunities.

The market can be broadly classified into four major segments, viz., product, taste, distribution channels and geography. On the basis of product types, the market can be segmented into fruits, vegetables, meat, seafood, relish etc. As per taste, the market is segmented into sweet, salty and sour pickles. On the basis of distribution channels, the market is divided into grocery retailers, hypermarket, supermarkets, food services, online retailers, etc.

5. MARKET POTENTIAL AND MARKETING ISSUES, IF ANY:

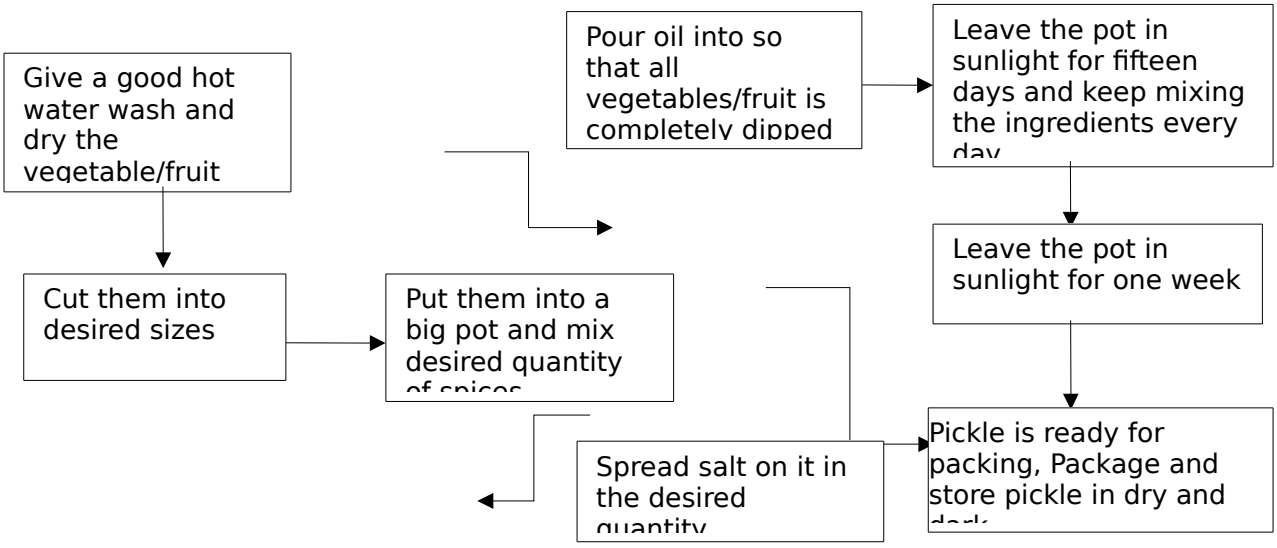
No Indian meal is complete without a smidgen of the pickle. So ready to eat pickle are very popular in almost every household. Apart from the domestic market, Indian pickles have very inspiring export demand. There are 1000 different types of pickle recipes in our country. And all those have very strong regional footprints. However, pickling techniques and the finished product might vary vastly from region to region. In addition, this is an easily scalable business. As your business grows, you can easily go for nationwide expansion. Pickles can be packed in different weights ranges from few grams to 5 kg so that it becomes useful for one time use to month’s consumption. There has to be implementation of systems for following of food standards like FSSAI, ISI etc. which can establish reputation in domestic as well as export market.

6. RAW MATERIAL REQUIREMENTS:

Pickle production would require various fruits and vegetables as per recipes, like tomato, bean, raw mango, red chili, lemon, garlic, cherry, plum, apricot, salt,

methi seeds, saunf, kalongi, rie, oil etc. For packaging, project needs HDPE pouch with, glass bottles, HDPE bottles, caps, aluminum foil and cardboard boxes.

7. MANUFACTURING PROCESS:



Pickle processing as described above requires sunlight and thus it is time consuming process. Different sizes of packaging and handling also requires more time. Other than this, there is not huge requirement in machinery and equipment. Packaging machinery needs to be automatic if project become larger with time, with proper filling, sealing and capping procedure. Lesser the human touch/intervention, higher the quality of product will be there.

8. MANPOWER REQUIREMENT:

The enterprise requires 9 employees as detailed below**:**

Sr. No.	**Designation of Employees**	**Salary Per Person**	**Monthly Salary ₹**	**Number of employees required**				
				Year-1	**Year-2**	**Year-3**	**Year-4**	**Year-5**
	Variable Labour: Workers							

1	Operator	₹ 10,000.00	₹ 10,000.00	1	1	1	2	2
2	Un Skilled Workers	₹ 8,000.00	₹ 24,000.00	3	3	3	5	5
	sub-total		₹ 34,000.00	4	4	4	7	7
	Fixed Staff:							
1	Accountant	₹ 12,000.00	₹ 12,000.00	1	1	1	1	1
2	Store Keeper	₹ 8,000.00	₹ 8,000.00	1	1	1	2	2
3	Sales Staff	₹ 12,000.00	₹ 24,000.00	3	3	3	4	4
	sub-total		₹ 44,000.00	5	5	5	7	7
	Total		₹ 78,000.00	9	9	9	14	14

9. IMPLEMENTATION SCHEDULE:

The project can be implemented in 6 – 8 months' time as detailed below

Sr. No.	Activity	Time Required *(in months)*
1	Acquisition of premises	1.00
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)*	6.00 - 8.00

10. COST OF PROJECT:

The project shall cost ₹ 28.98 lacs as detailed below:

Sr. No.	Particulars	₹ in Lacs
1	Land	4.50
2	Building	3.20
3	Plant & Machinery	10.39
4	Furniture, other Misc. Equipments	0.85
5	Other Assets including Preliminary / Pre-operative expenses	1.04
6	Margin for Working Capital	9.00
	Total	**28.98**

11. MEANS OF FINANCE:

Bank term loans are assumed @ 60% of fixed assets. The proposed funding pattern is as under:

Sr. No.	Particulars	₹ in Lacs
1	Promoter's contribution	7.24
2	Bank Finance	21.73
	Total	**28.98**

12. WORKING CAPITAL CALCULATION:

The project requires working capital of ₹ 9 lacs as detailed below:

Sr. No.	Particulars	Gross Amt	Margin %	Margin Amt	Bank Finance
1	Inventories	4.50	0.25	1.13	3.38
2	Receivables	2.25	0.25	0.56	1.69
3	Overheads	2.25	100%	2.25	0.00
4	Creditors	-		0.00	0.00
	Total	9.00		3.94	5.06

13. LIST OF MACHINERY REQUIRED:

A detail of important machinery is given below:

Sr. No.	Particulars	UOM	Qtty	Rate (₹ in Lacs)	Value (₹ in Lacs)
	Plant & Machinery / equipments				
a)	***Main Machinery***				
1	S.S.Top Working Table, Two head bottle Washing machine, SS Vessles for Oil dipping and Storage, S.S.Knife, ladles, Small utensils, mug, cups	Nos	1	₹ 5.00	₹ 5.00
2	Vegetable/Fruit Cutting Machine	Nos	1	₹ 1.35	₹ 1.35
3	Spices Mixing Machine	Nos	1	₹ 1.10	₹ 1.10
4	Automatic Filling Sealing and Packing Machine	Nos	1	₹ 1.85	₹ 1.85
5	Weighing Scale	Nos	3	₹ 0.18	₹ 0.54
6	Material Handling Equipment	Nos	LS	₹ 0.30	₹ 0.30
7	Misc. Tools	Nos	LS	₹ 0.25	₹ 0.25
	sub-total Plant & Machinery				**₹ 10.39**
	Furniture / Electrical installations				
1	Office furniture and Electrification	LS	1	₹ 0.85	₹ 0.85
	sub total				**₹ 0.85**
	Other Assets				
1	preliminary and preoperative	LS		1.04	₹ 1.04
	sub-total Other Assets				**₹ 1.04**
	Total				**₹ 12.28**

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:

1. Fry-Tech Food Equipments Private Limited
   S. 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

3. 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

5. 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	50.40	58.80	67.20	75.60	84.00
3	Raw Materials & Other direct inputs	₹. In Lacs	24.86	29.00	33.14	37.29	41.43
4	Gross Margin	₹. In Lacs	25.54	29.80	34.06	38.31	42.57
5	Overheads except interest	₹. In Lacs	10.36	11.01	12.30	12.69	12.95
6	Interest @ 10 %	₹. In Lacs	2.17	2.17	1.45	1.09	0.87
7	Depreciation @ 30 %	₹. In Lacs	3.12	2.34	1.87	1.25	0.94
8	**Net Profit before tax**	₹. In Lacs	**9.89**	**14.28**	**18.43**	**23.29**	**27.82**

The basis of profitability calculation:

This unit will have capacity of Sales Capacity of 80 MT per annum of Pickles in different packing of 50g, 300g, 450g, 1 kg and 5 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 litre. 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 32.46% of projected capacity as detailed below:

Sr. No.	Particulars	UOM	Value
1	Sales at full capacity	₹. In Lacs	84.00
2	Variable costs	₹. In Lacs	41.43
3	Fixed costs incl. interest	₹. In Lacs	13.82
4	BEP = FC/(SR-VC) x 100 =	% of capacity	32.46%

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 Labeling
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 centers 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 center associated with the retail chain of outlets with facilities like cold room/ cold storage/ ripening chamber.

18. TRAINING CENTERS AND COURSES

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

1. 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

2. MIT College of Food Technology, Pune
   Gate.No.140, Raj Baugh Educational Complex,

Pune Solapur Highway,
Loni Kalbhor, Pune – 412201
Maharashtra, India

3. 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.

Source:- Udyami Mitra/Sidbi