

TITLE :Manufacturing of Pickles and chutneys

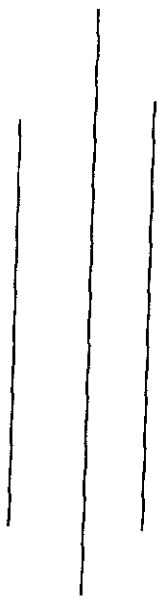
PRODUCT CODE :

- (iv) ASICC :
 - a) Pickles : 13534
 - b) Chutneys :13532
- (v) NIC :
 - a) Pickles :15312
 - b) Chutneys :15136
- (vi) ITC(HS):

QUALITY STANDARD : BIS

PRODUCTION CAPACITY QTY : 0.5 MT/day

YEAR OF PREPARATION : 2006 - 07



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1. (a) INTRODUCTION

Pickles and chutneys add to the palatability of meals and snacks and enjoyable. Pickles gain importance in the Indian menu. Pickles are made from Lime, mango, Lemon, Green chillies, carrot, etc. Preservation of fruits and vegetables is an old art and a variety of these products are made in the Indian homes. However, the taste and method of preparation differs from though the basic principle of pickling is curing of fruits and vegetables by salting, acidifying, addition of vinegar oil and spices.

Pickles are of different types

- Pickles in oil
- Pickles in citrus juice
- Pickles in brine
- Pickles in Vinegar

A fruit chutney is a preserved product similar to pickles, which contains minimum of 40 % of fruit content, 50 % of solids with acidity not exceeding 2 % and spices are considerably less than in pickles.

Both pickles and chutneys are consumed along with staple foods such as Rice, chappati, bread, samosa etc.

(Note : Preparation of Pickles required clearance from FPO)

(b) Traditionally pickles are prepared at home. However, during recent years Large numbers of brands have invaded the market and people find it convenient to purchase branded pickles than prepare at home. The demand for pickles & chutneys are on the increase both in domestic and export market. The present production of pickles and chutneys are increasing year after year due to increase in consumption level and improved in economic Situation. The popular variety of pickles are mango pickles, Lime pickles, Mixed vegetable pickles, tomato pickles etc.

Although, a numbers of brands are available in the market still there is a good scope for good quality pickles.

(c) Raw Materials

The seasonal availability of different fruits are as below :

- | | | |
|----|----------------|------------------------------------|
| 1. | Tomato | : March to July |
| 2. | Acid Limes | : December to march, July to sept. |
| 3. | Green Chillies | : Almost throughout the year |
| 4. | carrot | : July to February. |

All the materials are locally available. Since the availability of fruits and vegetables are seasonal, the production scheduled would have to be planned keeping in view the availability during a particular season. The raw materials are to be processed during the season, prepare cured, dehydrated and stored for ready use all round the year. Powder spices are the other raw material of importance in pickles preparation. They are cleaned, sieved and mechanically dried and ground to particles size before use. the other important ingredients are edible oil, such as sesame oil/mustard oil, which is available easily round the year.

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2. TECHNOLOGY/MANUFACTURING PROCESS

Fuly matured fresh raw mangoes/Limes/other fruits and vegetables are washed and cut to uniform sizes, brine cured at optimal conditions or are directly mixed with salt and other ingredients for preparing the pickles.

Clean and dried spices like red chilly, turmeric and mustard are ground separately and mixed with the cured or fresh mango, lime pieces etc.alongwith edible oil, garlic paste, vinegar etc. The prepared fresh pickles has to be cured for a week in plastic carboy or wooden barrels.

Periodical mixing will help will help progress uniform salt equilibrium, Cured pickles are then packed in dry bottles, sealed with caps, labeled and finally packed

In CFB boxes.

The fruit chutney is made by cooking the prepared pieces with sugar, spices etc. to a required consistency,finally finishing it with enquired quantity of vinegar. It is then packed in bottles as in the case of pickles.

3. INSTALLED CAPACITY

- | | |
|---------------------------------|------------|
| a) Installed Capacity | ☺.5 MT/day |
| b) No. of working days | : 20/Annum |
| c) Optimum capacity utilization | : 70 % |
| d) Annual production | : 140 MT |

4. LOCATION

The plant can be located anywhere in the vicinity of towns in hygienic Places,However,proper supply of electricity and water has to be ensured.

5. BASIS AND PRESUMPTION

- viii) The basis for calculation of production capacity has been taken on a single Shift basis on 75 % efficiency.
- ix) The maximum capacity utilization on a single shift basis for 300 days a year. During the first year and second year of operations the capacity utilization is 60 % and 80 % respectively The unit is expected to achieve full capacity utiliosation from the third year onwards.
- x) The salary and wages, cost of materials,utilities,rents,etc. are base on the Prevailing rates in and around Imphal. These cost factors are likely to vary with time and location.
- xi) Interest on term loan and working capital loan must be preferably current rate. Otherwise, the rate of 14 % on an average may be taken.
- Iv) The cost of machineries and equipments refer to a particular make/model And prices are approximate.
- xii) The breakeven point percentage indicated is of full capacity utilization.
- xiii) The project preparation cost etc. whenever required could be consider as pre-operative expenses.
- xiv) The essential production machinery and test equipment required for the project have been indicated.

6. IMPLEMENTATION SCHEDULED

The major activities in the implementation of the project listed and the average time for Implementation of the project is estimated at 12 months:

Sl.no	Events	Period(in months)
5.	Preparation of project report	2
6.	Registration and other formalities	2
7.	Sanction of loans by financial institutions	2
8.	Plant and Machinery	
	a) Placement of order	1
	b) Procurement	2
	c) Power connection/electrification	1
	d) Installation/Erection of machineries/Test equipments	1
5.	Recruitment of technical persons	2
6.	commercial production	2
	Total	14 mths

7. QUALITY STANDARDS ; As per customers satisfaction

8. PRODUCTION CAPACITY PER ANNUM

QTY : 100 MT per annum

VALUE : Rs, 6,75,000/-

9. MOTIVE POWER : 4 Kw(Appx.)

10. POLLUTION CONTROL

The Govt. accords utmost importance to control environments pollution. The small scale entrepreneurs should have an environmental friendly attitude and adopt pollution control measures by process modification and technology substitutions. India having acceded to the Montreal Protocol in Sept. 1992 the production and use of Ozone Depleting Substance(ODS)

Like CHLOROFLUOROCARBON (CFC), Carbon Tetrachloride, Halons and methyl chloroform etc. need to be phase out immediately with alternative chemical/Solvents. A notification for detail rules to regulate ODS phase out under the Environment Protection Act, 1986 have been put in place with effect from 19th July, 2000.

The following steps are suggested which may help to control pollution in electronics industries wherever applicable:

- iii) In electronic industry fumes and gases are released during hand soldering/wave soldering/Dip soldering, which are harmful to people as well as environment and the end products. Alternate technologies may be used to phase out the existing polluting technologies. Numerous new flux have been Developed containing 2- 10% solids as opposed to the traditional 15-35 % solids
- iv) Electronics industry uses CFC s, Carbon Tetrachloride and Methyl Chloroform for cleaning of printed circuit board after assembly to remove flux residues left after soldering, and various kinds of foam for packing.

Many alternatives solvents could replace CFC -113 and methyl Chloroform in Electronic industry cleaning. Other chlorinated solvents such as trichloroethylene, perchloroethylene and methylene chloride have been used as effective cleaners in electronic industry for many years. Other organic solvents such as ketenes and alcohols are effective in removing both solder fluxes and many polar contaminants.

Besides, then unit must have proper waste and effluent treatment facility.

11. ENERGY CONSERVATION

With the growing energy needs and shortage coupled with rising energy cost, a greater Thrust in energy efficiency in industrial sector has been given by the Govt. of India since 1980s. The energy conservation Act 2001, which provides for efficient used of energy, its conservation & capacity building of Bureau of Energy Efficiency created under the Act.

The following steps may help for conservation of electrical energy:

- vi) Adoption of energy conservation technologies, production aids and testing Facilities.
- vii) Efficient management of process/manufacturing machineries and systems QC, and testing equipments for yielding maximum energy conservation.
- viii) Optimum used of electrical energy for heating during soldering process can be obtained by using efficient temperature controlled soldering and de soldering stations.
- ix) Periodical maintenance of Motor compressors etc.
- x) Use of power factor correction capacitors. Proper selection and layout of lighting system, timely switching off of the lights, use of compact fluorescent lamps wherever possible etc.

12. FINANCIAL ASPECTS

Land	1000 Sq.Mtrs	Rs,3,00,000
Building & allied civil works	300 Sq mtrs	Rs.15,00,000
	Total	Rs.18,00,000

12(a) MACHINERY AND EQUIPMENT

Washing Tank, Spices grinding machine, Slicing machine, Pickles mixing machine Electric oven, Bottle rinsing, capping and Sealing machine, Labelling machine, storage Barrels, Aluminium working tables, stainless Steel knives, Weighing balance, Tray & utensils Office furnitures, Electrification etc	L.S	: Rs.7,00,000
Preliminary & Pre-operative expenses Like traveling charges, legal expenses Registration etc.	L.S	: Rs. 92,000
Office furnitures, Tools&Fixtures	L.S	:Rs. 70,000.

Total Fixed capital :Rs.26,62,000

13. Means of finance

Sl.no	Particular	Amount (Rs.)
1.	Fixed Capital	18,62,000
2.	Working capital for three months	11,67,000
	Total	3,02,9000
	Say,	30,00,000
a)	Promoters Contribution (25 %)	: Rs.7,50,000
b)	Term Loan (75%)	: Rs.22,50,000

14. Financial Analysis :

(a) Cost of Production (per annum)

Sl.no	Particular	Amount (Rs.)
1.	Recurring Expenses	46,68,000
2.	Depreciation on building	40,000
1.	Depreciation on machinery and equipment@10%	70,000
2.	Depreciation on Tools,Jigs,&Furniture@ 25%	14,000
3.	Interest on capital investment @ 14 %	2,94,000
5.		
6.	Total	50,86,000
	Say	50,0,000

(b) Turnover per annum

By sale of Pickles & Chutneys
(250 ml,500 ml,750 ml etc.)

L.S. : Rs.56,50,000

(c) Profit per Annum(before taxes)

Turnover per annum – Cost of production per annum = Rs.56,50,000 – 50,00,000
= Rs. 6,50,000

Net profit ratio

$$\frac{(\text{Profit/annum}) * 100}{(\text{Sales/ annum})}$$

= 11.5 %

Rate of Return

$$\frac{\text{Profit/annum} * 100}{\text{Total capital investment}}$$

= 21.67 %

(d) Break Even Point

Fixed Cost per annum

Sl. no	Particular	Amount (Rs.)
1.	Depreciation on building	40,000
2.	Depreciation on machinery and equipment @ 10 %	70,000
3.	Depreciation on tools, jigs & Furniture's @ 25 %	14,000
5.	Interest on total capital investment @ 14 %	2,94,000
7.	40 % salaries and wages	3,40,000
8.	40 % other contingents Expenses (Excl insurance)	62,400
9.	Total fixed cost	8,20,400
	Or say	8,20,000

Break Even Point

$$\frac{\text{Fixed Cost} * 100}{\text{Fixed cost} + \text{profit}} = 55 \%$$

15. Additional Information's

- a) The project profile may be modified/tailor to suit the individual entrepreneurship Quality, production programmed and also to suit the location characteristic, Wherever applicable.
- b) The electronics technology is undergoing rapid strides of changes and there is need for regular monitoring of the international technology scenario. The unit may Therefore, keep abreast with the new technologies in order to keep them in pace With the developments for global competition.
- c) Quality today is not only confined to product or service alone. It also extend to the process and environment in which they are generated. The ISO-9000 defines standards for environment management systems and ISO-14001 defines standards for environmental management system for Acceptability at international level. The unit may therefore adopt these standards For global competition.
The margin money recommended is 25 % of the working capital requirement at an Average. However, the percentage of margin money may vary as per banks discretion.

15. Name and Addresses of the Machinery & Equipment Suppliers

- 1) Mysore Industries
2336, 9th Cross
Basaceswara Road, Mysore - 560004
- 2) General engineering Co.
P.B No. 20, Udipi Karnataka
- 3) Sathana Industries
A-3, Industrial Estate
Krishnagiri -635001
Tamilnadu
- 4) Shriyan Enterprises
B-5, Ghansham Industrial estate
Veera desai Road, Andheri(W)
Mumbai - 410053
- 5) S.S Packaging Industries
R-R 29, Ist Floor, Miyawali Nagar
Roktak Road, New Delhi- 110087
- 6) Maxima Boilers Pvt. Ltd
G-14, Mughal service industrial Estate
Devidayal Road, Mulund (W)
Mumbai - 400080