

# **PROJECT PROFILE**

ON

TAMARIND PASTE

Month & Year  
Aug 2010

**PREPARED BY  
TANSTIA-FNF SERVICE CENTRE  
B-22, INDUSTRIAL ESTATE  
CHENNAI-600032**

Supported by

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## TAMARIND PASTE

### **1. Introduction**

Tamarind paste is a commonly used condiment in daily culinary practices. It is used in the preparation of sambhar, rasams, soups, gravies, modified rice preparations, sweet-sour sauce etc. With the increasing use of tamarind in food preparations, ready to use tamarind powder and pastes have found a market place. This is because these products have very little or no fibre; are ready to use directly in preparations and are not cumbersome or messy to use. Of the two, the paste finds a better acceptance among housewives.

### **2. Market**

The major market outlets are the “A” and “B” class outlets, departmental stores, super markets and self service counters. The product also has a good export potential. Although the product is conceptually new, its properties as a ready to use product are known among housewives.

### **3. Packaging**

The processed product is packed in metallized polyester-poly pouches or rigid polyethylene cups with lid. The product is packed in measures of 100 grams and 200 grams.

### **4. Production capacity**

- The plant will be in operation for two shifts a day with each shift of 8 hours duration.
- The plant will operate to a capacity of a raw material (tamarind) input of 500 kilograms per shift or one tonne per day.
- The estimated production per day is 400 kilograms.
- The total production per month will be 10 M.T while the annual production is estimated at 120 M.T
- The time period required for achieving full capacity utilization is one year.

**5. Sales revenue**

- The ex-factory selling price will be Rs. 30 per cup of 200 grams thereby yielding a sales revenue of 180 lakhs per annum.

**6. Production process outline.**

Deseeded tamarind is soaked in small quantities of water in the kettle and the mass is heated gently till the pulp becomes soft. The mass is then stirred, removed from the kettle and the pulp extracted with the aid of an extractor. The pulp obtained is once again taken to the kettle where it is once again concentrated to one third its volume. A kilogram of tamarind yields about 400 grams of the paste. Preservatives are added and the product packed in containers of 200 grams capacity and sealed.

**7. Quality specifications**

- The product shall conform to standards laid down under the FPO
- A FPO license is mandatory.
- The product shall be free from fermented odour on production or storage.
- The product shall not develop any mold or fungal growth.
- It shall be free from species of coliform, salmonella and streptococci bacteria.

**8. Pollution control measures**

Not necessary as there are no pollutants or effluents.

**9. Energy conservation measures**

Common measures will do.

**10. Land and construction cost for the proposed unit**

The proposed unit is to be set up in a leased area. The total leased area is 3000 square feet vide details given below.

<b>SI</b>	<b>Description</b>	<b>Sq. feet</b>
1	Processing area	1800
2	Raw material store for tamarind	100
3	Other ingredients storage room	100
4	Finished goods store room	100
5	Packaging material storage room	100
6	Laboratory	200
7	Office space	200
8	Machinery spares room	100
9	Toilets	100
10	Baby boiler area	100
11	Miscellaneous space	100
<b>12</b>	<b>Total</b>	<b>3000</b>

Lease rent – Rs. 6 per square foot

Total rent per month – Rs. 18000

Lease advance – Rs. 75000

**11. Costing of machinery and equipment**

<b>SI</b>	<b>Description</b>	<b>Rs. lakhs</b>
1	Baby boiler and accessories	1.650
2	Stainless steel pulp extractor	0.750
3	Stainless steel steam jacketed kettle	0.650
4	Stirrer, motor, reduction gears for kettle	0.350
5	Cup washing and drying machine	0.272
6	Stainless steel working tables	0.300
<b>7</b>	<b>Total</b>	<b>3.972</b>
8	Laboratory equipment	0.500
<b>9</b>	<b>Grand total machinery and equipment</b>	<b>4.472</b>

**12. Project cost**

SI	Description	Rs. lakhs
1	Land	On lease
2	Civil works	On lease
3	Plant machinery	3.972
4	Laboratory equipment	0.500
5	Transport vehicle (Tata Ace)	3.760
6	Pollution control equipment	0.000
7	Energy conservation equipment	0.000
8	Cost of power connection	0.250
9	Cost of electrification	0.350
10	Erection and commissioning	0.400
11	Cost of machinery spares	0.100
12	Cost of office equipment	1.000
13	Deposits if any	0.600
14	Company formation expenses	0.100
15	Gestation period expenses	0.500
16	Sales tax registration expenses	0.100
17	Initial advertisement and publicity	5.000
18	Contingencies	0.500
19	Working capital margin money	5.336
<b>20</b>	<b>Total</b>	<b>22.468</b>

**13. Working capital requirements per month**

**a. Salaries and wages**

SI	Description	No of persons	Total salary / month (Rs. lakhs)
1	Production Supervisor (female)	1	0.150
2	Chemist (female)	2	0.200
3	Skilled workers (female)	2	0.120
4	Unskilled workers (female)	4	0.120
5	Driver	1	0.070
6	Administrative staff 9female)	1	0.100
<b>7</b>	<b>Total</b>	<b>11</b>	<b>0.760</b>

**b. Raw material requirement per month**

SI	Description	Qty (kgs)	Rate / kg (Rs)	Value (Rs. lakhs)
1	Deseeded Tamarind	25000	32.00	8.000
2	Preservatives	10	120.00	0.012
3	<b>Total raw material</b>	<b>25010</b>		<b>8.012</b>

**c. Packaging material requirement per month**

SI	Description	Qty	Rate / unit (Rs)	Value (Rs. lakhs)
1	Primary packaging material – cups with lid	50000 nos	2.00	1.000
2	Cartons and straps	2000 nos	40	0.800
3	<b>Total</b>			<b>1.800</b>

**Total raw + packaging material = Rs. 9.812 lakhs**

**d. Utilities per month**

SI	Description	Rs. lakhs
1	Power 1200 kwh @ Rs. 5.50 per unit	0.066
2	Water	0.050
3	Boiler fuel	0.300
4	<b>Total utilities</b>	<b>0.416</b>

**e. Contingent expenses per month**

SI	Description	Rs. lakhs
1	Rent for processing shed	0.180
2	Postage and stationery	0.010
3	Telephones, fax etc.	0.050
4	Consumable stores	0.020
5	Repairs and maintenance	0.037
6	Local transports, loading and unloading	0.100
7	Advertisement and publicity @ 5% of sales	0.750
8	Insurance	0.005
9	Sales expenses @ 1% of sales	0.150
10	Miscellaneous expenses @ 1% of sales	0.150
11	Trade incentives @ 2% of sales	0.300
12	Taxes @ 4%	0.600

<b>13</b>	<b>Total contingent expenses</b>	<b>2.352</b>
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**f. Total working capital requirement per month**

<b>SI</b>	<b>Description</b>	<b>Rs. lakhs</b>
1	Salaries and wages	0.760
2	Raw material and packaging material	9.812
3	Utilities	0.416
4	Contingent expenses	2.352
<b>5</b>	<b>Total</b>	<b>13.340</b>

**14. Means of finance**

<b>SI</b>	<b>Description</b>	<b>Rs. lakhs</b>
1	Total Project Cost	22.468
2	Equity	7.414
3	Debt	15.054
4	Working capital margin money	5.336

**15. Financial analysis**

<b>SI</b>	<b>Description</b>	<b>Rs. lakhs</b>
1	Total recurring cost per year	160.080
2	Depreciation on land and building	0.000
3	Depreciation on machinery	0.820
4	Depreciation on furnaces	0.000
5	Depreciation on moulds and fixtures	0.020
6	Depreciation on office equipment	0.100
7	Interest on long term loan @ 13.5%	2.032
8	Interest on short term borrowings@ 13.5%	1.080
<b>9</b>	<b>Total cost of production</b>	<b>164.132</b>

**16. Turnover per year**

<b>SI</b>	<b>Item</b>	<b>Qty</b>	<b>Rate/unit (Rs)</b>	<b>Total Rs. lakhs</b>
<b>1</b>	<b>Tamarind paste</b>	<b>120,000 kgs</b>	<b>150</b>	<b>180.00</b>

**17. Viability analysis**

<b>Sl</b>	<b>Description</b>	<b>Value</b>
1	Net profit before income tax (Rs. lakhs)	15.868
2	Net profit ratio	8.8%
3	Internal rate of return	20.8%
4	Break even percentage	39%
5	Debt service coverage ratio	2.014

***List of machinery suppliers for Tamarind Paste***

1. Geeta Food Engineering, Plot No. C - 7 / 1, TTC Industrial Area, Pawana MIDC, Thane - Belapur Road, Behind Savita Chemicals, Navi Mumbai 400705. Maharashtra.; Tel: 022 - 56101973; Fax: 022 - 55906450