

# **PROJECT PROFILE**

ON

TAMARIND SEED POWDER

Month & Year  
Aug 2010

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

Supported by

Friedrich Naumann  
STIFTUNG **FÜR DIE FREIHEIT**

## TAMARIND SEED POWDER

### **1. Introduction**

Tamarind seed powder contains starches which is used in the textile industry.

### **2. Market**

The major market outlets are institutional and comprise the textile industries.

### **3. Packaging**

Tamarind seed powder is packed in HDPE bags with a LDPE inner liner. The quantity packed per bag is 25 kgs.

### **4. Production capacity**

- The plant will be in operation for two shifts a day.
- The production capacity is estimated at 100 kilograms per hour or 1.6 tons per day.
- The yield of tamarind seed powder will be 40.0 tonnes per month and that per annum would be 480 metric tonnes.
- The time period required for achieving full capacity utilisation is one year.

### **5. Sales revenue**

- With an ex-factory selling price at Rs. 22.00 per kilogram, the annual sales revenue on full capacity utilisation would yield Rs. 105.60 lakhs.

### **6. Production process outline.**

Seeds must be cleaned before commencement of processing. The production process consists of first cleaning the tamarind seeds by passing through a chaff separator and destoner. Here, contaminant material such as twigs, chaff, fibre, mud, and stones are removed. The cleaned seeds are then conditioned by addition of water, passed through a roaster to loosen the skin and then ground in a hammer mill to 200 mesh particle size and passed through a vibratory sieve to separate the fibre from starches. The starch fraction is collected in polythene lined HDPE bags of specified capacity, stitched and

stacked to dispatch. The fibrous material is collected in used gunnies and disposed off as boiler fuel.

**7. Quality specifications**

- The product should be free from any fermented odour.
- The moisture content should not exceed 8%
- Mold and fungal growth should be absent.

**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 area required is 3000 square feet as described below:

SI	Description	Sq. feet
1	Processing area	1800
2	Raw material store	200
3	Packing material store	200
4	Finished goods store	200
5	Laboratory	100
6	Machinery spares room	100
7	Office	100
8	Toilets	100
9	Miscellaneous space	200
<b>10</b>	<b>Total</b>	<b>3000</b>

Lease rent – Rs. 6 per square foot

Total rent per month – Rs. 18000

Lease advance – Rs. 60000

### 11. Costing of machinery and equipment

SI	Description	Rs. lakhs
1	Destoner	0.500
2	Chaff separator	0.600
3	Conditioner and roaster	2.500
4	Hammer mill pulveriser with accessories	2.500
5	Grader	0.600
<b>6</b>	<b>Total</b>	<b>6.700</b>
7	Laboratory equipment	0.500
<b>8</b>	<b>Grand total machinery and equipment</b>	<b>7.200</b>

### 12. Project cost

SI	Description	Rs. lakhs
1	Land	On lease
2	Civil works	On lease
3	Plant machinery	6.700
4	Laboratory equipment	0.500
5	Transport vehicle (1 LCV)	7.500
6	Pollution control equipment	0.000
7	Energy conservation equipment	0.000
8	Cost of power connection	0.350
9	Cost of electrification	0.650
10	Erection and commissioning	0.720
11	Cost of machinery spares	0.500
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	2.000
18	Contingencies	0.250
19	Working capital margin money	2.992
<b>20</b>	<b>Total</b>	<b>24.462</b>

**13. Working capital requirements per month**

**a. Salaries and wages**

SI	Description	No of persons	Total salary / month (Rs. lakhs)
1	Production Manager	1	0.300
2	Production supervisor cum chemist	1	0.200
3	Skilled workers	2	0.120
4	Unskilled workers	4	0.160
5	Driver	1	0.070
6	Administrative staff	1	0.200
7	<b>Total</b>	<b>10</b>	<b>1.050</b>

**b. Raw material requirement per month**

SI	Description	Qty (kgs)	Rate / kg (Rs)	Value (Rs. lakhs)
1	Tamarind seeds	48000	8.00	3.840
2	<b>Total raw material</b>	<b>48000</b>		<b>3.840</b>

**c. Packaging material requirement per month**

SI	Description	Qty	Rate / unit (Rs)	Value (Rs. lakhs)
1	Primary packaging material – LDPE bags with liner	1600 nos	12	0.192
2	<b>Total</b>			<b>0.192</b>

**Total raw + packaging material = Rs. 4.032 lakhs**

**d. Utilities per month**

SI	Description	Rs. lakhs
1	Power 20000 kwh @ Rs. 6.00 per unit	1.200
2	Water	0.010
3	Boiler fuel	0.000
4	<b>Total utilities</b>	<b>1.210</b>

**e. Contingent expenses per month**

<b>SI</b>	<b>Description</b>	<b>Rs. lakhs</b>
1	Rent for processing shed	0.180
2	Postage and stationery	0.010
3	Telephones, fax etc.	0.050
4	Consumable stores	0.010
5	Repairs and maintenance	0.073
6	Local transports, loading and unloading	0.150
7	Advertisement and publicity	0.000
8	Insurance	0.010
9	Sales expenses @ 1% of sales	0.080
10	Miscellaneous expenses @ 1% of sales	0.080
11	Trade incentives	0.000
12	Taxes	0.544
<b>13</b>	<b>Total contingent expenses</b>	<b>1.187</b>

**f. Total working capital requirement per month**

<b>SI</b>	<b>Description</b>	<b>Rs. lakhs</b>
1	Salaries and wages	1.050
2	Raw material and packaging material	4.032
3	Utilities	1.210
4	Contingent expenses	1.187
<b>5</b>	<b>Total</b>	<b>7.479</b>

**14. Means of finance**

<b>SI</b>	<b>Description</b>	<b>Rs. lakhs</b>
1	Total Project Cost	24.462
2	Equity	8.072
3	Debt	16.390
4	Working capital margin money	2.992

**15. Financial analysis**

SI	Description	Rs. lakhs
1	Total recurring cost per year	89.748
2	Depreciation on land and building	0.000
3	Depreciation on machinery and vehicle	1.470
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%	2.213
8	Interest on short term borrowings@ 13.5%	0.606
<b>9</b>	<b>Total cost of production</b>	<b>94.157</b>

**16. Turnover per year**

SI	Item	Qty	Rate/unit (Rs)	Total Rs. lakhs
1	Tamarind seed powder	48,00,00 kgs	22	105.60

**17. Viability analysis**

SI	Description	Value
1	Net profit before income tax (Rs. lakhs)	11.443
2	Net profit ratio	10.8%
3	Internal rate of return	22.8%
4	Break even percentage	54%
5	Debt service coverage ratio	1.986

**List of machinery suppliers for Tamarind Seed Powder**

1. Sri Valsa Engineering Works, 36, Nanda Nagar, Singanallur, Coimbatore 641005. Tamil Nadu.; Tel: 0422 - 2574268; Fax: 0422 - 2574268
2. Goldin India Equipment Private Limited, F / 29, B.I.D.C. Industrial Estate, Gorwa, Vadodra, Gujarat. 390016. ; Tel: 0265 - 280461; Fax: 0265 - 280168
3. D.P Pulveriser Works, Modi and Modi Building No.2, 76, Nagindas Master Road, Mumbai. 400001.; Tel: 022 - 22670976; Fax: 022 - 22676435
4. KAPS Engineers, 831, GIDC, Makarpura, Vadodra, 390010, Gujarat.; Tel: 0265 - 2638448