

# **PROJECT PROFILE**

ON

## **CHIKKIES**

Month & Year

Aug 2010

**PREPARED BY  
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## CHIKKIES

### **1. Introduction**

Chikkies are jaggery enrobed cashews, peanuts and sesame. They are used as a pastime snack by children and adults as they enjoy the sweet taste. It is also served during parties and festive occasions. People consume it while traveling on picnics and therefore the product has a wide market potential.

### **2. Market**

The major market outlets are the “A” and “B” class stores. The product also finds placement in self service counters and departmental stores. Bakeries sell chikkies. In addition “C” class outlets sell unbranded varieties of chikkies made by cottage industries or by women at home.

### **3. Packaging**

Chikkies are packed in weights of 100 grams. Polypropylene wrappers or cellophane wrappers are used.

### **4. Production capacity**

- The plant will be in operation for three shifts a day.
- The production capacity is estimated at 500 kilograms per shift or 1500 kilograms per day.
- The yield of chikkies will be 37.5 tonnes per month and that per annum would be 450 metric tonnes.
- The time required for achieving full capacity utilisation is one year.
- Different types of chikkies are made from peanuts, sesame and cashew. The present project considers use of peanuts as an example. The procedure for manufacture of sesame and cashew chikkies is the same as that of peanuts.

### **5. Sales revenue**

- With an ex-factory selling price at Rs. 110 per kilogram of peanut chikkies, the total sales revenue will be Rs. 495 lakhs per annum on full capacity utilisation.

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

Peanuts are first shelled to remove the outer skin. The kernels are roasted in a roaster at 120 degrees centigrade for 30 to 40 minutes till they turn golden brown. They are removed and cooled. The outer seed coat is removed by rubbing and the roasted kernels are removed by rubbing.

Separately jaggery is boiled in the kettle till a thick syrup is formed. The syrup is filtered through a muslin cloth to remove mud, and other dust particles.

The hot syrup is mixed with the roasted kernels in the ratio of 40:60 by weight respectively and then poured into the trays for drying. The trays are kept in the trolley of the tray drier and dried in a blast of cold air.

The dried chikki is packed in cellophane paper and put into cartons for dispatch.

## **7. Quality specifications**

- The product should be completely dry with the moisture content not exceeding 5%.
- There should be no signs of mold and fungal growth when observed under the microscope.
- Artificial sweeteners are prohibited from being added.
- Only sugar, jaggery, dextrose, invert sugar, liquid glucose, either singly or in combination can be used as sweetening agents.
- It should be free from any fermented odour, coliforms, salmonella and streptococci bacteria.
- It cannot contain any artificial flavours, colour and preservatives.

## **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:

<b>SI</b>	<b>Description</b>	<b>Sq. feet</b>
1	Processing area	2500
2	Raw material store	200
3	Packing material store	200
4	Finished goods store	200
5	Laboratory space	200
6	Machinery spares room	100
7	Administrative area	200
8	Toilet space	200
9	Miscellaneous space	200
<b>10</b>	<b>Total</b>	<b>4000</b>

Lease rent – Rs. 6.00 per square foot

Total rent per month – Rs. 24000

Lease advance – Rs. 100,000

**11. Costing of machinery and equipment**

<b>SI</b>	<b>Description</b>	<b>Rs. lakhs</b>
1	Thermostat controlled roaster for oilseeds	2.700
2	Tray drier with 2 trolleys each and 48 trays each	3.200
3	Stainless steel working vessels and trays	0.600
4	Jaggery syrup preparation kettles – 2 nos	0.600
5	Electronic weighing scales of different capacities – 5 nos	0.900
<b>6</b>	<b>Total</b>	<b>8.000</b>
7	Laboratory equipment	0.500
<b>12</b>	<b>Grand total machinery and equipment</b>	<b>8.500</b>

**12. Project cost**

<b>SI</b>	<b>Description</b>	<b>Rs. lakhs</b>
1	Land	On lease
2	Civil works	On lease
3	Plant machinery	8.000
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	0.200
9	Cost of electrification	0.400
10	Erection and commissioning	0.800
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	10.000
18	Contingencies	0.350
19	Working capital margin money	15.188
<b>20</b>	<b>Total</b>	<b>41.598</b>

**13. Working capital requirements per month**

**a. Salaries and wages**

<b>SI</b>	<b>Description</b>	<b>No of persons</b>	<b>Total salary / month (Rs. lakhs)</b>
1	Production Manager	1	0.300
2	Production supervisor cum chemist	3	0.600
3	Skilled workers	3	0.240
4	Unskilled workers	12	0.480
5	Packing workers	6	0.240
6	Administrative staff	1	0.200
7	Van driver	1	0.080
8	Sales coordinator	1	0.150

9	<b>Total</b>	<b>28</b>	<b>2.290</b>
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**b. Raw material requirement per month**

SI	Description	Qty (kgs)	Rate / kg (Rs)	Value (Rs. lakhs)
1	Peanuts	23625	50.00	11.810
2	Jaggery	13150	30.00	3.945
3	Liquid glucose	2000	27.00	0.540
4	<b>Total raw material</b>	<b>38775</b>		<b>16.295</b>

**c. Packaging material requirement per month**

SI	Description	Qty	Rate / unit (Rs)	Value (Rs. lakhs)
1	Primary packaging material – polypropylene pouches	7.5 lakh nos	0.50	3.750
2	Cartons and straps	3750 nos	40	1.500
3	<b>Total</b>			<b>5.250</b>

**Total raw + packaging material = Rs. 21.545 lakhs**

**d. Utilities per month**

SI	Description	Rs. lakhs
1	Power 18000 kwh @ Rs. 5.50 per unit	0.990
2	Water	0.050
3	Boiler fuel	0.000
4	<b>Total utilities</b>	<b>1.040</b>

**e. Contingent expenses per month**

<b>SI</b>	<b>Description</b>	<b>Rs. lakhs</b>
1	Rent for processing shed	0.240
2	Postage and stationery	0.010
3	Telephones, fax etc.	0.050
4	Consumable stores	0.020
5	Repairs and maintenance	0.086
6	Local transports, loading and unloading	0.300
7	Advertisement and publicity @20% of sales	8.250
8	Insurance	0.010
9	Sales expenses @ 2% of sales	0.826
10	Miscellaneous expenses @ 2% of sales	0.826
11	Trade incentives @ 2% of sales	0.826
12	Taxes @ 4%	1.652
<b>13</b>	<b>Total contingent expenses</b>	<b>13.096</b>

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

<b>SI</b>	<b>Description</b>	<b>Rs. lakhs</b>
1	Salaries and wages	2.290
2	Raw material and packaging material	21.545
3	Utilities	1.040
4	Contingent expenses	13.096
<b>5</b>	<b>Total</b>	<b>37.971</b>

**14. Means of finance**

<b>SI</b>	<b>Description</b>	<b>Rs. lakhs</b>
1	Total Project Cost	41.598
2	Equity	13.727
3	Debt	27.871
4	Working capital margin money	15.188

**15. Financial analysis**

SI	Description	Rs. lakhs
1	Total recurring cost per year	455.652
2	Depreciation on land and building	0.000
3	Depreciation on machinery and vehicle	1.133
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%	3.762
8	Interest on short term borrowings@ 13.5%	3.075
<b>9</b>	<b>Total cost of production</b>	<b>463.742</b>

**16. Turnover per year**

SI	Item	Qty	Rate/unit (Rs)	Total Rs. lakhs
1	Chikkies	450,000 kgs	110	495.00

**17. Viability analysis**

SI	Description	Value
1	Net profit before income tax (Rs. Lakhs)	31.258
2	Net profit ratio	6.3%
3	Internal rate of return	28.9%
4	Break even percentage	37%
5	Debt service coverage ratio	2.223

*List of machinery suppliers for chikkies*

Machinery has to be fabricated to specifications. No ready-made machinery is available.