PROJECT PROFILE

ON

BETEL NUTS

Month & Year
Aug 2010

PREPARED BY

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

Supported by

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BETEL NUTS

1. Introduction

Betel nuts are a commonly consumed commodity among people. For many it is habit forming as it stimulates the nervous system while for many others it is a pastime pleasure. Wide varieties of the product exist in the market. The most prominent ones include an ad mixture of betelnut and other ingredients like clove, menthol, catacheu, cardamom and other condiments, while others contain tobacco as an added ingredient. Some manufacturers add saccharin as a sweetening agent but it leaves a very unpleasant taste in the mouth.

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. Many "C" class outlets and wayside shops also sell the product.

3. Packaging

Betel Nuts are packed in 50 grams and 100 grams pouches. Single use sachets containing 5 grams of the product are also available.

4. Production capacity

- The plant will be in operation for one shift a day.
- The production capacity is estimated at 200 kilograms per day.
- The yield of betel nuts will be 5 tonnes per month and that per annum would be 60 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. 400.00 per kilogram and with an unit packaging of 100 grams, the total annual sales revenue on full capacity utilisation would yield Rs. 240.00 lakhs.

6. Production process outline.

For the production of sugar coated betelnuts, the raw nuts are taken and cut into tiny pieces using a mechanical shredder. They are then soaked in sugar syrup of 50 degrees brix for 72 hours. The sugar syrup is drained and the nuts

are once again soaked in sugar syrup of 70 degrees brix for 24 hours. The excess sugar solution is drained and the betelnut dried in the drying chamber and packed. For preparation of mentholated betelnuts, the raw nuts are first shredded into tiny pieces using the shredder. To the desired quantity of nuts, refined oil containing a paste of cloves, cardamom, menthol, and other condiments is added and the mass mixed homogeneously. The mixed ingredients are allowed to mature for 72 hours before being packed into sachets.

7. Quality specifications

- The product should be free from mold and fungal growth.
- The oil used should be free from rancidity.
- The oil used shall have a maximum F.F.A level of 0.1%
- The oil used shall be free from peroxides.
- No artificial colouring matter is permitted.

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 2000 square feet as described below:

Sl	Description	Sq. feet
1	Processing area – pre preparation	600
2	Raw material store	200
3	Packing material store room	200
4	Finished goods store room	200
5	Laboratory space	100
6	Baby boiler area	200
7	Machinery spares room	100
8	Administration	100
9	Toilet space	200
10	Miscellaneous space	100
11	**Total**	**2000**

Lease rent per month – Rs. 5.00 per square foot

Total rental value per month – Rs. 10000

11. Costing of machinery and equipment

Sl	Description	Rs. lakhs
1	Stainless steel soaking tanks – 40 nos	1.200
2	Shredder knives – 2 nos	0.010
3	Nut cracker	0.600
4	Form fill and seal packing machine	2.450
5	Packing machine for 2 gram sachets	1.700
6	Tray drier with two trolleys and 48 trays	2.000
7	**Total**	**7.960**
8	Laboratory equipment	0.500
9	**Grand total machinery and equipment**	**8.460**

12. Project cost

Sl	Description	Rs. lakhs
1	Land	On lease
2	Civil works	On lease
3	Plant machinery	7.960
4	Laboratory equipment	0.500
5	Transport vehicle – Tata Ace	3.600
6	Pollution control equipment	0.000
7	Energy conservation equipment	0.000
8	Cost of power connection	0.100
9	Cost of electrification	0.500
10	Erection and commissioning	0.800
11	Cost of machinery spares	0.250
12	Cost of office equipment	1.000
13	Deposits if any	0.500
14	Company formation expenses	0.100
15	Gestation period expenses	1.000
16	Sales tax registration expenses	0.100
17	Initial advertisement and publicity	5.000
18	Contingencies	1.000
19	Working capital margin money	7.291
20	**Total**	**29.701**

13. Working capital requirements per month

a. Salaries and wages

Sl	Description	No of persons	Total salary / month (Rs. lakhs)
1	Production Supervisor	1	0.200
2	Chemist	1	0.150
3	Skilled workers	1	0.100
4	Unskilled workers	3	0.180
5	Packing workers	2	0.080
6	Sales coordinators	2	0.300
7	Vehicle drivers	1	0.080
8	Administrative staff	1	0.150
9	**Total**	**12**	**1.240**

b. Raw material requirement per month

Sl	Description	Qty (kgs)	Rate / kg (Rs)	Value (Rs. lakhs)
1	Arecanut	4600	240.00	11.040
2	Sugar	400	17.00	0.068
3	Orange oil	5	500.00	0.025
4	Condiments and spices	300	300.00	0.900
5	Refined oil	500	80.00	0.400
6	**Total raw material**	**5805**		**12.433**

c. Packaging material requirement per month

Sl	Description	Qty	Rate / unit Rs)	Value (Rs. lakhs)
1	Primary packaging material – metallized polyester – poly film	500 kgs	200	1.000
2	Cartons and straps	1200 nos	40	0.480
3	**Total**			**1.480**

Total raw + packaging material = Rs. 13.913 lakhs

d. Utilities per month

Sl	Description	Rs. lakhs
1	Power 2000 kwh @ Rs. 6.00 per unit	0.120
2	Water	0.010
3	Boiler fuel	0.000
4	**Total utilities**	**0.130**

e. Contingent expenses per month

Sl	Description	Rs. lakhs
1	Rent for processing shed	0.100
2	Postage and stationery	0.010
3	Telephones, fax etc.	0.050
4	Consumable stores	0.020
5	Repairs and maintenance	0.100
6	Local transports, loading and unloading	0.060
7	Advertisement and publicity @ 5% of sales	1.000
8	Insurance	0.005
9	Sales expenses @ 1% of sales	0.200
10	Miscellaneous expenses @ 1% of sales	0.200
11	Trade incentives @ 2% of sales	0.400
12	Taxes @ 4%	0.800
13	**Total contingent expenses**	**2.945**

f. Total working capital requirement per month

Sl	Description	Rs. lakhs
1	Salaries and wages	1.240
2	Raw material and packaging material	13.913
3	Utilities	0.130
4	Contingent expenses	2.945
5	**Total**	**18.228**

14. Means of finance

Sl	Description	Rs. lakhs
1	Total Project Cost	29.701
2	Equity	9.801
3	Debt	19.900
4	Working capital margin money	7.291

15. Financial analysis

Sl	Description	Rs. lakhs
1	Total recurring cost per year	218.736
2	Depreciation on land and building	0.000
3	Depreciation on machinery and vehicles	1.200
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%	2.686
8	Interest on short term borrowings@ 13.5%	1.476
9	**Total cost of production**	**224.218**

16. Turnover per year

Sl	Item	Qty	Rate/unit (Rs)	Total Rs. lakhs
1	**Betelnuts**	**60000 kgs**	**400**	**240.00**

17. Viability analysis

Sl	Description	Value
1	Net profit before income tax (Rs. lakhs)	15.782
2	Net profit ratio	6.5%
3	Internal rate of return	26.7%
4	Break even percentage	34%
5	Debt service coverage ratio	2.096

List of machinery suppliers for betel nuts

1. Sri Valsa Engineering Works, 36, Nanda Nagar, Singanallur, Coimbatore 641005. Tamil Nadu.; Tel: 0422 - 2574268; Fax: 0422 – 2574268
2. 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
3. Vivega Engineering Works, 116 – 118, Sathy Road, R.K.Puram, Ganapathy, Coimbatore. 641006; Tel: 0422-2531523; 09443721341
4. Navinchandra and Co., 308, Thambu Chetty Street, Chennai. 600001; Tel: 044-25228675