# PROJECT PROFILE <br> ON 

## BABY DOUGHNUTS

Month \& Year<br>Aug 2010

# PREPARED BY <br> TANSTIA-FNF SERVICE CENTRE B-22, INDUSTRIAL ESTATE CHENNAI-600032 

Supported by
stifitung FỦR DIE FREIHEIT

## BABY DOUGHNUTS

## 1. Introduction

Baby Doughnuts are small doughnuts weighing 20 to 25 grams each. They are normally sweet but could be made sweet and sour, or salted or coated with layers of chocolate. They could serve as alternatives to breakfast foods, snacks, or as quick ready to eat foods. They are normally packed in units of four, six, or ten and marketed through bakeries and departmental stores.

## 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 also sell doughnuts.

## 3. Packaging

Baby Doughnuts are packed in polypropylene bags.

## 4. Production capacity

- The plant will be in operation for one shift a day.
- The production capacity is estimated at 25 kilograms per hour or 250 kilograms of the finished product per day.
- The yield of doughnuts will be 6.25 tonnes per month and that per annum would be 75 metric tonnes.
- The time period required for achieving full capacity utilization is one year.


## 5. Sales revenue

- The ex-factory selling price per piece of 25 grams is fixed at Rs. 4.00.
- The annual sales revenue would be Rs. 120 lakhs on full capacity utilization.


## 6. Production process outline.

Raw material maida is kneaded into dough along with water, vanaspathi, salt, sugar and yeast and allowed to mature for an hour. It is then kneaded once again and cut into small size of desired shape and weight and allowed to further proof for another half an hour. It is then baked to give raw doughnuts. They are cooled and fried in oil for a few seconds. The excess oil is drained and the doughnuts taken to the coating pan where they are enrobed with chocolate mass
and dried by blowing hot air. They are then packed in polythene pouches in units of four, six or ten as desired.

## 7. Quality specifications

The maida used must conform to the following specifications:

- Moisture - $13.5 \%$ maximum
- Ash - $1 \%$ maximum
- Acid insoluble ash - $0.1 \%$ maximum
- Alcoholic acidity $-0.1 \%$ maximum
- Insect infestation - nil
- Rodent hair and excreta - absent
- Gluten-7.5\% minimum

The vanaspathi used should conform to the following specifications:

- Free fatty acids - $0.1 \%$ maximum as oleic acid
- Moisture $0.1 \%$ maximum
- Peroxide value - nil
- The doughnuts should be free from mold and fungal growth.
- It should be free from any fermented odour, coliforms, salmonella and streptococci bacteria.
- If dried fruits are used, they shall be declared on the label.
- It cannot contain any added colours and flavours.

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 1500 square feet as described below:

| SI | Description | Sq. feet |
| :---: | :--- | ---: |
| 1 | Processing area | 500 |
| 2 | Raw material store | 200 |
| 3 | Packing material store | 100 |
| 4 | Finished goods store | 100 |
| 5 | Laboratory space | 100 |
| 6 | Machine spares area | 100 |
| 7 | Finished goods store | 100 |
| 8 | Administrative area | 100 |
| 9 | Toilet space | 100 |
| 10 | Miscellaneous space | 100 |
| $\mathbf{1 1}$ | Total | $\mathbf{1 5 0 0}$ |

Lease rent per square foot - Rs. 8.00
Total rental per month - Rs. 12000
11. Costing of machinery and equipment

| SI | Description | Rs. lakhs |
| ---: | :--- | ---: |
| 1 | Dough kneader | 0.600 |
| 2 | Forming machine | 0.650 |
| 3 | Proofing pans | 0.350 |
| 4 | Thermostat oven 35 to 250 degrees <br> centigrade | 3.600 |
| 5 | Thermostat fryer | 0.590 |
| 6 | Sugar coating pan | 1.869 |
| 7 | Sealing machines | 0.300 |
| $\mathbf{8}$ | Total | $\mathbf{7 . 9 5 9}$ |
| 9 | Laboratory equipment | 1.000 |
| $\mathbf{1 0}$ | Grand total machinery and equipment | $\mathbf{8 . 9 5 9}$ |

12. Project cost

Rs. Lakhs

| SI | Description | Rs. lakhs |
| ---: | :--- | ---: |
| 1 | Land | On lease |
| 2 | Civil works | On lease |
| 3 | Plant machinery | 7.958 |
| 4 | Laboratory equipment | 1.000 |
| 5 | Transport vehicle - Tata Ace | 3.600 |
| 6 | Pollution control equipment | 0.000 |
| 7 | Energy conservation equipment | 0.000 |
| 8 | Cost of power connection | 0.150 |
| 9 | Cost of electrification | 0.250 |
| 10 | Erection and commissioning | 0.300 |
| 11 | Cost of machinery spares | 0.250 |
| 12 | Cost of office equipment | 0.500 |
| 13 | Deposits if any | 0.400 |
| 14 | Company formation expenses | 0.100 |
| 15 | Gestation period expenses | 0.250 |
| 16 | Sales tax registration expenses | 0.100 |
| 17 | Initial advertisement and publicity | 2.000 |
| 18 | Contingencies | 0.250 |
| 19 | Working capital margin money | 3.350 |
| 20 | Total | 20.458 |

13. Working capital requirements per month
a. Salaries and wages

| SI | Description | No of <br> persons | Total <br> salary/ <br> month <br> (Rs. lakhs) |
| :--- | :--- | :---: | :---: |
| 1 | Production Manager | 1 | 0.300 |
| 2 | Production supervisor cum <br> chemist | 1 | 0.200 |
| 3 | Skilled workers | 2 | 0.200 |
| 4 | Unskilled workers | 3 | 0.180 |
| 5 | Packing workers | 2 | 0.080 |
| 6 | Van driver | 1 | 0.080 |
| 7 | Administrative staff | 1 | 0.200 |
| $\mathbf{8}$ | Total | $\mathbf{1 1}$ | $\mathbf{1 . 2 4 0}$ |

b. Raw material requirement per month

| SI | Description | Qty <br> (kgs) | Rate $/ \mathbf{k g}$ <br> (Rs) | Value <br> (Rs. lakhs) |
| :--- | :--- | :---: | :---: | :---: |
| 1 | Maida | 6250 | 27.00 | 1.688 |
| 2 | Sugar | 460 | 30.00 | 0.138 |
| 3 | Vanaspathi | 1065 | 75.00 | 0.799 |
| 4 | Chocolate mass | 80 | 200.00 | 0.160 |
| 5 | Salt and spices | 20 | 50.00 | 0.010 |
| 2 | Total raw material | $\mathbf{7 8 7 5}$ |  | $\mathbf{2 . 7 9 5}$ |

c. Packaging material requirement per month

| SI | Description | Qty | Rate / unit <br> Rs) | Value <br> (Rs. lakhs) |
| :--- | :--- | :---: | :---: | :---: |
| 1 | Primary packaging <br> material - polypropylene <br> pouches | 6300 nos | 1.00 | 0.063 |
| 2 | Cartons and straps | 125 nos | 40 | 0.050 |
| 3 | Total |  |  | $\mathbf{0 . 1 1 3}$ |

Total raw + packaging material = Rs. 2.908 lakhs
d. Utilities per month

| SI | Description | Rs. lakhs |
| :---: | :--- | ---: |
| 1 | Power 1600 kwh @ Rs. 6.00 per unit | 0.096 |
| 2 | Water | 0.020 |
| 3 | Boiler fuel | 0.000 |
| 4 | Total utilities | $\mathbf{0 . 1 1 6}$ |

e. Contingent expenses per month

| SI | Description | Rs. lakhs |
| :---: | :--- | ---: |
| 1 | Rent for processing shed | 0.120 |
| 2 | Postage and stationery | 0.010 |
| 3 | Telephones, fax etc. | 0.010 |
| 4 | Consumable stores | 0.020 |
| 5 | Repairs and maintenance | 0.050 |
| 6 | Local transports, loading and unloading | 0.090 |
| 7 | Advertisement and publicity @ 30\% of sales | 3.000 |
| 8 | Insurance | 0.010 |
| 9 | Sales expenses @ 1\% of sales | 0.100 |
| 10 | Miscellaneous expenses @ 1\% of sales | 0.100 |
| 11 | Trade incentives @ 2\% of sales | 0.200 |
| 12 | Taxes @ 4\% | 0.400 |
| $\mathbf{1 3}$ | Total contingent expenses | $\mathbf{4 . 1 1 0}$ |

f. Total working capital requirement per month

| SI | Description | Rs. lakhs |
| :---: | :--- | ---: |
| 1 | Salaries and wages | 1.240 |
| 2 | Raw material and packaging material | 2.908 |
| 3 | Utilities | 0.116 |
| 4 | Contingent expenses | 4.110 |
| $\mathbf{5}$ | Total | $\mathbf{8 . 3 7 4}$ |

14. Means of finance

| SI | Description | Rs. lakhs |
| :---: | :--- | ---: |
| 1 | Total Project Cost | 20.458 |
| 2 | Equity | 6.751 |
| 3 | Debt | 13.707 |
| 4 | Working capital margin money | 3.350 |

## 15. Financial analysis

| SI | Description | Rs. lakhs |
| :---: | :--- | ---: |
| 1 | Total recurring cost per year | 100.488 |
| 2 | Depreciation on land and building | 0.000 |
| 3 | Depreciation on machinery | 0.896 |
| 4 | Depreciation on furnaces | 0.000 |
| 5 | Depreciation on moulds and fixtures | 0.010 |
| 6 | Depreciation on office equipment | 0.100 |
| 7 | Interest on long term loan @ 13.5\% | 1.890 |
| 8 | Interest on short term borrowings@ 13.5\% | 0.678 |
| $\mathbf{9}$ | Total cost of production | $\mathbf{1 0 4 . 0 6 2}$ |

16. Turnover per year

| SI | Item | Qty | Rate/unit <br> (Rs) | Total <br> Rs. lakhs |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Baby <br> doughnuts | 75000 kgs | 160 | 120.00 |

17. Viability analysis

| SI | Description | Value |
| :---: | :--- | ---: |
| 1 | Net profit before income tax (Rs. lakhs) | 15.938 |
| 2 | Net profit ratio | $13.3 \%$ |
| 3 | lnternal rate of return | $36.0 \%$ |
| 4 | Break even percentage | $39 \%$ |
| 5 | Debt service coverage ratio | 2.162 |

List of machinery suppliers for baby doughnuts

1. Nagpal Brothers; C-127, Mayapuri Industrial Area Phase - II, (Opposite State Bank of India), New Delhi. 110064; Tel: 011 - 28117631; Fax: 011 28116884
2. Arun Engineering Works, Leach and Webony Compound, 61, Off Haines Road, Worli, Mumbai. 400018. Tel: 022-23098629
3. Arun Engineering Works, SF No. 213, Site no. 4, Sitra Kalapatti Road, Near LMW Unit VIII, Kalapatti Post, Coimbatore 641035. Tamil Nadu. Tel: 04222665622; 0422-2669849
