

CAKES & PASTRIES



1.0 INTRODUCTION

Bakery products have become very popular throughout the country. Breads and biscuits are the most common products but other items like cakes, pastries, cream-rolls, cookies etc. are also not lagging far behind. These items are consumed by people of all age groups across the board. Nature of these products is such that the consumers prefer fresh items. Shelf life of cakes & pastries is limited and thus local manufacturers enjoy distinct advantage. In spite of continuous increase in the consumption of these items during last few years, the per capita consumption is still very low compared to the advanced countries. There is, thus, good scope for these items.

2.0 PRODUCT

2.1 Applications

Cakes & pastries are sweet wheat preparations usually made with beaten eggs and yeast as they act as aerating agents. These are, thus, concentrated foods of high caloric value with rich in fat. There are many varieties and flavours of cakes & pastries.

2.2 Quality Standards and Compliances

Compliance with the PFA Act is mandatory. BIS has specified quality standards for both the products.

3.0 MARKET POTENTIAL

3.1 Demand and Supply

Changing lifestyles and increase in the standard of living have changed the eating habits of people with liking for instant or ready-to-eat food items. This trend has spread throughout

the country in all age groups and now even people from the rural areas have also joined this band-wagon. Bakery products fall under the same category and apart from bread and biscuits; items like cakes, pastries, cream-rolls, cookies etc. have become very popular. Fresh items are always preferred by the consumers.

3.2 Marketing Strategy

Couple of national brands tried to enter this market in a big way few years back but their products are still finding it difficult to capture the market as the consumer preference is always for freshly prepared cakes or pastries. There are always some well-known bakers at each centre and the real competition would be from them. Hence, it is advisable to have a retail outlet along with bakery apart from sale through other outlets.

4.0 MANUFACTURING PROCESS

It is standardised and simple for all products. To make cakes, wheat flour and baking powder along with cream, sugar and ghee is mixed thoroughly till it becomes fluffy. Then mixture of beaten eggs is added to it along with caramel colour and chopped fruits before the mixture is poured into cake pans and baked for around 30-40 minutes. Pastries are made in different shapes like square, rectangular etc. from thick cake sheets. Butter cream, jam etc. are placed between layers of cake. The layered cake is then chilled and cut with sharp knife in the required shape and size. Sides of the pieces are iced with butter cream or fudge and topped with finely ground cake crumbs or pieces of fruits or chocolate strips and decorated with proper design, colour and garnish.

There are no standard flavours or varieties and preference of local population has to be kept in mind. There is a very good scope to introduce new varieties palatable to local tastes.

5.0 CAPITAL INPUTS

5.1 Land and Building

Land of about 200 sq.mtrs. with built up area of 125 sq.mtrs. would accommodate bakery as well as a retail outlet. Land may cost Rs. 60,000/- whereas the construction cost would be Rs.3.40 lacs including necessary product storage and display facilities for retailing.

5.2 Machinery

It is assumed that the cake making capacity would be 100 tonnes with 1 shift working and 330-340 working days.

This would need following machines:

Item	Qty.	Price (Rs.)
Flour Sifter	1	15,000
Egg Beater	1	8,000
Cake Mixer	1	25,000
Sugar Pulveriser- 10 Kgs Capacity	1	12,000
Electrically-operated Oven with 48 Trays	1	80,000
Baking Pans and Moulds	--	20,000
SS utensils, plastic tubs, mixing vessels, weighing scales etc.	--	40,000
	Total	2,00,000

5.3 Miscellaneous Assets

Other items like furniture & fixtures, storage racks, packing tables and display-cum-selling counter etc. shall be required for which a provision of Rs. 75,000/- is made.

5.4 Utilities

Total power requirement shall be 20 HP whereas water requirement would be about 1200 ltrs. every day.

5.5 Raw and Packing Materials

The all important raw materials will be wheat flour, sugar, eggs and ghee for which proper arrangements should be made. Other items like milk powder, yeast, salt, assorted fruits, baking powder, caramel colour, vanilla, butter cream, etc. shall be required in small quantity. Butter paper and cardboard cartons will be required for packing.

6.0 MANPOWER REQUIREMENTS

Particulars	Nos.	Monthly Salary (Rs.)	Total Monthly Salary (Rs.)
Skilled Workers	2	2,500	5,000
Unskilled Workers	4	1,250	5,000
Salesmen	2	2,500	5,000
		Total	15,000

7.0 TENTATIVE IMPLEMENTATION SCHEDULE

Activity	Period (in months)
Application and sanction of loan	2
Site selection and commencement of civil work	1
Completion of civil work and placement of orders for machinery	4
Erection, installation and trial runs	1

8.0 DETAILS OF THE PROPOSED PROJECT

8.1 Land and Building

Particulars	Area (Sq.Mtrs)	Cost (Rs.)
Land	200	60,000
Building	125	3,40,000
	Total	4,00,000

8.2 Machinery

The total cost of machinery is estimated to be Rs. 2.00 lacs as explained before.

8.3 Miscellaneous Assets

Total expenditure under this head is likely to be Rs.75, 000/- as discussed earlier.

8.4 Preliminary & Pre-operative Expenses

A provision of Rs. 50,000/- would take care of pre-production expenses like establishment, registration and administrative charges, interest during implementation, trial run expenses etc.

8.5 Working Capital Requirements

At 60% capacity utilisation in the first year, the working capital needs shall be as under.

(Rs. in lacs)

Particulars	Period	Margin	Total	Bank	Promoters
Stock of Raw & Packing Materials	½ Month	30%	0.70	0.50	0.20
Receivables	½ Month	25%	1.10	0.80	0.30
Working Expenses	1 Month	100%	0.30	--	0.30
		Total	2.10	1.30	0.80

8.6 Cost of the Project & Means of Financing

(Rs. in lacs)

Item	Amount
Land and Building	4.00
Machinery	2.00
Miscellaneous Assets	0.75
P&P Expenses	0.50
Contingencies @ 10% on Land & Building and Machinery	0.60
Working Capital Margin	0.80
Total	8.65
Means of Finance	
Promoters' Contribution	2.70
Term Loan from Bank/FI	5.95
Total	8.65
Debt Equity Ratio	2.20 : 1
Promoters' Contribution	31%

Financial assistance in the form of grant is available from the Ministry of Food Processing Industries, Govt. of India, towards expenditure on technical civil works and plant and machinery for eligible projects subject to certain terms and conditions.

9.0 PROFITABILITY CALCULATIONS

9.1 Production Capacity & Build-up

As against annual rated capacity of 100 tonnes, actual utilisation would be 60% in the first year and 75% thereafter.

9.2 Sales Realisation at 100%

Assuming average selling price of Rs. 45,000/- per ton, annual sales at 100% would be Rs. 45.00 lacs.

9.3 Raw and Packing Materials Required at 100%

(Rs. in lacs)

Product	Qty. (Tonnes)	Price/Ton (Rs.)	Value
Wheat Flour	30	12,000	3.60
Sugar	30	18,000	5.40
Ghee	15	50,000	7.50
Eggs	30,000 Dozens	Rs.10/- per Dozen	3.00
Milk powder, yeast, salt, assorted fruits, baking powder, caramel colours, vanilla, etc.	--	--	3.00
Packing Material	--	--	1.00
		Total	23.50

9.4 Utilities

Annual expenditure at 100% utilisation would be Rs. 60,000/-.

9.5 Interest

Interest on term loan of Rs. 5.95 lacs is calculated @ 12% per annum assuming repayment in 3 years including a moratorium period of 6 months whereas that on working capital from bank, it is computed @ 14% per annum.

9.6 Depreciation

It is calculated on WDV basis @ 10% on building and 20% on machinery and miscellaneous assets.

10.0 PROJECTED PROFITABILITY

(Rs. in lacs)

No.	Particulars	1st Year	2nd Year
A	Installed Capacity	--- 100 Tonnes ---	
	Capacity Utilisation	60%	75%
	Sales Realisation	27.00	33.75
B	Cost of Production		
	Raw and Packing Materials	14.10	17.62
	Utilities	0.36	0.45
	Salaries	1.80	2.40
	Stores and Spares	0.18	0.30
	Repairs & Maintenance	0.24	0.45
	Selling Expenses @ 15%	4.05	5.05
	Administrative Expenses	0.48	0.72
	Total	21.21	26.99
C	Profit before Interest & Depreciation	5.79	6.76
	Interest on Term Loan	0.59	0.33
	Interest on Working Capital	0.18	0.23
	Depreciation	0.89	0.75
	Profit before Tax	4.13	5.45
	Income-tax @ 20%	0.83	1.10
	Profit after Tax	3.30	4.35
	Cash Accruals	4.19	5.10
	Repayment of Term Loan	1.10	2.20

11.0 BREAK-EVEN ANALYSIS

(Rs. in lacs)

No	Particulars	Amount	
[A]	Sales		27.00
[B]	Variable Costs		
	Raw and Packing Materials	14.10	
	Utilities (70%)	0.25	
	Salaries (70%)	1.26	
	Stores & Spares	0.18	
	Selling Expenses (70%)	2.80	
	Admn Expenses (50%)	0.24	
	Interest on WC	0.18	19.01
[C]	Contribution [A] - [B]		7.99
[D]	Fixed Cost	3.86	
[E]	Break-Even Point [D] ÷ [C]		49%

12.0 [A] LEVERAGES

Financial Leverage

$$\begin{aligned} &= \text{EBIT/EBT} \\ &= 4.90 \div 4.13 \\ &= 1.19 \end{aligned}$$

Operating Leverage

$$\begin{aligned} &= \text{Contribution/EBT} \\ &= 7.99 \div 4.13 \\ &= 1.93 \end{aligned}$$

Degree of Total Leverage

$$\begin{aligned} &= \text{FL/OL} \\ &= 1.19 \div 1.93 \\ &= 0.62 \end{aligned}$$

[B] Debt Service Coverage Ratio (DSCR)

(Rs. in lacs)

Particulars	1st Yr	2nd Yr	3rd Yr
Cash Accruals	4.19	5.10	5.43
Interest on TL	0.59	0.33	0.15
Total [A]	4.78	5.43	5.58
Interest on TL	0.59	0.33	0.15
Repayment of TL	1.10	2.20	2.15
Total [B]	1.69	2.53	2.30
DSCR [A] ÷ [B]	2.83	2.15	2.43
Average DSCR	----- 2.47 -----		

[C] Internal Rate of Return (IRR)

Cost of the project is Rs. 8.65 lacs.

(Rs. in lacs)

Year	Cash Accruals	16%	18%	20%	24%	28%	32%
1	4.19	3.61	3.55	3.49	3.38	3.27	3.18
2	5.10	3.79	3.66	3.54	3.32	3.11	2.93
3	5.43	3.48	3.31	3.14	2.85	2.59	2.36
4	5.92	3.27	3.05	2.85	2.50	2.21	1.95
	20.64	14.15	13.57	13.02	12.05	11.18	10.42

The IRR is around 36%.

The machines would be available from

1. Archana Machinery Stores, Guwahati
2. Industrial Equipments of Guwahati, Assam
3. KS Engg. Works, Factory Area, Nr. Ranjit Press, Patiala- 147003. Tel No. 2361535
4. Rolex Tin and Metal Works, 21 Yacoob Street, Nr. JJ Hospital-400003.
Tel No. 23472420/23411034
5. Gaziabad Printing and Packing Industries Pvt. Ltd. , Nr. DPS, Meerut Road, Gaziabad.