

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 promoters prefer fresh items. Shelf life of cakes & pastries is limited and thus local promoters 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.

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.

This project profile is for setting up of a Cake & Pastries making unit with installed production capacity of 50 kg per day.

2.0 MARKET POTENTIAL

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.

Established brands try to enter this market in a big way but they face difficulty in capturing the market as the consumer preference is always for freshly prepared cakes or pastries. There are always some well-known bakers even in small towns. Thus, opportunities for starting Cake & Pastries making unit are huge.

3.0 PROCESS DETAILS

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 and 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 need to be kept in mind. There is very good scope to introduce new varieties palatable to local tastes.

4.0 COST OF THE PROJECT

The estimated project cost is given below.

Particulars	Amount (Rs lacs)
Land & Site Development	-
Building & Civil Works	4.75
Machinery & Equipment	4.21
Misc. Fixed Assets	2.00
Preliminary & Pre-operative Expenses	0.61
Contingencies & Escalation @ 3%	0.33
Working Capital	2.08
TOTAL	13.98

4.1 Land & Site Development: No cost has been considered for land & site development. It is assumed that the project will be set up in own land.

4.2 Building & Civil Works: Details of building & civil works are given below.

Particulars	Area (Sqm)	Rate (Rs)	Amount (Rs)
Work-shed (Half brick wall, CGI roof, Concrete floor)	100	3500	350000
Store (Brick wall, CGI roof, Concrete floor)	20	4500	90000
Add: Electrification, etc @ 10%			35000
TOTAL			475000
Say (Rs. in lacs)			4.75

4.3 Machinery & Equipment: Details of machinery & equipment are given below.

Particulars	Qty	Rate (Rs)	Amount (Rs)
Flour Sifter	1	67000	67000
Egg Beater	1	36000	36000
Cake Mixer	1	110000	110000
Sugar Pulveriser	1	54000	54000
Electrically-operated Oven	1	36000	36000
Baking Pans and Moulds	LS	LS	30000
Miscellaneous items	LS	LS	50000
Sub-total			383000
Add: Transportation, taxes, etc @ 10%			38300
TOTAL			421300
Say (Rs. in lacs)			4.21

4.4 Misc. Fixed Assets: Details of miscellaneous fixed assets are given below.

Particulars	Qty	Rate (Rs)	Amount (Rs)
Power connection (20 HP)	1	100000	100000
Water supply system (STW boring, 3 HP pump set, storage, pipes & fittings)	1	80000	80000
Furniture & fixtures	LS	LS	10000
Miscellaneous items	LS	LS	10000
TOTAL			200000
Say (Rs. in lacs)			2.00

4.5 Preliminary & Pre-operative Expenses: Details of preliminary & pre-operative expenses are given below.

Particulars	Amount (Rs lacs)
Travelling expenses	0.20
Professional & other fees	0.10
Interest during implementation	0.21
Miscellaneous expenses	0.10
TOTAL	0.61

4.6 Contingencies & Escalation: Contingencies & escalation has been assumed at 3% of the cost of building & civil works, machinery & equipment and miscellaneous fixed assets.

4.7 Working Capital Details of working capital are given below.

	Period (Days)	Amount (Rs lacs)		
		Year 1	Year 2	Year 3
Raw Materials & Consumables	30	0.73	0.87	1.02
Power	30	0.05	0.06	0.07
Salary	30	0.56	0.57	0.57
Receivables	15	0.74	0.89	1.04
Total		2.08	2.39	2.70
Working Capital Margin in Year 1 (100%)	2.08			

5.0 MEANS OF FINANCE

The means of finance for the project is estimated as below.

Particulars	Percent	Amount (Rs lacs)
EQUITY		
A. Equity from Promoters	40%	5.59
B. Subsidy from Central/State Govt.	-	
DEBT		
Term Loan from Banks/FIs	60%	8.39
TOTAL	100%	13.98

6.0 PROFITABILITY STATEMENT

(Rs. in lacs)

Particulars	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr 7
A. INCOME							
Installed capacity (kg/annum)	15000	15000	15000	15000	15000	15000	15000
Capacity utilisation	50%	60%	70%	70%	70%	70%	70%
Production at capacity utilisation	7500	9000	10500	10500	10500	10500	10500
Avg. Selling Price (Rs/kg)	240	240	240	240	240	240	240
Income from sales/annum	18.00	21.60	25.20	25.20	25.20	25.20	25.20
B. OPERATING EXPENSES							
Raw Materials & Consumables	8.87	10.64	12.41	12.41	12.41	12.41	12.41
Power	0.63	0.75	0.88	0.88	0.88	0.88	0.88
Salary	6.84	6.87	6.91	6.94	6.98	7.01	7.05
Repair & Maintenance	0.11	0.13	0.16	0.19	0.23	0.27	0.33
Selling Expenses	0.18	0.22	0.25	0.25	0.25	0.25	0.25
Miscellaneous Expenses	0.09	0.11	0.13	0.13	0.13	0.13	0.13
Total Operating Expenses	16.71	18.72	20.73	20.80	20.87	20.95	21.04
Less: working expenses capitalised	2.08	0.00	0.00	0.00	0.00	0.00	0.00
Operating profit	3.37	2.88	4.47	4.40	4.33	4.25	4.16
C. FINANCIAL EXPENSES							
Depreciation	0.51	0.51	0.51	0.51	0.51	0.51	0.51
Interest on Term Loan	0.67	0.60	0.49	0.38	0.27	0.17	0.06
Net Profit	2.19	1.78	3.47	3.51	3.55	3.58	3.59
Net cash accruals	2.70	2.29	3.98	4.02	4.06	4.08	4.10
Principal Repayment	0.34	1.34	1.34	1.34	1.34	1.34	1.34

6.1 Production capacity: Total production of cakes and pastries at installed capacity is estimated as below.

Rate production capacity per day (kg)	50
Days/annum	300
Production of cakes & pastries per annum at installed capacity (kg)	15000

6.2 Raw Materials & Consumables: Expenses on raw materials & consumables at installed capacity is estimated as below.

Particulars	Unit	Usage rate/ kg	Quantity/ annum	Price (Rs/unit)	Amount (Rs)
Wheat flour	kg	0.40	6000	25	150000
Sugar	kg	0.40	6000	35	210000
Ghee	kg	0.25	3750	250	937500
Eggs	Nos	4	60000	3	180000
Sub total					1477500
Add: Expense on additives @ 15%					221625
Add: Packing materials @ 5%					73875
Expenses on raw materials & consumables at installed capacity (Rs)					1773000

6.3 Power: Expenses on power at installed capacity is estimated as below.

A. Expenses on power

Connected load (kw)	15
Avg. load factor	70%
Hrs/day	8
Days/annum	300
Rate per unit (Rs)	5.00
Expenses on power at installed capacity (Rs)	125328

6.4 Salary: Expenses on salary in the 1st year is estimated as given below. It is assumed that salary expenses will increase @ 0.5% every subsequent year.

Particulars of Employees	Numbers	Salary/ Month (Rs)	Cost/ annum (Rs)
Manager (Self)	-	-	-
Skilled workers	4	8000	384000
Salespersons	2	5000	120000
Helpers	5	3000	180000
Expenses on salary in the 1st year (Rs)			684000

6.5 Repair & Maintenance: Expenses on repair & maintenance in the 1st year is estimated as given below. It is assumed that expenses on repair & maintenance will increase @ 20% every subsequent year.

(Rs. in lacs)			
Particulars	Cost (Rs)	Rate	Amount (Rs)
Building & Civil Works	4.75	1%	0.05
Machinery & Equipment	4.21	1%	0.04
Misc. Fixed Assets	2.00	1%	0.02
Expenses on repair & maintenance in year 1			0.11

6.6 Selling Expenses: Selling expenses has been assumed at 1% of sales.

6.7 Miscellaneous Expenses: Miscellaneous expenses have been assumed at 0.5% of sales.

6.8 Depreciation: Depreciation has been calculated by straight line method. The details of calculation are given below.

Description	Cost (Rs)	Rate	Amount/annum (Rs lacs)
Building & Civil Works	4.75	3.34%	0.16
Machinery & Equipment	4.21	5.28%	0.22
Misc. Fixed Assets	2.00	6.33%	0.13
TOTAL			0.51

6.9 Interest on Term Loan & Principal Repayment: Interest rate has been assumed at 8%. Duration of Loan repayment has been considered for a period of 7 years including moratorium period of 9 months with equal monthly instalments. The details of calculation are given below.

(Rs in lacs)

Month	Year	1	2	3	4	5	6	7
Month 1	Opening balance	8.39	8.05	6.71	5.37	4.03	2.68	1.34
	Repayment	0.00	0.11	0.11	0.11	0.11	0.11	0.11
	Interest (8%)	0.06	0.05	0.04	0.04	0.03	0.02	0.01
	Closing balance	8.39	7.94	6.60	5.26	3.91	2.57	1.23
Month 2	Opening balance	8.39	7.94	6.60	5.26	3.91	2.57	1.23
	Repayment	0.00	0.11	0.11	0.11	0.11	0.11	0.11
	Interest	0.06	0.05	0.04	0.04	0.03	0.02	0.01
	Closing balance	8.39	7.83	6.49	5.14	3.80	2.46	1.12
Month 3	Opening balance	8.39	7.83	6.49	5.14	3.80	2.46	1.12
	Repayment	0.00	0.11	0.11	0.11	0.11	0.11	0.11
	Interest	0.06	0.05	0.04	0.03	0.03	0.02	0.01
	Closing balance	8.39	7.72	6.38	5.03	3.69	2.35	1.01
Month 4	Opening balance	8.39	7.72	6.38	5.03	3.69	2.35	1.01
	Repayment	0.00	0.11	0.11	0.11	0.11	0.11	0.11
	Interest	0.06	0.05	0.04	0.03	0.02	0.02	0.01
	Closing balance	8.39	7.61	6.26	4.92	3.58	2.24	0.89
Month 5	Opening balance	8.39	7.61	6.26	4.92	3.58	2.24	0.89
	Repayment	0.00	0.11	0.11	0.11	0.11	0.11	0.11
	Interest	0.06	0.05	0.04	0.03	0.02	0.01	0.01
	Closing balance	8.39	7.49	6.15	4.81	3.47	2.13	0.78
Month 6	Opening balance	8.39	7.49	6.15	4.81	3.47	2.13	0.78
	Repayment	0.00	0.11	0.11	0.11	0.11	0.11	0.11
	Interest	0.06	0.05	0.04	0.03	0.02	0.01	0.01
	Closing balance	8.39	7.38	6.04	4.70	3.36	2.01	0.67
Month 7	Opening balance	8.39	7.38	6.04	4.70	3.36	2.01	0.67
	Repayment	0.00	0.11	0.11	0.11	0.11	0.11	0.11
	Interest	0.06	0.05	0.04	0.03	0.02	0.01	0.00
	Closing balance	8.39	7.27	5.93	4.59	3.24	1.90	0.56
Month 8	Opening balance	8.39	7.27	5.93	4.59	3.24	1.90	0.56
	Repayment	0.00	0.11	0.11	0.11	0.11	0.11	0.11
	Interest	0.06	0.05	0.04	0.03	0.02	0.01	0.00
	Closing balance	8.39	7.16	5.82	4.47	3.13	1.79	0.45
Month 9	Opening balance	8.39	7.16	5.82	4.47	3.13	1.79	0.45
	Repayment	0.00	0.11	0.11	0.11	0.11	0.11	0.11
	Interest	0.06	0.05	0.04	0.03	0.02	0.01	0.00
	Closing balance	8.39	7.05	5.70	4.36	3.02	1.68	0.34
Month 10	Opening balance	8.39	7.05	5.70	4.36	3.02	1.68	0.34
	Repayment	0.11	0.11	0.11	0.11	0.11	0.11	0.11
	Interest	0.06	0.05	0.04	0.03	0.02	0.01	0.00
	Closing balance	8.28	6.93	5.59	4.25	2.91	1.57	0.22
Month 11	Opening balance	8.28	6.93	5.59	4.25	2.91	1.57	0.22
	Repayment	0.11	0.11	0.11	0.11	0.11	0.11	0.11
	Interest	0.06	0.05	0.04	0.03	0.02	0.01	0.00
	Closing balance	8.16	6.82	5.48	4.14	2.80	1.45	0.11
Month 12	Opening balance	8.16	6.82	5.48	4.14	2.80	1.45	0.11
	Repayment	0.11	0.11	0.11	0.11	0.11	0.11	0.11
	Interest	0.05	0.05	0.04	0.03	0.02	0.01	0.00
	Closing balance	8.05	6.71	5.37	4.03	2.68	1.34	0.00
Principal Repayment		0.34	1.34	1.34	1.34	1.34	1.34	1.34
Interest		0.67	0.60	0.49	0.38	0.27	0.17	0.06

7.0 DEBT SERVICE COVERAGE RATIO (DSCR)

(Rs. in lacs)

Year	1	2	3	4	5	6	7	Total
Profit After Tax (Net Profit)	2.19	1.78	3.47	3.51	3.55	3.58	3.59	
Depreciation	0.51	0.51	0.51	0.51	0.51	0.51	0.51	
Interest	0.67	0.60	0.49	0.38	0.27	0.17	0.06	
Total	3.37	2.88	4.47	4.40	4.33	4.25	4.16	27.86
Interest	0.67	0.60	0.49	0.38	0.27	0.17	0.06	
Loan repayment	0.34	1.34	1.34	1.34	1.34	1.34	1.34	
Total	1.00	1.94	1.83	1.72	1.62	1.51	1.40	11.02
DSCR	3.36	1.49	2.44	2.56	2.68	2.82	2.97	

Average DSCR = 2.53

8.0 BREAK EVEN POINT (BEP)

(Rs. in lacs)

Year	1	2	3
A. Net sales	18.00	21.60	25.20
B. Variable cost			
Raw Materials & Consumables	8.87	10.64	12.41
Power	0.63	0.75	0.88
Selling Expenses	0.18	0.22	0.25
Miscellaneous Expenses	0.09	0.11	0.13
Total variable cost	9.76	11.71	13.67
C. Contribution (A-B)	8.24	9.89	11.53
D. Fixed & Semi-fixed Costs			
Salary	6.84	6.87	6.91
Repair & maintenance	0.11	0.13	0.16
Interest on Term Loan	0.67	0.60	0.49
Depreciation	0.51	0.51	0.51
Total fixed cost	8.13	8.11	8.06
E. BREAK EVEN POINT	98.64%	82.02%	69.90%
F. BEP at operating capacity	49.32%	49.21%	48.93%
G. Cash BEP	46.24%	46.13%	45.85%

9.0 INTERNAL RATE OF RETURN (IRR)

(Rs. in lacs)

Year	0	1	2	3	4	5	6	7
CASH OUTFLOW								
Capital Expenditure	11.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Working Capital	0.00	2.08	0.31	0.31	0.00	0.00	0.00	0.00
Total (A)	11.29	2.08	0.31	0.31	0.00	0.00	0.00	0.00
CASH INFLOW								
Profit After Tax		2.19	1.78	3.47	3.51	3.55	3.58	3.59
Add: Depreciation		0.51	0.51	0.51	0.51	0.51	0.51	0.51
Add: Interest		0.67	0.60	0.49	0.38	0.27	0.17	0.06
Add: Salvage Value								
Total (B)	0.00	3.37	2.88	4.47	4.40	4.33	4.25	4.16
NET FLOW (B-A)	-11.29	1.29	2.57	4.16	4.40	4.33	4.25	4.16

IRR = 21%

MACHINERY SUPPLIERS

- (a) Baker Enterprises, 23, Bhera Enclave, Paschim Vihar, New Delhi - 110 087, Delhi, India
- (b) Kanteen India Equipments Co.
C. B - 59, Sector - 1, Salt Lake City, Near P. N. B., Tank No. 2, Opposite Mafatlal Showroom, Kolkata - 700 064, West Bengal, India
- (c) Tools & Machinery Stores, No. 10, B. B. B. Basu Road, Kolkata - 700 001, West Bengal, India