

1 BISCUIT PLANT

1.1 Introduction

Biscuit making is a conventional activity in many parts of the country. Despite the advent of modern, large capacity and automatic biscuit making plants, large section of people especially in semi-urban and rural areas still prefer fresh biscuits from local bakery as they are cheap and offer many varieties. These manufacturers are able to cater to some typical local palate as well. Thus, they are able to withstand competition from organised sector units.

1.2 Objective

The primary objective of the model report is to facilitate the entrepreneurs in understanding the importance of setting up unit of biscuit plant. This model report will serve as guidance to the entrepreneurs on starting up such a new project and basic technical knowledge for setting up such a facility.

1.3 Raw Material Availability

The basic raw material for the manufacture of biscuits is wheat flour. Major wheat producing districts in the state are Hosangabad (4.19 lakh MT production), Ujjain (3.85 lakh MT), Dhar (3.51 lakh MT), Indore (3.34 Lakh MT) etc.

1.4 Suitable Location

The suitable recommended location of the biscuit plant is Hoshangabad, Ujjain, Dhar, Indore, Vidisha, Sehore etc. There is already a food park at Hosangabad,

1.5 Market Opportunities

Market for biscuits is scattered all over the country. There are three distinct market segments viz. urban, semi-urban and rural. Urban and semi-urban markets are dominated by many national and regional brands but even then many local manufacturers have also carved a special niche as their products are fresh, they offer many varieties and they are cheaper.

1.6 Project description

1.6.1 Applications

Biscuits are eaten by all sections of people across the board round the year. They are, thus, mass consumption items with number of varieties and shapes. The market is scattered. There are some dominant national and regional brands. Biscuits can be manufactured at a location which is close to the market.

1.7 Capacity of the Project

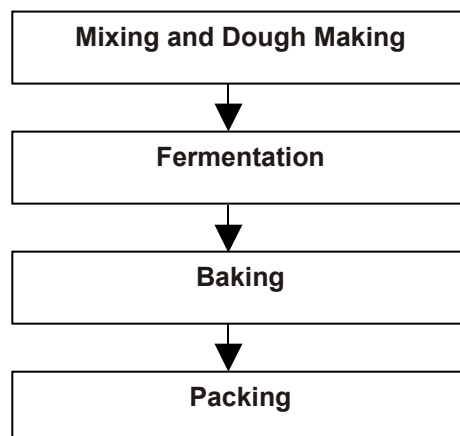
The capacity of the project is 50 tonnes of biscuits per year.

1.8 Critical success factors

Rural and certain semi-urban markets are mainly captured by small manufacturers. This note primarily suggests entering this market. Apart from domestic customers, there is a vast market at bus and taxi stands, railway stations, weekly hats or bazaars, highway eateries or dhabas and melas or fairs. A small delivery vehicle can take care of destinations located in the vicinity of about 50-60 km. Attractive margins to traders/retailers will be crucial.

1.9 Manufacturing process

The process is conventional and easy. Wheat flour along with other ingredients is mixed with water and dough is prepared. Then it is kept at a normal room temperature for about couple of hours to allow proper fermentation. Then it is placed in biscuit moulding trays and these trays are placed in oven for baking. After requisite baking, trays are taken out, cooled and biscuits are packed. The process flow chart is as under:



1.10 Project component and cost

PARTICULARS	Unit	Qty	Cost/unit	Total
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LAND & BUILDING				13.45
Land	SqM	400	250.00	1.00
Land Development				
Land Area		400	500.00	2.00
Building				
Production Block				
Main Production Area	SqM	100	5,000.00	5.00
Store cum packing room & Sales Counter	SqM	50	5,000.00	2.50
Misc Handling Area	SqM	100	2,000.00	2.00
Contingencies		10%		0.95
PLANT & MACHINERY				28.98
Flour Sifter	LS	1	70,000.00	0.70
Dough Kneader		2	50,000.00	1.00
Electrically Operated Oven		1	250,000.00	2.50
Biscuit Moulding Tray		70	30,000.00	21.00
Contingencies		15%		3.78
MISCELLANEOUS FIXED ASSETS				6.73
Furniture and Fixture	LS	1	40,000	0.40
Sealing and wrapping machine	No	2	50,000	1.00
Vehicles-Delivery LCV	No	2	200,000	4.00
Weighing Scale	No	1	25,000	0.25
Others	LS	1	20,000	0.20
Contingencies		15%		0.88
PRE-OPERATIVE EXPENSES				5.90
Establishment		1	230,000	2.30
Professional Charges		1	200,000	2.00
Security Deposits		1	160,000	1.60
TOTAL				55.06

1.10.1 Building

The building development cost will be around Rs 10.45 lakhs.

1.10.2 Plant and Machinery

It is suggested to have installed production capacity to manufacture 105 tonnes of biscuits per year assuming working for about 330 days for 12 hours every day. This would require flour sifter, dough kneader, electrically operated oven, biscuit moulding tray and sealing and wrapping machine. All these machineries will cost around Rs. 28.98 lakhs.

1.11 Miscellaneous Assets

The miscellaneous assets will cost around Rs. 6.73 Lakhs.

1.12 Preliminary & Pre-operative Expenses

A provision of Rs. 5.90 lakhs would take care of pre-production expenses like establishment, professional charges, security deposits etc.

1.13 Working Capital Requirement

(RS IN LACS)

ITEMS	Year 1	Year 3	Year 5
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STOCK OF RAW MATERIAL & PACKING MATERIAL	2.59	3.98	3.98
SUNDRY DEBTORS	10.24	15.75	15.75
TOTAL	12.82	19.73	19.73
MARGIN	3.21	4.93	4.93
MPBF	9.62	14.80	14.80
INTEREST ON WC	1.06	1.63	1.63

1.14 Means of Finance

EQUITY CAPITAL			35.00%	20.39
MOFPI SUBSIDY	25%	50.00	25.00%	14.57
TERM LOAN				
FINANANCIAL INSTITUTIONS		10.00%	40.00%	23.31
-Payable half yearly Installments	10	2.30		
TOTAL			100%	58.26

1.15 Cash flow statement

PARTICULARS	Year 1	Year 3	Year 5	Year 7
SOURCES OF FUNDS				
EQUITY CAPITAL	-	-	-	-
SUBSIDY				
NET PROFIT	1.21	9.06	8.23	7.47
(INTEREST ADDED BACK)				
DEPRECIATION	3.87	3.87	3.87	3.87
PRELIMINARY EXP.W/O	0.84	0.84	0.84	0.84
INCREASE IN TERM LOAN	-	-	-	-
INCREASE IN BANK BORROWINGS-WC	9.62	1.48	-	-
TOTAL	15.54	15.25	12.94	12.18

1.16 Projected balance sheet

PARTICULARS	Year 1	Year 3	Year 5	Year 7
LIABILITIES				
EQUITY CAPITAL	20.39	20.39	20.39	20.39
RESERVES & SURPLUS	12.39	21.65	33.67	45.74
TERM LOAN	21.01	11.81	2.61	0.00
BANK BORROWINGS-WC	9.62	14.80	14.80	14.80
TOTAL	63.40	68.65	71.46	80.93

1.17 Projected profit and loss account

PARTICULARS	Year 1	Year 3	Year 5	Year 7
NET REVENUE REALISATION	37.54	57.75	57.75	57.75
TOTAL EXPENSES	31.62	43.98	44.81	45.57
GROSS PROFIT	5.92	13.77	12.94	12.18
DEPRECIATION	3.87	3.87	3.87	3.87
INTEREST	3.39	3.15	2.23	1.63
PRELIMINARY EXP.W/O	0.84	0.84	0.84	0.84
PROFIT BEFORE TAX	(2.18)	5.90	5.99	5.84
RETAINED PROFIT	(2.18)	5.90	5.99	5.84

1.18 Key Indicators

NET PRESENT VALUE at current Inflation (Rs. in lakhs)	54.85
INTERNAL RATE OF RETURN %	21.79
AVERAGE DSCR	1.97

BREAK EVEN POINT %	80.23
PAY BACK PERIOD (YEARS)	5.06

1.19 Man power requirement

PARTICULARS	NOs.
SUPERVISORY STAFF	
Production Supervisors	2
Accountant	1
WORKERS	
Skilled Workers	2
Semi-Skilled Labour	4
Salesman	2
Driver	2
TOTAL	13

1.20 Assumptions

Project & Financing			
Contingencies on Building			10%
Contingencies on Equipment			15%
Term Loan			40%
Rate of Interest on Term Loan			10%
Subsidy Considered	Subject to ceiling		25%
Expected time of Installation	Months		10
Moratorium	Months		6
CAPACITY			
Rated Capacity Per Annum	80% of Installed capacity	TPA	105
Number of Operational Days	DAYS		330
Working Hours Per day	Hrs		12
CAPACITY UTILIZATION			
Year I			65%
Year II			90%
Year III			100%
SALES PRICE			
W S Price			55,000
OTHER EXPENSE			
Commission			5.0%
Marketing Expenses			2.5%
POWER			
Connected Load	HP		40
DEPRICIATION AS PER COMPANY'S ACT			
BUILDING			3.34%
PLANT & MACHINERY			10.34%
MISC. FIXED ASSETS			7.07%
LAND & SITE DEVELOPMENT			1.63%
MAINTENANCE			
BUILDING			1.00%
PLANT & MACHINERY			2.00%
MISC. FIXED ASSETS			1.50%
LAND & SITE DEVELOPMENT			1.00%

1.21 Sources of technology

- Master Mechanical Works Pvt Ltd, 75,Link Road, Lajpat Nagar 3, New Delhi- 110024
- Nagpal Brothers, C-127, Phase 2, Mayapuri Industrial Area, New Delhi- 110064

- Delight Engg. Works, Lane No. 8 Aslat pura, Moradabad-244001.
Tel No. 2498398/2491687, Fax: 2494378
- Foodmac Engg. Pvt. Ltd. 37038, Sector 2, Parwanoo-173220 (HP).
Tel No. 233294/233295, Fax: 233296
- KGN Engg., Plot No. 174, Old Airport Road, Secunderabad-500011. Tel No. 27952147

The actual cost of projects may deviate on change of any of the assumptions.