

Financial Evaluation for the establishment of Makhana kheer mix Production Unit

1	Name of the Produce:	Instant Makhana kheer mix		
2	Installed Capacity of the Unit:	100 kg/day		
3	Number of Working Days and Shifts:			
	(a)	Working hours in one shifts:	8 hours	
	(b)	Number of shifts:	One	
	(c)	Number of working days in a month:	25.00	
	(d)	Total number of working days in a year:	250.00	
4	Plant Capacity Utilization:			
	2nd year	:	70%	
	3rd year	:	80%	
	4th and subsequent years	:	90%	
5	Land Requirement: 100 sq m (100 m ² @ Rs. 2000/m ²):	Rs.	200000.00	
6	Building: (@ Rs. 3000/m ²):		Rs. 300000.00	
7	Plants and Machinery:			
	S.No	Equipment/machinery/head	Quantity	Cost, Rs.
	i.	Makhana grinder (15 kg/h)	1	20000.00
	ii.	Blender (25 kg/batch)	1	40000.00
	iii.	SS storage tanks (0.05 m ³ capacity)	5	25000.00
	iv.	Weighing balance (1 kg)	2	8000.00
	v.	Sealing machine	2	5000.00
	vi.	Weighing balance (50 kg)	1	10000.00
	vii.	Miscellaneous		10000.00
		Total	: Rs.	118000.00
8	Miscellaneous Fixed Assets (Including furniture & other office equipment)		: Rs.	10000.00
9	Pre-Operative Expenses:			
	(a)	Pre-operative and preliminary expenses	: Rs.	5000.00
	(b)	Consultancy and technical know-how	: Rs.	65000.00
		Total	: Rs.	70000.00
10	Contingencies			
	(a)	Land	: Rs.	10000.00
	(b)	Building	: Rs.	12000.00
	(c)	Plant and machinery (2% of plant & machinery cost)	: Rs.	2360.00
		Total	: Rs.	24360.00

11	Total Fixed Capital:		
	(i) Plant and machinery	: Rs.	118000.00
	(ii) Land and building	: Rs.	500000.00
	(iii) Other fixed costs	: Rs.	60360.00
	Total	: Rs.	722360.00
12	Raw Material Requirement (per month)		
	(a) Raw material (Makhana @ Rs. 400/kg)	: Rs.	400000.00
	(b) Ingredients (Sugar, milk powder, cardamom, flavouring agents, etc)	: Rs.	375000.00
	Total	: Rs.	775000.00
13	Utilities:		
	Power requirement:		
	S.No.	Equipment/machine	Power requirement, kW
	1	Grinder	0.75
	2	Blender	0.75
	3	Lights, fans, exhausts etc.	1.50
		Total load (kW)	3.00
	(i)	Electricity charges for one month @ Rs. 6.50 per	: Rs. 3900.00 unit
	(ii)	Water consumption 100 kilo liter @ Rs. 2.00 per	: Rs. 200.00 liter
		Total	: Rs. 4100.00
14	Salary and Wages		
	(i) Two unskilled workers @ Rs. 15000/- per	: Rs.	30000.00 month per worker
	(ii) Salary of owner	: Rs.	50000.00
	Total	: Rs.	80000.00
15	Administrative overheads:		
	(i) Publicity	: Rs.	500.00
	(ii) Insurance	: Rs.	356.67
	(iii) Administrative expenses	: Rs.	500.00
	Total	: Rs.	1356.67
16	Repair and maintenance	: Rs.	590.00
17	Sales Realization (per month):		
	(i) For 1st year at 70% capacity utilization	: Rs.	700000.00
	(ii) For 2nd year at 80% capacity utilization	: Rs.	800000.00
	(iii) For 3rd year and subsequent year at 90% capacity	: Rs.	900000.00

	(iv)	At 100% capacity utilization	: Rs.	1000000.00
18		Packing and Selling Expenses (per month):		
		(Plastic bags and films, cans etc)		
	(i)	For 1st year at 70% capacity utilization	: Rs.	10500.00
	(ii)	For 2nd year at 80% capacity utilization	: Rs.	12000.00
	(iii)	For 3rd year and on wards at 90% capacity utilization	: Rs.	13500.00
	(iv)	For 100% capacity utilization	: Rs.	15000.00
19		Working Capacity and Margin Money Calculations (at 100% capacity utilization):		
	(i)	Raw material	: Rs.	775000.00
	(ii)	Packing and selling expenses	: Rs.	15000.00
	(iii)	Salary and wages	: Rs.	80000.00
	(iv)	Utilities and overheads	: Rs.	6046.67
		Total working capital per month	: Rs.	876046.67
		For 3 months	: Rs.	2628140.00
		MARGIN MONEY (25% of working capital for 3 month)	: Rs.	657035.00
20		Cost of Project:		
		Total fixed capital	: Rs.	722360.00
		Margin money	: Rs.	657035.00
		Total Cost	: Rs.	1379395.00
21		Means of Finance:		
	(a)	Owner's share	: Rs.	1300895.00
24		Cost of Processing and Profitability		
		Capacity utilization:		
		2nd Year : 70%		
		3rd Year : 80%		
		4th year : 90%		
	(a)	1st year		
	(i)	Raw material	: Rs.	5425000.00
	(ii)	Salary (for 10 months)	: Rs.	800000.00
	(iii)	Packaging material (for 10 months at 70% capacity utilization)	: Rs.	105000.00
	(iv)	Utilities (for 10 months at 70% capacity utilization)	: Rs.	28700.00
	(v)	Overheads (for 10 months)	: Rs.	13626.67
		Total cost of processing	: Rs.	6372326.67

(b) 2nd year		
(i) Raw material	: Rs.	6200000.00
(i) Salary (for 10 months)	: Rs.	800000.00
(iii) Packaging material (for 10 months at 80% capacity utilization)	: Rs.	120000.00
(iv) Utilities (for 10 months at 80% capacity utilization)	: Rs.	32800.00
(v) Overheads (for 10 months)	: Rs.	15573.33
Total	: Rs.	7168373.33
 (c) 3rd Year and onwards		
(i) Raw material	: Rs.	6975000.00
(ii) Salary (for 10 months)	: Rs.	800000.00
(ii) Packaging material (for 10 months at 90% capacity utilization)	: Rs.	135000.00
(iv) Utilities (for 10 months at 90% capacity utilization)	: Rs.	36900.00
(v) Overheads (for 10 months)	: Rs.	17520.00
Total	: Rs.	7964420.00

29. Break Even Point

Fixed cost will be as under

(i) Interests	:Rs.	104727.55
(ii) Depreciations	:Rs.	36800.00
(iii) 40% of salary and wages	:Rs.	320000.00
(iv) 40% of utilities and overheads	:Rs.	19349.33
	:Rs.	480876.88
BEP	:	27.95%
Pay-back period	:	1.33

30. Sensitivity Analysis

(a) Assuming that sale price is reduced by 5%.

The BEP : 39.40%

(b) Assuming that sale price is reduced by 10%.

The BEP : 66.75%

(c) Assuming that cost of processing is increased by 5%

The BEP : 37.50%

(d) Assuming that cost of processing is increased by 10%

The BEP : 56.95 %