

**PROJECT PROFILE ON
JAGGERY AND
PEANUT SESAME
CHIKKI PLANT UNIT**

Table of Contents

INTRODUCTION	3
PRODUCTS AND ITS APPLICATION	3
PLANT CAPACITY & PRODUCT MIX	3
DESIRED QUALIFICATION FOR PROMOTER.....	3
INDUSTRY OUTLOOK/TREND	3
MARKET POTENTIAL AND MARKETING ISSUES, IF ANY	4
RAW MATERIAL REQUIREMENTS	4
MANUFACTURING PROCESS.....	4
MANPOWER REQUIREMENT	4
IMPLEMENTATION SCHEDULE	4
COST OF PROJECT	5
WORKING CAPITAL CALCULATION	5
SALES REVENUE.....	5
LIST OF MACHINERY REQUIRED	6
PROFITABILITY CALCULATIONS.....	6
BREAKEVEN ANALYSIS.....	7
Break-even point: 53.92.....	7
References	7
Addresses of Raw Material and Plant Machinery Suppliers	7
CRITICAL FACTORS FOR THE PROJECT	8
STATUTORY/ GOVERNMENT APPROVALS.....	8
DISCLAIMER:.....	8
DISCLAIMER:.....	8

INTRODUCTION

Chikki is a traditional Indian sweet generally made from groundnuts (peanuts) and jaggery. There are several different varieties of chikki in addition to the most common groundnut chikki. Each variety of chikki is named depending upon the ingredients used, which include puffed or roasted Bengal gram, sesame, puffed rice, beaten rice, or desiccated coconut. Chikki are also made from dry fruits (cashews, almonds, pistachio, etc.).

PRODUCTS AND ITS APPLICATION

Chikki made from quality ingredients like edible nuts, oilseeds like sesame, roasted or puffed cereals, pulses or legumes; incorporated with good quality jaggery, sugar and liquid glucose as binding agent. Chikki having lot of health benefits as being rich source of proteins, mono-unsaturated fatty acids, antioxidants, minerals and vitamins. It is a good source of calories, beneficial in coronary, nervous and skin diseases; as well help in overall growth and development of human body. Chikki is consumed directly.

PLANT CAPACITY & PRODUCT MIX

Generally, chikki making units are of small or home scales units to produce from 500 kg/day to 5000 kg/day or more. Here, it is proposed to produce 300 kg/hr. chikki on semi-automatic line where cooking is manual whereas rolling, sheeting, cutting and packing operations are automatic on indigenous machinery. On the same line other cooked rolled bar type food products can be manufactured. Chikki season generally considered of three months, from November to January, however, it is consumed and can be consumed throughout the year.

DESIRED QUALIFICATION FOR PROMOTER

As such promoters do not required any specific qualification but the entrepreneur must be well versed with process and raw materials quality as well able to sale the products in a competitive markets.

INDUSTRY OUTLOOK/TREND

Products made from edible oil seeds and sugar are considered as healthy, nutritious, and energetic. Chikki is one of them and demand for this product is increasing day by day due to ready to eat and easy availability in good packing with hygienic conditions. The trend of this sub sector is rising with increasing per capita income and GDP of the nation.

Delivery of Machinery										
Term/Wkg Loan Sanction										
Installation of Machinery										
Commissioning of Plant										
RM/Inputs Procurement										
Manpower Appointments										
Commercial Production										

COST OF PROJECT

Sl. No.	Costing heads	Quantity (Sq. M.)	Rate (INR)	Total Expense (INR in Lakh)
1	Land	500	1000	5.00
2	Building	250	9000	22.50
3	Plant & Machinery			84.10
4	Other capital investment			10.00
5	Contingency			5.00
	Total			126.60

WORKING CAPITAL CALCULATION

Particulars	Total Amount	Stock period (Days)	Value of Stock period	Promoter's Margin	Promoter's Share	Bank Borrowing
Raw Materials	620.00	15	31.00	0.50	15.50	15.50
Packing Materials	792.65	30	79.27	0.40	31.71	47.56
Work in process	1603.61	3	16.04	0.40	6.41	9.62
FP Stock	1755.00	15	87.75	0.40	35.10	52.65
Bills receivable	1755.00	15	87.75	0.40	35.10	52.65
Working	12.00	30	1.20	1.00	1.20	0.00
Total	6538.26			0.00	125.02	177.98

SALES REVENUE

Particulars	1 st year	2 nd year	3 rd year	4 th year	5 th year
Opening stock (in INR lakh)	-	20.00	25.00	25.00	25.00
Production	1248.00	1409.00	1579.50	1579.50	1579.50
Less closing stock	20.00	25.00	25.00	25.00	25.00
Net sale (opening stock + Production – Closing stock) (in INR lakh)	1228.5	1404.00	1579.50	1579.50	1579.50

LIST OF MACHINERY REQUIRED

S. No.	Machine	Unit	Cost	Total Cost (in Rs. Lakh)
1	Roaster Machine	2	2.50	5.00
2	Skin Remover Machine	1	2.50	2.50
3	Syrup making vessel (automatic)	2	8.00	16.00
4	Flow wrap packaging machine	2	4.00	8.00
5	Chikki Cooking cum Mixing Pans (Capacity 400 kg per hour)	4	1.50	6.00
6	Gas station and pipeline	1	1.00	1.00
7	Working Tables	8	0.25	2.00
8	SS Roller Pins	10	0.04	0.40
9	SS Trays	10	0.04	0.40
10	Sheeting and Cutting Machine	1	10.00	10.00
11	Plant Electrification (30 HP)	1 Set	3.00	3.00
	<i>GST</i>			9.77
	Total (Main P&M)			64.07

S. No.	Utilities	Unit	Cost	Total Cost (in Rs. Lakh)
1	RO (15000 liter)	1	16.50	16.50
2	Weighing Machines	2	0.13	0.26
3	Water Storage Tank	2	0.10	0.20
	<i>GST</i>			3.05
	Total			20.01

PROFITABILITY CALCULATIONS

Sl. No.	Particulars	Year 1	Year 2	Year 3	Year 4	Year 5
A	Gross Sales	1228.5	1404	1579.5	1579.5	1579.5
	Less:					
1	Raw Materials	434	496	558	558	558
2	Packing Materials	554.855	634.12	713.385	713.385	713.385
3	Fuel	3.528	4.032	4.536	4.536	4.536
4	Power	7.056	8.064	9.072	9.072	9.072
5	Manpower	69.5994	78.5224	87.4454	87.4454	87.4454
6	Depreciation	18.452	21.088	23.724	23.724	23.724
7	Sundry Expenses	4.2	4.8	5.4	5.4	5.4
8	Interest on term loan	6.132	7.008	7.884	7.884	7.884
9	Interest on WC loan	17.85	20.4	22.95	22.95	22.95

10	Repairs and maintenance	3.5	4	4.5	4.5	4.5
11	Marketing expenses	10.5	12	13.5	13.5	13.5
B	Production Cost	1129.672	1290.034	1450.396	1450.396	1450.396
C	Gross Profit (A-B)	98.8276	113.9656	129.1036	129.1036	129.1036
	Tax @30%*	26.64828	34.18968	38.73108	38.73108	38.73108
	Net Profit	69.17932	79.77592	90.37252	90.37252	90.37252

*in case of MSME it is 26%

The proposed unit will have the production capacity of 720 MT of peanut chikki per year. The unit cost of power is taken at Rs. 8. The depreciation on building is taken at the rate of 5% whereas for plant and machinery it is at 10%.

The sales price of peanut chikki is taken at the rate of Rs. 244 per kg on an average for proposed project.

BREAKEVEN ANALYSIS

$$\frac{\text{Annual Fixed Cost} \times 100}{\text{Annual Fixed Cost} + \text{Profit}} = \%$$

Break-even point: 53.92

References

- Central Food Technological research institute, Mysore- Chikki Making Unit
- Chikki Making Unit- <http://www.agriculture.rajasthan.gov.in>
- **Video Link-**
<https://youtu.be/-JONNiNZJnI>
https://youtu.be/grQu_MAw7ns

Addresses of Raw Material and Plant Machinery Suppliers

- ALFA MACHINE TOOLS- Sanjay Raichura(Operations Manager)- +91-94264-16661, Market Yard, Plot No. 111-112, Near "Surbhi Masala, opp. Exit Gate Of, Dolatpara, Junagadh, Gujarat 362001
- Wisdome Automation-Phone no-+919585526912,Address-S.F.No.37/1B, Site no.6, Murugan Nagar, Opp. GRG Polytechnic College, Kattampatti, Kovilpalayam, Coimbatore, 641107, Tamil Nadu, India E-mail:info@wisdommachines.com
- Vijay Vishwanath Industries-Mr Vinod R Siddhapura (Director), Mobile:08035063309, Address-63/2, Shree Harikrupa Industrial Park, Sardar Patel Ring Rd, near. Baroda Express Way, Ahmedabad, Gujarat 382445

CRITICAL FACTORS FOR THE PROJECT

- Chikki is generally a seasonal product so it needs to plan product-mix in such a way to run the plant throughout the year.
- Jaggery used in chikki making is of specific quality and need to purchase in season and make available throughout the year by keeping in cold storage.
- Plant and machinery selection and setting its parameters for commercial production are of utmost important.
- Quality of liquid glucose and jaggery are important as important the quality of peanut used.

STATUTORY/ GOVERNMENT APPROVALS

There is statutory requirement of FSSAI license for setting up of food processing industry. Moreover, MSME & GST registration, IEC Code for Export of end products and local authority clearance may be required for Shops and Establishment, for Fire and Safety requirement and registration for ESI, PF and Labour laws may be required if applicable. Entrepreneur may contact State Pollution Control Board where ever it is applicable.

DISCLAIMER:

This is an indicative illustration of project profile; the above calculation can vary with the locations. Only few machine manufacturers are mentioned in the profile, although many machine manufacturers are available in the market. The addresses given for machinery manufacturers have been taken from reliable sources, to the best of knowledge and contacts. However, no responsibility is admitted, in case any inadvertent error or incorrectness is noticed therein. Further, the same have been given by way of information only and do not carry any recommendation.

DISCLAIMER:

"The document users/third parties shall verify the facts and figures at their end and shall be solely responsible for any action taken by it based on this document. BRIEF & SIDBI, its directors, employees or any office shall not be liable for loss of whatsoever nature arising by using the content of this document."