

BLANCHED & ROASTED PEANUTS

1. INTRODUCTION

Peanuts, also known as 'moongphali' in Hindi, have been a very popular and affordable source of nutrition and flavor in Indian cuisine. While cultivation of peanuts is extensive in the states of Gujarat, Andhra Pradesh, and Tamil Nadu, it has not traditionally been the dominant crop in the northern states of India where cash crops such as rice, wheat, maize, millets, fruits & vegetables hold sway. However, growing trend towards healthier snacking options presents an enticing opportunity for starting a business that provides health-conscious choices, particularly in hilly areas. Blanched & Roasted peanuts offer numerous nutritional benefits that can effectively cater to the eco-conscious demography in hilly states like Uttarakhand. Sourcing of raw groundnut can be accomplished from neighboring regions like Uttar Pradesh. The rich qualities and nutritional values of peanuts will promise sustainable growth of the business.

2. PRODUCT & ITS APPLICATION

Blanched and roasted peanuts are a versatile and flavorful snack option relished by people all over India. Peanuts are used in both savory and sweet dishes. Ground peanuts are used to make peanut butter, which serves as a healthy breakfast option. Mixing caramelized sugar with peanuts creates a delightful treat for children. Moreover, in Indian cuisines, peanuts are often used to make a variety of chutneys and sauces. It is also a key ingredient in breakfast items such as Poha and Upma. They add a pleasant crunch and a nutty flavor to a wide range of dishes.

3. DESIRED QUALIFICATION FOR PROMOTER

While educational qualification is not mandatory, a combination of culinary skills, business knowledge, and dire passion & commitment for the business can greatly increase the chance of establishing and running a successful business.

4. INDUSTRY LOOKOUT AND TRENDS

With the increasing importance of edible oil in one's daily diet, the demand for peanuts has skyrocketed. The growth of the urban middle class and the rise of the snacking culture have contributed to the increased consumption of peanut-based snacks. Moreover, the food processing industry in India has incorporated peanuts in a greater range of products such as peanut butter, oil, and namkeens, which furthers the demand. Consumption level is expected to rise further because of increased income and population. Currently, supply is insufficient to meet demand.

5. MARKET POTENTIAL AND MARKETING ISSUES; IF ANY

The snack and nut industry is highly competitive. To succeed, one needs to differentiate their products from others by developing the product's unique selling proposition. With more and more people becoming diet conscious, the packaging of the product needs to be done carefully by listing out all the dietary ingredients and contents.

Uttarakhand's hilly terrain can pose logistical challenges in terms of sourcing raw materials and transportation of finished goods. The mountainous landscape may result in higher transportation costs and longer delivery times. Moreover, raising awareness about the product and its benefits in the hilly region may require a localized marketing approach and language customization.

6. RAW MATERIAL REQUIREMENTS

Hand Picked and sorted peanuts form the basic raw material for this manufacturing setup. For roasting and flavoring, oil, salt, masala, pepper, and other flavors are needed. Cardboard boxes for packing seasoning in a bunch are required.

7. MANUFACTURING PROCESS

There are four main stages of processing:

A. Roasting: Hand-picked and sorted peanuts undergo the process of roasting. Roasting gives peanuts the flavor that many people associate with them. Roasting also causes the peanuts to dry out even more and turn brown as the peanut oil stains the cell walls. Peanuts are prepared for packing or further processing into sweets or peanut butter after roasting. Dry roasting and oil roasting are the two main methods for roasting peanuts.

Peanut Roasting Machine: Dry roasting can be done in batches or continuously. Batch roasters have the advantage of being able to adapt to different moisture content of peanut lots that have been stored. Batch roasters are revolving ovens that run on natural gas (drum-shaped). The peanuts are continuously stirred by the rotation of the oven, resulting in an equal roast. Temperatures in the oven are around 430°C (800°F), and the temperature of the peanuts is raised to around 160°C (320°F) for 40 to 60 minutes. Temperatures and periods for roasting vary depending on the state of the peanut batch and the desired results. Continuous dry roasters come in a variety of shapes and sizes. Continuous roasting saves time and money by ensuring a constant supply of peanuts for other processes (such as packing, candy making, and peanut butter production). It also eliminates leakage. Peanuts may be moved through an oven on a conveyor or by gravity feed in continuous roasters. Peanuts are put into a stream of countercurrent hot air that roasts the peanuts in one type of roaster. The peanuts are stirred in this technique to guarantee that air travels around the individual kernels, promoting an even roast. Cooled and blanched dry roasted peanuts following roasting, the peanuts are cooled in cooling boxes or on conveyors where vast amounts of air are pushed over them. To terminate the roasting process and preserve a consistent quality, cooling is required. Blanching the peanut eliminates the skin as well as any dust, molds, or other foreign material. Blanching can be done in a variety of ways, including dry, water, spin, and air impact.

Dry Roasting Conventionally: In the traditional procedure, the groundnut is roasted in the sand. This activity is frequently carried out at the village level, where physical labor is plentiful. However, it is strenuous labor that poses a serious health risk due to the frequent inhalation of gases and dust particles created during the roasting of peanuts.

D. Blanching: Blanching refers to the gentle removal of the outer red skin from peanuts. Around 20% to 25% of the peanuts split during this procedure.

E. Packaging: Peanuts are mostly wrapped using the vacuum packaging method. The machine in question is an FFS machine that fills and seals airtight plastic bags with peanuts.

8. MANPOWER REQUIREMENT

Sr. No	Particulars	No.	No of month in year	Wages/Salaries per month (Rs. In Lakhs)	Annual Expense (Rs. In Lakhs)
1	Production Manager	1	12	0.40	4.80
2	Skilled	4	12	0.20	9.60
3	Semi-skilled	4	12	0.10	4.80
4	Accountant	2	12	0.25	6.00
	Sub Total				25.20
6	Statutory Requirements(PPF, ESI, Gratuity etc.) at 25%				6.30
	Total				31.50

9. IMPLEMENTATION SCHEDULE

Sr. No.	Activity	Time Required (in months)
1	Acquisition of premises	1
2	Construction (if applicable)	1.5
3	Procurement & installation of Plant & Machinery	2.5
4	Arrangement of Finance	1
5	Recruitment of required manpower	1
	Total time required	3

10. COST OF PROJECT

Sr. No	Particulars	Annual Expenses (Rs. in lakhs)
1	Pre-operative and preliminary Exp.	0.32
3	Machinery Exp.	8.75
4	Equipment and Furniture Exp.	3.60
5	Working Capital	18.89
	Total Project Cost	31.56

11. MEANS OF FINANCE

Bank-term loans are assumed @ 60%

Sr. No.	Particulars	Annual Expenses (Rs. in lakhs)
1	Promoter's contribution	12.62
2	Bank Finance	18.94
	Total	31.56

12. LIST OF MACHINERY REQUIRED

A. Machinery

Sr. No	Particulars	Unit	Price per Unit (Rs. in lakhs)	Total Amount (Rs. in lakhs)
1	Roasting/Flavouring Machine	1	1.80	1.80
2	Dryer	1	1.50	1.50
3	Conveyor Belt	1	1.60	1.60
4	Separator and Peeling Machine	1	1.40	1.40
5	Packing, Filling and Sealing Machine	1	1.00	1.00
6	Weighing Scale	2	0.50	1.00
7	Material Handling Equipment	1	0.10	0.10
8	Misc. Tools	-	0.05	0.05
Total Amount				8.45
Tax, Transportation, Insurance etc.				0.20
Electrification Exp.				0.10
Grand Total Amount				8.75

B. Furniture & Equipment

Sr. No	Particulars	Unit	Price per Unit (Rs. in lakhs)	Total Amount (Rs. in lakhs)
1	Vehicle	2	0.80	1.60
2	Computers	1	0.50	0.50
3	Office Table & Chair	6	0.25	1.50
Total				3.60

The availability of machines and equipment from local manufacturers is a promising advantage for the entrepreneur. It is essential to carefully choose the right mix of products and suitable machinery and tooling to facilitate modern and flexible production. Here are some of the suppliers of machinery an entrepreneur can consider:

1. Asian Power Cyclopes
111, Rochipura, Majra,
Dehradun-248171,
Uttara hand, India
2. Unisoft Pheripherals
No. 3, Shreyas Anand Complex, 1st Floor,
Ashram Road, Rajkot-360003,
Gujarat, India
3. Dipack Corporation
B-65, East Nathu Colony,
Street No. 5 Shahdara- 110093,
Delhi, India
4. Big Byte Innovations Pvt. Ltd.
901, Westend Mall,
Janakpuri-110058,
Delhi, India

5. Indu Engineering Works
A-48, 1st Floor, Wazirpur Industrial Area,
Budh Vihar-110052,
Delhi, India

6. National Packaging Solution
W 6, Sector 11, Noida,
Gautam Budh Nagar-201301,
Uttar Pradesh, India

13. PROFITABILITY CALCULATIONS

The basis of profitability calculation:

Sr. No	Particulars	Annual Expenses (Rs. in lakhs)
A.	Sales realization	224.00
B.	Cost of production	
i)	Raw materials	145.20
ii)	Utilities	12.15
iii)	Manpower Cost (Salaries/wages)	31.50
iv)	Administrative expenses	0.42
v)	Selling & distribution expenses	8.40
vii)	Rent	5.50
viii)	Interest	0.48
	Total (B)	203.65
	No. of Unit production	160000
	Cost of Goods Sold	Rs. 127 (One Hundred Twenty-seven)
	Gross profit/loss (A – B)	20.35
	Less: Depreciation	1.36
C.	PBIT	19.00
D	Income-tax	1.90
E	Net profit/loss	17.10
F.	Repayment (Annual)	1.82
G	Retained surplus (E-F)	15.27

The production capacity of the unit is estimated at 80%.

14. BREAKEVEN ANALYSIS

(Rs. in lakhs)

Fixed cost	
Land & Building Rent	5.50
Depriciation	1.36
Interest	0.48
Manpower	9.45
Total Fixed cost	16.78
Variable cost	
Raw materials	145.20
Utilities	12.15
ManPower	22.05
Administrative expenses	0.42
Selling & distribution expenses	8.40

Total Variable cost	188.22
Variable cost per Unit	117.64
Revenue per unit	140.00
Margin per Unit	22.36
Number of Unit for Break Even Point	75052
Actual Capacity	160000

15. STATUTORY/GOVERNMENT APPROVALS

The Food Safety and Standards Authority of India (FSSAI) is the regulatory body responsible for ensuring food safety and standards in India. It is established under the Food Safety and Standards Act, of 2006, and governs all matters related to food, storage, distribution, sales, and import. Any entity operating a food business has to abide by the food safety rules and regulations and fulfill the legal requirements. Non-compliance with FSSAI regulations can lead to penalties, fines, and even closure of the business.

Besides an FBO license, a food processing unit has to secure and register a business under MSME. It also has to secure various types of licenses such as:

1. Trade License: This license is important for any food-related business. The local municipal authority gives it.
2. GST Registration: Registration under the GST is mandatory for any business with a certain turnover and is involved in the sales of goods including food products.
3. Other legal approvals include meeting with labeling compliance, local permits, and state-specific licenses if any.

16. TRAINING CENTERS AND COURSES

There are few specialized Institutes that provide degree certification in Food Technology, The most famous and authenticate Institutions are as follows:

1. FCI Institute of Management
11, Subash Road, Opposite Police HQ,
Dehradun, Uttarakhand, India
2. Food Industry Capacity & Skill Initiative (Ficsi)
1, 3rd floor, Shriram Bharatiya Kala Kendra,
Copernicus Marg, Mandi House-110001,
Delhi, India
3. National Institute of Food Technology Entrepreneurship and Management
97, Niftem Rd, HSIIDC, Industrial Estate,
Kundli, Sonipat- 131028,
Haryana, India

Disclaimer

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.