# PEANUT BUTTER MAKING UNIT

## Introduction

Peanut butter is a food paste or spread made from ground, dry-roasted peanuts. It often contains additional ingredients that modify the taste or texture, such as salt, sweeteners, or emulsifiers. Peanut butter is a protein packed spread popular around the world. It's made of ground peanuts – often roasted first - blended into a thick paste. Natural peanut butter is available at health food stores and specialty grocers, and can be easily found online. Look for a product that contains no additives other than a little salt. Peanuts have considerable nutrients and are consumed in different forms all over the world since long. Peanut butter is one such product consumed in large quantities especially in western countries since many years. It is not very popular in India and the domestic market is dominated by milk butter. Hence, the promoters must target growing export market and should be financially sound. The technology is available indigenously and it is advisable to engage a technical consultant to ensure quality. Peanut butter is served as a spread on bread, toast, or crackers, and used to make sandwiches.

## Market Potential

Peanuts are an essential crop grown worldwide and are commercially used for the production of oil, butter, flour, confections and snack products. Indian peanuts are popular all over the world with large exports every year. But unfortunately, our market share is primarily confined to raw peanuts and value-added products like blanched & roasted peanuts and peanut butter has very negligible contribution. Peanut Butter Market in India estimated to grow aggressively due to increasing demand from all the states of India. The Indian Peanut Butter Market witnessing 16.2% of CAGR from 2024 to 2029.

## Raw Material Description

Major Raw Material are mentioned below:

Peanuts

Honey

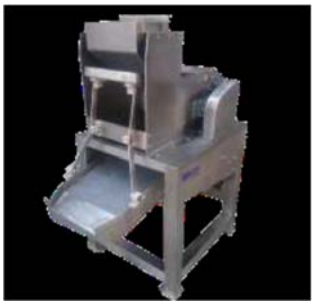
Jaggery

## Plant & Machinery Details

Major Machines that are used are mentioned below:

Peanut Roaster: The machine mainly process food: legume, kernels, nut (e.g. various kinds of peanut kernels, melon seeds, almond, chestnut, horsebean) etc.

**Granulator:** The Nut Granulator is perfect solution for nut, peanut and dry fruit processor for cutting nuts and make granules of accurate size.



**Peanut Grinder:** This machine is designed for grinding oily peanuts into peanut butter or low oil peanuts into peanut powder.


**Mixer:** Peanut seasoning mixer machine is mainly used in mixing, powder coating and blending of seasoning powder.

**Peanut butter filling machine:** The peanut butter filling machine is an ideal equipment for filling high viscosity fluid and paste.

## Manufacturing Process

It is possible to buy raw peanuts instead of shelled peanuts or peanut pods. But it is advisable to install groundnut shelling plant to ensure quality of the all-important input which determines the ultimate quality of butter. The manufacturing process in this project is briefly described hereunder:

Peanut Grading: Procurement of raw material & Peanuts are graded according to sizes to ensure only big or bold peanuts are taken up for process.

Peanut Roasting & Blanching: This is a critical stage. Roasting is done at around 160O C for 40-60 minutes depending upon the moisture contents. Roasting reduces water contents to around 1% which increases the shelf life of peanuts and helps develop flavor. After roasting, peanuts are cooled and then blanched (removal of outer red skin). After blanching each peanut is inspected to remove discoloured (grey or black) nuts.

Grinding Peanuts are then ground in peanut butter mill in two stages to produce fine and creamy butter. The outlet temperature is around 65-75OC. All ingredients like salt, sugar and stabilizers are added during this process.

De-aeration Air is incorporated into peanut butter during milling and subsequently it is removed in a vacuum.

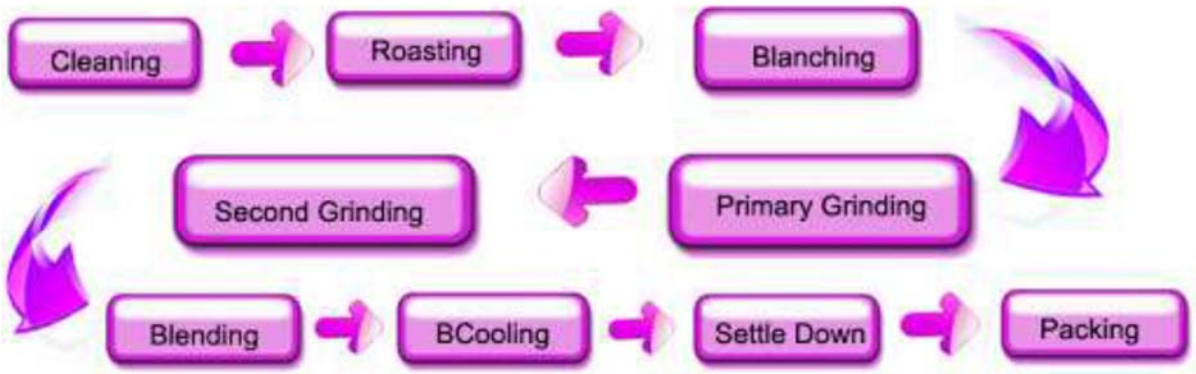
Cooling a scraped surface heat exchanger is used for cooling. The outlet temperature depends upon the type of stabiliser used.

Filling and Packing Peanut butter is filled in Pet Jars or metal drums as per the instructions of the buyer. Immediately after filling, the jars are vibrated to remove any remaining air bubbles. After keeping jars or drums for around 35-40 hours at around

20OC, the peanut butter sets completely and can be dispatched. Recovery from groundnut shells or pods is 55% HPS groundnuts, 22% husk and balance 23% are splits or kapchi. Roasting of peanuts and removal of discoloured peanuts, results in further waste/loss of 5%.

Checking of final product, packaging & sent for sale.

**Peanut butter manufacturing flow chart**



## PROJECT AT A GLANCE - TOP SHEET

| | | | | | |
|---|---|---|---|---|---|
| **1** | Name of the Beneficiary | | **XXXXXX** | | |
| **2** | Constitution(Legal Status) | | **Individual** | | |
| **3** | Father/Spouse Name | | XXXXXXX | | |
| **4** | Unit Address | | XXXXXX | | |
| | | Taluk/Block: | **XXXXXX** | | |
| | | District : | **XXXXXX** | | |
| | | Pin: | **XXXXXX** | State: | **XXXXXX** |
| | | E-Mail : | **XXXXXX** | | |
| | | Mobile | **XXXXXX** | | |
| **5** | Cost of Project | : | **Rs.** | **8.67** | **in Lakhs** |
| **(i)** | Plant & Machinery | | | **6.00** | **in Lakhs** |
| **(ii)** | Furniture & Fixtures | | | **1.00** | **in Lakhs** |
| **(iii)** | Working Capital Required | | | **1.67** | **in Lakhs** |
| **6** | Means of Finance | : | **Rs.** | | |
| **(i)** | Term Loan | | | **6.30** | **in Lakhs** |
| **(ii)** | Working Capital | | | **1.50** | **in Lakhs** |
| **(iii)** | Own Capital | | | **0.87** | **in Lakhs** |
| | | | | **8.67** | **in Lakhs** |
| **7** | Debt Service Coverage Ratio | : | | **2.63** | |
| **8** | Break Even Point | : | | 71.40% | |
| **9** | Plant & Machinery | : | Peanut Roaster/Granulator/Peanut Grinder/Mixer/Peanut Butter Filling Machine | | |
| **10** | Major Raw materials | : | Peanut/Honey/Jaggery | | |
| **11** | Employment | : | | 5 | |
| **12** | Power Requirement | : | | 7.00 | |
| **13** | Name of the project / business activity | : | Peanut Butter Making Unit | | |

## PROJECTED BALANCE SHEET

| PARTICULARS | YEAR-I | YEAR-II | YEAR-III | YEAR-IV |
|---|---|---|---|---|
| **SOURCES OF FUND** | | | | |
| Capital Account | - | 2.27 | 3.73 | 5.17 |
| Add: Addition | 0.87 | | | |
| Add : Net Profit | 2.41 | 3.46 | 4.44 | 5.98 |
| | 3.27 | 5.73 | 8.17 | 11.15 |
| Less : Drawings | 1.00 | 2.00 | 3.00 | 4.00 |
| **NET OWN FUNDS** | **2.27** | **3.73** | **5.17** | **7.15** |
| Term Loan | 5.04 | 3.36 | 1.68 | - |
| Cash Credit | 1.50 | 1.50 | 1.50 | 1.50 |
| Sundry Creditors | 0.43 | 0.49 | 0.54 | 0.61 |
| Provisions & Other Liab | 0.50 | 0.53 | 0.55 | 0.58 |
| **TOTAL :** | **9.74** | **9.60** | **9.45** | **9.84** |
| **APPLICATION OF FUND** | | | | |
| **Fixed Assets** | 7.00 | 7.00 | 7.00 | 7.00 |
| Less : Depreciation | 1.00 | 1.86 | 2.59 | 3.21 |
| Net Fixed Assets | 6.00 | 5.15 | 4.41 | 3.79 |
| **Current Assets** | | | | |
| Sundry Debtors | 2.72 | 3.24 | 3.72 | 4.23 |
| Stock in Hand | 0.46 | 0.52 | 0.59 | 0.66 |
| Cash and Bank | 0.56 | 0.70 | 0.73 | 1.16 |
| **TOTAL :** | **9.74** | **9.60** | **9.45** | **9.84** |
| | - | - | - | - |

## PROJECTED PROFITABILITY STATEMENT

| PARTICULARS | YEAR-I | YEAR-II | YEAR-III | YEAR-IV |
|---|---|---|---|---|
| Capacity Ulisation % | **50%** | **55%** | **60%** | **65%** |
| **SALES** | | | | |
| Gross Receipts/Sale | 27.19 | 32.37 | 37.15 | 42.30 |
| **Total** | **27.19** | **32.37** | **37.15** | **42.30** |
| **COST OF SALES** | | | | |
| Purchase & Consumables | 12.78 | 14.57 | 16.35 | 18.40 |
| Elecricity Expenses | 2.45 | 2.91 | 3.34 | 3.81 |
| Other Direct Expenses | 1.63 | 1.94 | 2.23 | 2.54 |
| **Cost of Production** | 16.86 | 19.42 | 21.92 | 24.75 |
| **Add: Opening Stock /WIP** | - | 0.46 | 0.52 | 0.59 |
| **Less: Closing Stock /WIP** | 0.46 | 0.52 | 0.59 | 0.66 |
| Cost of Sales | **16.40** | **19.36** | **21.85** | **24.67** |
| **GROSS PROFIT** | 10.79 | 13.02 | 15.30 | 17.63 |
| | **39.68%** | **40.20%** | **41.17%** | **41.68%** |
| Salary to Staff | 5.17 | 6.20 | 7.44 | 8.18 |
| Selling & Adm Expenses Exp. | 1.36 | 1.78 | 2.15 | 2.50 |
| Depriciation | 1.00 | 0.86 | 0.73 | 0.63 |
| Interest on Term Loan | 0.69 | 0.55 | 0.37 | 0.18 |
| Interest on Working Capital | 0.17 | 0.17 | 0.17 | 0.17 |
| TOTAL (D+G) | **8.38** | **9.55** | **10.86** | **11.65** |
| **NET PROFIT** | **2.41** | **3.46** | **4.44** | **5.98** |
| | **8.85%** | **10.69%** | **11.95%** | **14.13%** |
| **CASH ACCRUALS** | **3.41** | **4.32** | **5.17** | **6.60** |

## PROJECTED CASH FLOW STATEMENT

| PARTICULARS | YEAR-I | YEAR-II | YEAR-III | YEAR-IV |
|---|---|---|---|---|
| ***SOURCES OF FUND*** | | | | |
| Capital | 0.87 | - | - | - |
| Reserve & Surplus | 2.41 | 3.46 | 4.44 | 5.98 |
| Depriciation & Exp. W/off | 1.00 | 0.86 | 0.73 | 0.63 |
| Increase in Cash Credit | 1.50 | - | - | - |
| Increase In Term Loan | 6.30 | - | - | - |
| Increase in Creditors | 0.43 | 0.06 | 0.06 | 0.07 |
| Increase in Provisions | 0.50 | 0.03 | 0.03 | 0.03 |
| **TOTAL :** | **13.00** | **4.40** | **5.25** | **6.70** |
| **APPLICATION OF FUND** | | | | |
| Increase in Fixed Assets | 7.00 | - | - | - |
| Increase in Stock | 0.46 | 0.07 | 0.06 | 0.07 |
| Increase in Debtors | 2.72 | 0.52 | 0.48 | 0.51 |
| Repayment of Term Loan | 1.26 | 1.68 | 1.68 | 1.68 |
| Drawings | 1.00 | 2.00 | 3.00 | 4.00 |
| **TOTAL :** | **12.44** | **4.26** | **5.22** | **6.27** |
| Opening Cash & Bank Balance | - | 0.56 | 0.70 | 0.73 |
| Add : Surplus | 0.56 | 0.14 | 0.03 | 0.43 |
| Closing Cash & Bank Balance | **0.56** | **0.70** | **0.73** | **1.16** |

## COMPUTATION OF PRODUCTION

| | | |
|---|---|---|
| Production Capacity | 50 | Kg/Day |
| No. of Working Hour | 10 | |
| Total | 50 | Kg/Day |
| No of Working Days per month | 25 | |
| No. of Months | 12 | |
| Total Production Per Annum | 15,000 | Kg |

| Year | Capacity Utilisation | Sheet |
|---|---|---|
| YEAR-I | 50% | 7,500 |
| YEAR-II | 55% | 8,250 |
| YEAR-III | 60% | 9,000 |
| YEAR-IV | 65% | 9,750 |

## COMPUTATION OF SALE

| Particulars | YEAR-I | YEAR-II | YEAR-III | YEAR-IV |
|---|---|---|---|---|
| Op Stock | - | 250 | 283 | 309 |
| Production | 7,500 | 8,250 | 9,000 | 9,750 |
| | 7,500 | 8,500 | 9,283 | 10,059 |
| Less : Closing Stock | 250 | 283 | 309 | 335 |
| Net Sale | 7,250 | 8,217 | 8,974 | 9,724 |
| Rate Per Kg | 375.00 | 394.00 | 414.00 | 435.00 |
| **Net Sale (in lacs)** | **27.19** | **32.37** | **37.15** | **42.30** |

## COMPUTATION OF DEPRECIATION

| Description | Plant/Machinery Equipments | Furniture | TOTAL |
|---|---|---|---|
| Rate of Depreciation | **15.00%** | **10.00%** | |
| **Opening Balance** | - | - | - |
| Addition | 6.00 | 1.00 | 7.00 |
| | 6.00 | 1.00 | 7.00 |
| Less : Depreciation | 0.90 | 0.10 | 1.00 |
| WDV at end of Year-1 | 5.10 | 0.90 | 6.00 |
| Additions During The Year | - | - | - |
| | 5.10 | 0.90 | 6.00 |
| Less : Depreciation | 0.77 | 0.09 | 0.86 |
| WDV at end of Year II | 4.34 | 0.81 | 5.15 |
| Additions During The Year | - | - | - |
| | 4.34 | 0.81 | 5.15 |
| Less : Depreciation | 0.65 | 0.08 | 0.73 |
| WDV at end of Year III | 3.68 | 0.73 | 4.41 |
| Additions During The Year | - | - | - |
| | 3.68 | 0.73 | 4.41 |
| Less : Depreciation | 0.55 | 0.07 | 0.63 |
| WDV at end of Year IV | 3.13 | 0.66 | 3.79 |

## TERM LOAN

| Year | Opening Balance | Repayment | Closing Balance | Interest @ 11% |
|---|---|---|---|---|
| 1st | 6.30 | 1.26 | 5.04 | 0.69 |
| 2nd | 5.04 | 1.68 | 3.36 | 0.55 |
| 3rd | 3.36 | 1.68 | 1.68 | 0.37 |
| 4th | 1.68 | 1.68 | 0.00 | 0.18 |

## BREAK EVEN POINT & RATIO ANALYSIS

| Particulars | 1st Year | 2nd Year | 3rd Year | 4th Year |
|---|---|---|---|---|
| Fixed Cost | 7.57 | 8.69 | 9.83 | 10.92 |
| Variable Cost | 17.67 | 20.28 | 22.95 | 25.48 |
| Total Cost | 25.24 | 28.98 | 32.78 | 36.40 |
| | | | | |
| Sales | 27.19 | 32.37 | 37.15 | 42.30 |
| | | | | |
| Contribution (Sales-VC) | 9.52 | 12.09 | 14.21 | 16.82 |
| | | | | |
| B.E.P in % | 80% | 72% | 69% | 65% |
| | | | | |
| Break Even Sales in Rs. | 21.62 | 23.28 | 25.72 | 27.46 |
| | | | | |
| Net Profit Ratio | **8.85%** | **10.69%** | **11.95%** | **14.13%** |

## CALCULATION OF D.S.C.R

| PARTICULARS | YEAR-I | YEAR-II | YEAR-III | YEAR-IV |
|---|---|---|---|---|
| **CASH ACCRUALS** | 3.41 | 4.32 | 5.17 | 6.60 |
| Interest on Term Loan | 0.69 | 0.55 | 0.37 | 0.18 |
| Total | 4.10 | 4.87 | 5.54 | 6.79 |
| **REPAYMENT** | | | | |
| Instalment of Term Loan | 1.26 | 1.68 | 1.68 | 1.68 |
| Interest on Term Loan | 0.69 | 0.55 | 0.37 | 0.18 |
| Total | 1.95 | 2.23 | 2.05 | 1.86 |
| **DEBT SERVICE COVERAGE RATIO** | **2.10** | **2.18** | **2.70** | **3.64** |
| **AVERAGE D.S.C.R.** | | | **2.63** | |