## PROJECT REPORT

## Of

## POPCORN MAKING UNIT

## PURPOSE OF THE DOCUMENT

This particular pre-feasibility is regarding Popcorn making unit.

The objective of the pre-feasibility report is primarily to facilitate potential entrepreneurs in project identification for investment and in order to serve his objective; the document covers various aspects of the project concept development, start-up, marketing, finance and management.
[We can modify the project capacity and project cost as per your requirement. We can also prepare project report on any subject as per your requirement.]

## PROJECT AT A GLANCE

1 Name of the Entreprenuer
2 Constitution (legal Status)
3 Father / Spouse Name
4 Unit Address

5 Product and By Product

6 Name of the project / business activity proposed

7 Cost of Project
8 Means of Finance Term Loan
Own Capital
Working Capital
9 Debt Service Coverage Ratio
10 Pay Back Period

11 Project Implementation Period
12 Break Even Point
13 Employment
14 Power Requirement
15 Major Raw materials
16 Estimated Annual Sales Turnover (Max Capacity)
17 Detailed Cost of Project \& Means of Finance

COST OF PROJECT

| (Rs. In Lakhs) |  |
| :--- | ---: |
| Particulars | Amount |
| Land | Own/Rented |
| Building / Shed 800 Sq ft | 3.00 |
| Plant \& Machinery | 15.00 |
| Furniture \& Fixtures | 1.00 |
| Working Capital | 5.56 |
| Total | $\mathbf{2 4 . 5 6}$ |

MEANS OF FINANCE

| Particulars | Amount |
| :--- | ---: |
| Own Contribution | 2.46 |
| Working Capital(Finance) | 5.00 |
| Term Loan | 17.10 |
| Total | $\mathbf{2 4 . 5 6}$ |

## POPCORN MAKING UNIT

Introduction: Popcorn (popped corn, popcorns or pop-corn) is a variety of corn kernel, which expands and puffs up when heated. A popcorn kernels strong hull contains the seed's hard, starchy endosperm with 14-20\% moisture, which turns to steam as the kernel is heated. Pressure from the steam continues to build until the hull ruptures, allowing the kernel to forcefully expand from 20 to 50 times its original size-and finally, cool. Each kernel of popcorn contains a certain amount of moisture and oil. Unlike most other grains, the outer hull of the popcorn kernel is both strong and impervious to moisture and the starch inside consists almost entirely of a hard type.


## Benefits \& Market Potential:

1. It helps to lose weight.
2. It can keep blood sugar in check.
3. It contains whole grains.
4. Popcorn are full of vitamins \& minerals.
5. It prevent disease \& boast eyesight.

The popularity of popcorn as a snack is growing across the country and can be seen as more and more retail stores are increasing the number of ready-to-eat popcorn packets kept in their shelves. The global popcorn market is projected to reach $\$ 15$ billion by 2023, registering a CAGR of 7.6 percent from 2017 to 2023, with ready-to-eat leading the segment. While established FMCG businesses have either launched a popcorn product or are looking to launch one, startups too have built ready-to-eat or ready-to-cook popcorn brands in the domain.

## Description of Machinery \& Equipment:

Following machines are required for Popcorn manufacturing unit

1. Popcorn popper
2. Conveyor
3. Cooling tumbler
4. Masala Seasoning machine
5. Online dryer with vibro dryer
6. Slurry kettle
7. Caramelizer
8. Z conveyor
9. Pouch packaging Machine
10. Other machines \& equipments( Air compressor, weighing scale)

These Machines are used to produce popcorn from the raw material. With the help of this machine the work of mixing, extruding \& packaging completes in a very short span. The price of all machines will be Rs 15 Lac (Approx.) excluding transportation and set-up cost.

Raw material requirement: The major consumables required are Corn Kernels, oil, salt \&spices etc. Average raw material (cost per Kg: Rs 90-140)

Manufacturing Process: The product is produced by heating kernels until the internal moisture expands and pops through the outer shell of the kernel, allowing the starch within to expand and cool. The machine will do everything to produce crispy popcorns. Finally, you will need to pack the product with the moisture proof packaging materials. Generally, corrugated outer cartons are used for the transportation and bulk handling of the items.

## Area:

The industrial setup requires space for Inventory, workshop or manufacturing area, space for power supply utilities and auxiliary like Generator setup. Also some of the area of building is required for office staff facilities, documentation, office furniture, etc. Thus, the approximate total area required for complete industrial setup is 800 to 1200Sqft. Civil work cost will be Rs 3 Lac (Approx.)

Power Requirement -The power consumption required to run all the machinery could be approximated as 20 hp

Manpower Requirement- There are requirement of skilled machine operators to run the machine set. Experience quality engineers are required for desired quality control. Some helpers are also required to transfer the material from one work station to other. Office staffs are required to maintain the documentation. The approximate manpower required is 8 including, 1 Plant operator, 1 unskilled worker, 2 Helper and 1 Security guard. 3 Skilled worker including Accountant, Manager and Sales person.

Bank Term Loan: Rate of Interest is assumed to be at 11\%

Depreciation: Depreciation has been calculated as per the Provisions of Income Tax Act, 1961

## Approvals \& Registration Requirement:

Basic registration required in this project:

- GST Registration
- Udyog Aadhar Registration (Optional)
- Choice of a Brand Name of the product and secure the name with Trademark if require
- FSSAI Registration


## Implementation Schedule:

| S No. | Activity | Time required |
| :--- | :--- | :--- |
| 1. | Acquisition of premises | $1-2$ Months |
| 2. | Procurement \& installation of Plant \& Machinery | $1-2$ Months |
| 3. | Arrangement of Finance | $1.5-2$ Months |
| 4. | Requirement of required Manpower | 1 Month |
| 5. | Commercial Trial Runs | 1 Month |
|  | Total time Required (some activities shall run <br> concurrently) | $5-6$ Months |

## FINANCIALS

PROJECTED CASH FLOW STATEMENT

|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PARTICULARS | 1 | II | III | IV | v |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| SOURCES OF FUND |  |  |  |  |  |
|  |  |  |  |  |  |
| Own Contribution | 2.46 | - |  |  |  |
| Reserve \& Surplus | 4.26 | 6.88 | 8.71 | 12.03 | 15.53 |
| Depriciation \& Exp. W/off | 2.65 | 2.27 | 1.95 | 1.67 | 1.44 |
| Increase In Cash Credit | 5.00 |  |  |  |  |
| Increase In Term Loan | 17.10 | - | - | - | - |
| Increase in Creditors | 2.03 | 0.30 | 0.32 | 0.28 | 0.29 |
|  |  |  |  |  |  |
| TOTAL: | 33.49 | 9.45 | 10.98 | 13.98 | 17.26 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| APPLICATION OF FUND |  |  |  |  |  |
|  |  |  |  |  |  |
| Increase in Fixed Assets | 19.00 | - | - | - | - |
| Increase in Stock | 4.41 | 0.61 | 0.64 | 0.64 | 0.66 |
| Increase in Debtors | 3.42 | 0.65 | 0.51 | 0.53 | 0.55 |
| Repayment of Term Loan | 1.90 | 3.80 | 3.80 | 3.80 | 3.80 |
| Taxation | 0.43 | 1.03 | 1.31 | 3.01 | 4.66 |
| Drawings | 2.50 | 3.00 | 4.00 | 5.50 | 7.50 |
| TOTAL: | 31.66 | 9.09 | 10.26 | 13.47 | 17.17 |
|  |  |  |  |  |  |
| Opening Cash \& Bank Balance | - | 1.83 | 2.19 | 2.92 | 3.43 |
|  |  |  |  |  |  |
| Add: Surplus | 1.83 | 0.36 | 0.72 | 0.51 | 0.09 |
|  |  |  |  |  |  |
| Closing Cash \& Bank Balance | 1.83 | 2.19 | 2.92 | 3.43 | 3.51 |



## PROJECTED PROFITABILITY STATEMENT



| COMPUTATION OF MAKING OF POPCORN |  |  |  |
| :---: | :---: | :---: | :---: |
| Item to be Manufactured Popcorn |  |  |  |
| Manufacturing Capacity per day |  | 300 | Kg |
| No. of Working Hour |  | 8 |  |
| No of Working Days per month |  | 25 |  |
| No. of Working Day per annum |  | 300 |  |
| Total Production per Annum |  | 90,000 | Kg |
| Total Production per Annum |  | 90,000 | Kg |
| Year |  | Capacity | POPCORN |
|  |  | Utilisation |  |
| I |  | 50\% | 45,000.00 |
| II |  | 55\% | 49,500.00 |
| III |  | 60\% | 54,000.00 |
| IV |  | 65\% | 58,500.00 |
| V |  | 70\% | 63,000.00 |
|  |  |  |  |


| Raw Material Consumed |  | Capacity | Rate per Kg |
| :--- | ---: | ---: | ---: |
|  | Amount (Rs.) |  |  |
|  | Utilisation |  |  |
|  |  |  |  |
| I | $50 \%$ | 90.00 | 40.50 |
| II | $55 \%$ | 94.00 | 46.53 |
| III | $60 \%$ | 98.00 | 52.92 |
| IV | $65 \%$ | 100.00 | 58.50 |
| V | $70 \%$ | 102.00 | 64.26 |


| COMPUTATION OF SALE |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Particulars | I | II | III | IV | V |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Op Stock | - | 2,250.00 | 2,475.00 | 2,700.00 | 2,925.00 |
|  |  |  |  |  |  |
| Production | 45,000.00 | 49,500.00 | 54,000.00 | 58,500.00 | 63,000.00 |
|  |  |  |  |  |  |
|  | 45,000.00 | 51,750.00 | 56,475.00 | 61,200.00 | 65,925.00 |
| Less : Closing Stock(15 Days) | 2,250.00 | 2,475.00 | 2,700.00 | 2,925.00 | 3,150.00 |
|  |  |  |  |  |  |
| Net Sale | 42,750.00 | 49,275.00 | 53,775.00 | 58,275.00 | 62,775.00 |
|  |  |  |  |  |  |
| Sale Price per Kg | 160.00 | 165.00 | 170.00 | 175.00 | 180.00 |
|  |  |  |  |  |  |
| Sale (in Lacs) | 68.40 | 81.30 | 91.42 | 101.98 | 113.00 |

## COMPUTATION OF CLOSING STOCK \& WORKING CAPITAL

|  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PARTICULARS | I | II | III | IV | v |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Finished Goods |  |  |  |  |  |
| (15 Days requirement) | 3.06 | 3.47 | 3.90 | 4.35 | 4.82 |
| Raw Material |  |  |  |  |  |
| (10 Days requirement) | 1.35 | 1.55 | 1.76 | 1.95 | 2.14 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Closing Stock | 4.41 | 5.02 | 5.67 | 6.30 | 6.96 |


| COMPUTATION OF WORKING CAPITAL REQUIREMENT |  |  |  |
| :--- | ---: | ---: | ---: |
|  |  |  |  |
| Particulars | Amount | Margin(10\%) | Net |
|  |  |  | Amount |
| Stock in Hand | 4.41 |  |  |
| Less: |  |  |  |
| Sundry Creditors | 2.03 |  |  |
| Paid Stock | 2.39 | 0.24 | 2.15 |
|  |  |  |  |
| Sundry Debtors | 3.42 |  | 3.34 |
| Working Capital Requirement |  |  | 5.22 |
|  |  |  | 0.58 |
| Margin |  |  | 5.22 |
|  |  |  | 5.00 |
| MPBF |  |  |  |
| Working Capital Demand |  |  |  |


| BREAK UP OF LABOUR |  |  |  |  |
| :--- | :--- | :--- | :--- | ---: |
|  |  |  |  |  |
| Particulars |  | Wages | No of | Total |
|  |  | Per Month | Employees | Salary |
|  |  |  |  |  |
| Plant Operator |  | $15,000.00$ | 1 | $15,000.00$ |
| Unskilled Worker |  | $12,000.00$ | 1 | $12,000.00$ |
| Helper |  | $10,000.00$ | 2 | $20,000.00$ |
| Security Guard |  | $6,000.00$ | 1 | $6,000.00$ |
|  |  |  |  |  |
|  |  |  |  | $53,000.00$ |
| Add: 5\% Fringe Benefit |  |  |  | $2,650.00$ |
| Total Labour Cost Per Month |  |  |  | $55,650.00$ |
| Total Labour Cost for the year ( In Rs. Lakhs) |  |  | 6.68 |  |


| BREAK UP OF SALARY |  |  |  |  |
| :--- | ---: | :---: | :---: | :---: |
|  |  |  |  |  |
| Particulars |  | Salary | No of | Total |
|  |  | Per Month | Employees | Salary |
| Manager |  | $12,000.00$ | 1 | $12,000.00$ |
| Accountant cum store keeper |  | $10,000.00$ | 1 | $10,000.00$ |
| Sales |  | $8,000.00$ |  | $8,000.00$ |
| Total Salary Per Month |  |  |  | $30,000.00$ |
|  |  |  |  |  |
| Add: 5\% Fringe Benefit |  |  |  | $1,500.00$ |
| Total Salary for the month |  |  |  | $31,500.00$ |
|  |  |  |  |  |
| Total Salary for the year ( In Rs. Lakhs) |  |  | 3.78 |  |


| COMPUTATION OF DEPRECIATION |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Description | Land | Building/shed | $\begin{gathered} \text { Plant \& } \\ \text { Machinery } \end{gathered}$ | Furniture | TOTAL |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| Rate of Depreciation |  | 10.00\% | 15.00\% | 10.00\% |  |
| Opening Balance | Leased |  | - | - | - |
| Addition | - | 3.00 | 15.00 | 1.00 | 19.00 |
|  | - | 3.00 | 15.00 | 1.00 | 19.00 |
|  |  | - | - | - |  |
| TOTAL |  | 3.00 | 15.00 | 1.00 | 19.00 |
| Less: Depreciation | - | 0.30 | 2.25 | 0.10 | 2.65 |
| WDV at end of Ist year | - | 2.70 | 12.75 | 0.90 | 16.35 |
| Additions During The Year | - | - | - | - | - |
|  | - | 2.70 | 12.75 | 0.90 | 16.35 |
| Less: Depreciation | - | 0.27 | 1.91 | 0.09 | 2.27 |
| WDV at end of IInd Year | - | 2.43 | 10.84 | 0.81 | 14.08 |
| Additions During The Year | - | - | - | - | - |
|  | - | 2.43 | 10.84 | 0.81 | 14.08 |
| Less: Depreciation | - | 0.24 | 1.63 | 0.08 | 1.95 |
| WDV at end of IIIrd year | - | 2.19 | 9.21 | 0.73 | 12.13 |
| Additions During The Year | - | - | - | - | - |
|  | - | 2.19 | 9.21 | 0.73 | 12.13 |
| Less: Depreciation | - | 0.22 | 1.38 | 0.07 | 1.67 |
| WDV at end of IV year | - | 1.97 | 7.83 | 0.66 | 10.45 |
| Additions During The Year | - | - | - | - | - |
|  | - | 1.97 | 7.83 | 0.66 | 10.45 |
| Less: Depreciation | - | 0.20 | 1.17 | 0.07 | 1.44 |
| WDV at end of Vth year | - | 1.77 | 6.66 | 0.59 | 9.02 |


| REPAYMENT SCHEDULE OF TERM LOAN |  |  |  |  |  | 11.0\% |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Particulars | Amount | Addition | Total | Interest | Repayment | Cl Balance |
| I | Opening Balance |  |  |  |  |  |  |
|  | Ist Quarter | - | 17.10 | 17.10 | 0.47 | - | 17.10 |
|  | Iind Quarter | 17.10 | - | 17.10 | 0.47 | - | 17.10 |
|  | IIIrd Quarter | 17.10 | - | 17.10 | 0.47 | 0.95 | 16.15 |
|  | Ivth Quarter | 16.15 | - | 16.15 | 0.44 | 0.95 | 15.20 |
|  |  |  |  |  | 1.85 | 1.90 |  |
| II | Opening Balance |  |  |  |  |  |  |
|  | Ist Quarter | 15.20 | - | 15.20 | 0.42 | 0.95 | 14.25 |
|  | Iind Quarter | 14.25 | - | 14.25 | 0.39 | 0.95 | 13.30 |
|  | IIIrd Quarter | 13.30 | - | 13.30 | 0.37 | 0.95 | 12.35 |
|  | Ivth Quarter | 12.35 |  | 12.35 | 0.34 | 0.95 | 11.40 |
|  |  |  |  |  | 1.52 | 3.80 |  |
| III | Opening Balance |  |  |  |  |  |  |
|  | Ist Quarter | 11.40 | - | 11.40 | 0.31 | 0.95 | 10.45 |
|  | Iind Quarter | 10.45 | - | 10.45 | 0.29 | 0.95 | 9.50 |
|  | IIIrd Quarter | 9.50 | - | 9.50 | 0.26 | 0.95 | 8.55 |
|  | Ivth Quarter | 8.55 |  | 8.55 | 0.24 | 0.95 | 7.60 |
|  |  |  |  |  | 1.10 | 3.80 |  |
| IV | Opening Balance |  |  |  |  |  |  |
|  | Ist Quarter | 7.60 | - | 7.60 | 0.21 | 0.95 | 6.65 |
|  | Iind Quarter | 6.65 | - | 6.65 | 0.18 | 0.95 | 5.70 |
|  | IIIrd Quarter | 5.70 | - | 5.70 | 0.16 | 0.95 | 4.75 |
|  | Ivth Quarter | 4.75 |  | 4.75 | 0.13 | 0.95 | 3.80 |
|  |  |  |  |  | 0.68 | 3.80 |  |
| V | Opening Balance |  |  |  |  |  |  |
|  | Ist Quarter | 3.80 | - | 3.80 | 0.10 | 0.95 | 2.85 |
|  | Iind Quarter | 2.85 | - | 2.85 | 0.08 | 0.95 | 1.90 |
|  | IIIrd Quarter | 1.90 | - | 1.90 | 0.05 | 0.95 | 0.95 |
|  | Ivth Quarter | 0.95 |  | 0.95 | 0.03 | 0.95 | 0.00 |
|  |  |  |  |  | 0.26 | 3.80 |  |


| Door to Door Period | 60 | Months |
| :--- | ---: | :--- |
| Moratorium Period | 6 | Months |
| Repayment Period | 54 | Months |


| CALCULATION OF D.S.C.R |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| PARTICULARS | I | II | III | IV | V |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
| CASH ACCRUALS | 6.48 | 8.12 | 9.35 | 10.70 | 12.31 |
|  |  |  |  |  |  |
| Interest on Term Loan | 1.85 | 1.52 | 1.10 | 0.68 | 0.26 |
|  |  |  |  |  |  |
| Total | 8.34 | 9.63 | 10.45 | 11.38 | 12.57 |
|  |  |  |  |  |  |
| REPAYMENT |  |  |  |  |  |
| Repayment of Term Loan | 1.90 | 3.80 | 3.80 | 3.80 | 3.80 |
| Interest on Term Loan | 1.85 | 1.52 | 1.10 | 0.68 | 0.26 |
|  |  |  |  |  |  |
| Total | 3.75 | 5.32 | 4.90 | 4.48 | 4.06 |
|  |  |  |  |  |  |
| DEBT SERVICE COVERAGE RATIO | 2.22 | 1.81 | 2.13 | 2.54 | 3.09 |
|  |  |  |  |  |  |
| AVERAGE D.S.C.R. |  |  | 2.33 |  |  |


|  |  |  |  |
| :---: | :---: | :---: | :---: |
| COMPUTATION OF ELECTRICITY |  |  |  |
| (A) POWER CONNECTION |  |  |  |
|  |  |  |  |
| Total Working Hour per day | Hours | 8 |  |
| Electric Load Required | HP | 20 |  |
| Load Factor |  | 0.7460 |  |
| Electricity Charges | per unit | 7.50 |  |
| Total Working Days |  | 300 |  |
| Electricity Charges |  |  | 2,68,560.00 |
|  |  |  |  |
| Add : Minimim Charges (@ 10\%) |  |  |  |
|  |  |  |  |
|  |  |  |  |
| (B) DG set |  |  |  |
| No. of Working Days |  | 300 | days |
| No of Working Hours |  | 0.3 | Hour per day |
| Total no of Hour |  | 90 |  |
| Diesel Consumption per Hour |  | 8 |  |
| Total Consumption of Diesel |  | 720 |  |
| Cost of Diesel |  | 65.00 | Rs. / Ltr |
| Total cost of Diesel |  | 0.47 |  |
| Add : Lube Cost @ $15 \%$ |  | 0.07 |  |
| Total |  | 0.54 |  |
|  |  |  |  |
| Total cost of Power \& Fuel at 100\% |  |  | 3.22 |
|  |  |  |  |
| Year | Capacity |  | Amount |
|  |  |  | (in Lacs) |
|  |  |  |  |
| I | 50\% |  | 1.61 |
| II | 55\% |  | 1.77 |
| III | 60\% |  | 1.93 |
| IV | 65\% |  | 2.10 |
| V | 70\% |  | 2.26 |

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