

National Institute of Micro, Small and Medium Enterprises (nimsme)[an Organisation of Ministry of MSME, Govt. of India]Yousufguda, HYDERABAD - 500045

## PAPPAD MANUFACTURING

## Introduction

Papad is also known as Papadum. Papad is nothing but the thin Indian wafer, which can be refereed as a cracker or flat bread. Papad is generally made from dried lentils, it can be eaten fried
or roasted. There are variety of papad flavors available in the market, that are made to suit the requirement of each and every individual.

The basic composition of the papad varies from a number of ingredients such as cereal flour, pulse flour, soya flour, spice mixes, chemical mixes and different vegetable juices for improving both organoleptic and nutritional characteristics.

Before making any papad, its dough is required to make. That dough contains salt and peanut oil and some flavors to make the special regional papad. Baking soda is also one of the main ingredient for making good papad. The dough is shaped into a thin, round flat bread and then dried (traditionally in the sun). Papad can be cooked by deep-frying, roasting over an open flame, toasting or microwaving.

In India, Papad has a vital place in every meal. It is highly served or accompanied either as a snack, chaat or with main course recipes. Papad is an example of the genius of Indian cuisine. Originally there are two types of Papad - North Indian papad and South Indian papad. They come into different sizes and textures such as mini papad, big papads, roasted papad, khakra and many more.

Papads of various brands are easily available in the market. One of the most famous market brand is Lijjat. You can get variety of tasty and flavorful Lijjat papads with different shapes and sizes. Always check that they are dry and not stuck with each other.

## USES:

1.3 Papad is a great accompaniment with drinks and mocktails, one of the best example is masala papad.
1.4 Papads are typically served as an accompaniment with any meal in India.
1.5 Papad can be eaten as a starter or snack dish.
1.6 Fried, roasted, open-flame papad and oven-made papad are some of the best varieties of papad.
1.7 A famous Rajasthani delicacy is papad curry or papad ki sabji, that is made from the papad only.
1.8 Papad can be enjoyed with variety of pickles, chutneys and sauces.
1.9 You can get papad of several flavors of your choice, such as Punjabi masala, urad dal, moong dal, asafoetida, black Pepper, green chilly, red chilly, cumin, garlic, ginger, cardamom, cloves and cinnamon, etc.
1.10 Since the years, Papad has been used to serve with dal and rice, as it enhance the taste of the meal.
1.11 You can munch the Papad as a great snack dish.
1.12 Papad can be served with soup or with the main meal.
2.0 Papad is often crushed and sprinkled on the rice.
2.1 A traditional Indian thali, platter, marriage buffets, parties, etc always includes papad in their menu.
2.2 You can crush the raw papads for coating the kebabs and tikkis.
2.3 Papad is used for making several Gujarati subzis like Methi- Papad nu shaak, Ghatia- papad nu shaak, etc.

## STORAGE:

3.0 Papad should be stored in air tight container.
3.1 It can be stored for 10-12 months.
3.2 Sometimes keep them under fresh air and sun light for few minutes for preserving even more better.
3.3 Although storage can be done, but it is advisable to buy limited stock or small packets of papad and use them as per your requirement.

## BENEFITS:

Papad is a good appetizer and a source for digestive.
Roasted or grilled papad helps to absorb the fatty material from the mouth and throat.
Papad should be eaten in moderate proportion, else it can become the reason of acidity.
Papad is very high in sodium, hence not advisable for hypertensive people.
Papads are made of lentils, hence are free from gluten, rich in protein and dietary fiber

## Location, Land \& Building

The unit will be located in a rented building. The monthly rent amount for this unit will be Rs 5000/month.

## Work Style / Activity

## Courtesy :

The raw materials of the units are Uzhunnu Mavu, Rice Powder, Castic Soda,Salt,Oil. It can be purchased in a large scale and avail locally. The Uzhunnu Mavu, Castic soda, salt and oil are mixed thoroughly and then put that mixture to the automatic pappad making machine. Then pappad can make according to the die that we are giving. This Pappad may pass through the drier also. Noramally this project aims pappad size of -5 Inch $\|$.

## Equipments

Fully auto pappad making machine is the major equipments required for the manufacturing of Pappad. In addition, the accessories like Sealing Machine,Tables,Chair and rack are required.

## Estimation of the working capital

The estimated requirement of working capital of the unit comes to Rs $3,23,000$ the basis for the estimation of working capital is cost of the raw material required per month, and the labor charges. The details are furnished in the financial analysis of the report.

## Cost of the Project.

The total cost of the project comes to Rs $10,23,000$; which is arrived from the financial analysis.

## Source of Fund.

The promoter is expecting a composite loan of Rs. 8,18,000 from the Bank, which includes the Term loan for the fixed investment and working capital. The pro moter's contribution is shown as Rs. $2,05,000$. Details are furnished in the financial analysis of the report.

## Assumptions

This project report is prepared based on the following assumptions.

- The unit is expected to operate 25 days in a month on single shift basis.
- Working capital is estimated based on raw material and other expenses required per month.
- Any change in the government or bank policy will make corresponding change in the project report.


## Conclusions

By virtue of the contacts of the promoter in the business activity the unit is expecting an ascending future. The project is prepared on the basis of reasonable and reliable estimates and assumptions. The project can generate enough cash to pay the interest as well as installment of loan. The project is technically feasible and financially viable.

## Pappad Manufacturing Unit

- Name \& Address
- Type of Organization
- Unit Address

ABSTRACT<br>Proprietary

- Panchayath
- Building Number /Survey no
- Village

$\begin{array}{ll}\text { - Rate of Return } & 56 \% \\ \text { - Average DSCR } & 2.61\end{array}$
- DER
- IRR
- BEP
- Current Ratio
- Net Profit Ratio
- Payback Period
- Employment Potential
- Name of Bank
- Project Implementation Period

From May 2015 To August 2015

## Project Details

## Fixed Capital Investment

Land \&
Building
Cost of Land Nil
Land Development Cost Nil
Building
Nil
Total

## B Machinery /Equipments

| Si No | Item | Make | Unit Price | Qty | Ext Price |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Fully Auto Pappad Machine | PP deluxe | 565000 | 1 | 565000 |
| 2 | Flour Kneading Machine | Inclusive of Pappad |  |  |  |
| 3 | Flat Sheet Making |  |  |  |  |
| 4 | Pappad Sheeter |  |  |  |  |
| 5 |  | Machine |  |  |  |
| 6 | Cutter Machine Electric Drier |  |  |  |  |
| 7 | Tax |  | 28250 | 1 | 28250 |
| 8 | Sealing Machine |  | 7000 | 1 | 7000 |
|  |  |  |  | Total | 600250 |

## Courtesy :

Furniture /
Fixtures

| Si No | Item | Make | Unit Price | Qty | Ext Price |
| :---: | :--- | :---: | :---: | :---: | :---: |
| 1 | Table |  | 15000 | 1 | 15000 |
| 2 | Chair |  | 700 | 5 | 3500 |
| 3 | Rack |  | 10000 | 2 | 20000 |
|  |  |  |  | Total | 38500 |

Preliminary \&
Pre-operative
cost
D

| Si No | Details | Amount |  |
| :---: | :--- | :---: | :--- |
| 1 |  <br> Electrification |  | 25000 |
|  | Preliminary <br> Expenses <br> Others) |  |  |
| 3 | Trial Production |  | 15000 |
|  |  | Total | 15000 |

## Contingency

| Si No | Details |  | Amount |
| :--- | :--- | :--- | :--- |
|  | Contingency / Others/ Miscellaneous Expenses |  | 6250 |

Total Capital Expenditure ( A + B + C + E )
700000 Sales Realization (@ 100\% Capacity Utilization)

| Si No | $\begin{aligned} & \hline \mathrm{I} \\ & \mathrm{t} \\ & \mathrm{e} \\ & \mathrm{~m} \end{aligned}$ | Unit Price | Qty | Ext Price | Yearly Sales |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Pappad | 7.5 | 65625 | 492187.5 | 5906250 |
|  |  |  | Total | 492187.5 | 5906250 |

Raw Materials

| Si No | Item | Unit | Amt/Mont | Qty or Mo | Ext Price |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Rice Powder | Kg | 32 | 3240 | 103680 |
| 2 | Caustic Soda | Kg | 70 | 540 | 37800 |
| 3 | Uzhunnu Mavu | Kg | 115 | 30600 | 3519000 |
| 4 | Oil | Kg | 75 | 900 | 67500 |

## Courtesy :

| 5 | Salt |  | Kg | 15 | 1080 | 16200 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6 | Packing Cover |  | Kg | 150 | 04 | 30600 |
|  |  |  |  | Total |  | 3774780 |
|  | 1 |  | Wages |  |  |  |
|  | Si No |  | Type of Worker | Numb ers | Month $y$ Wages/W orker | Monthly <br> Wages |
|  | 1 |  |  | 0 | 0 | 0 |
|  |  |  |  |  |  | Total |
|  | J Salary |  |  |  |  |  |
|  | Si No | Type of Worker |  | Numbers | Monthly Salary/wo rker | Monthly Salary |
|  | 1 | Manager/Proprietor |  | 1 | 15000 | 15000 |
|  | 2 | Worker |  | 2 | 11250 | 22500 |
|  | 3 | Helper |  | 1 | 8750 | 8750 |
|  |  |  |  |  |  | Total |

## K Other Expenses / Year

| SI <br> No | Elements |
| :--- | :--- |
| 1 | Repairs \& Maintenance |
| 2 | Power \& Fuel |
| 3 | Other Overhead expenses |
| 4 | Telephone Expenses |
| 5 | Stationery \& Postage |
| 6 | Advertisement \& Publicity |
| 7 | Other Miscellaneous Expenses |
| 8 | Rent (if building on rental ) |

Capacity Utilization of Manufacturing \& Administrative Expenses
L

| Part icul ars |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Capacity Utilization | $\begin{gathered} \text { 1st Year } \\ 70 \% \end{gathered}$ | $\begin{aligned} & \text { 2nd Year } \\ & 72^{2} \end{aligned}$ | $\begin{aligned} & \text { 3rd Year } \\ & 74 \% \end{aligned}$ | $\begin{aligned} & \text { 4th Year } \\ & 76 \% \end{aligned}$ | $\begin{aligned} & \text { 5th Year } \\ 78 \% & \end{aligned}$ | 6th Ye 80\% |
| No of Shifts/day | 1 | 1 | 1 | 1 |  | 1 |

A. Manufacturing Expenses

1

| Raw Materials | 2642346 | 2717842 | 2793337 | 2868833 | 2944328 | 301 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wag es |  |  |  |  |  |  |
| Repairs \& Maintenance | 7000 | 7200 | 7400 | 7600 | 7800 |  |
| Power \& Fuel | 108675 | 111780\| | 114885 | 117990 | 121095 | 12 |
| Other Overhead expenses | 7000 | 7200\| | 7400 | 7600 | 7800 |  |
| Total <br> (A) | 2765021 | 2844022 | 2923022 | 3002023 | 3081023 | 316 |

## B. Administrative Expenses

| Sala <br> ry |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 555000 | 582750 | 611888 | 642482 | 674606 |
| Telephone Expenses | 6000 | 6600 | 7260 | 7986 | 8785 |


|  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :--- |
| Stationery \& Postage | 10000 | 11000 | 12100 | 13310 | 14641 | 16105 | 17716 | 19487 |
|  <br> Publicity |  |  |  |  |  |  |  |  |
| Other Miscellaneous | 10000 | 11000 | 12100 | 13310 | 14641 | 16105 | 17716 | 19487 |
|  | 8000 | 8800 | 9680 | 10648 | 11713 | 12884 | 14172 | 15590 |

## Courtesy :

आudर्₹


- Assessment of Working Capital

|  |  | 1st Year | 2nd Year | 3rd Year | 4th Year | 5th Year | 6th Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Capacity Utilization | if $100 \%$ Shift/Da | 70\% | 72\% | 74\% | 76\% | 78\% | 80\% |
|  |  |  |  |  |  |  |  |
|  |  | 1 | 1 | 1 | 1 | 1 | 1 |

i Variable Production Cost

| Raw Material | 3774780 | 2642346 | 271784 | 2793337 | 2868833 | 2944328 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Wages | 0 | 0 | 0 | 0 | 0 | 0 |
| Repair \& Maintenance | 10000 | 7000 | 7200 | 7400 | 7600 | 7800 |
| Power \& Fuel | 155250 | 108675 | 111780 | 114885 | 117990 | 121095 |
| Other Overhead Expenses | 10000 | 7000 | 7200 | 7400 | 7600 | 7800 |

ii Fixed Production Cost

| Salary | 555000 | 555000 | 582750 | 611888 | 642482 | 674606 | 708336 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Telephone Expenses | 6000 | 6000 | 6600 | 7260 | 7986 | 8785 | 9663 |
| Stationery \& Postage | 10000 | 10000 | 11000 | 12100 | 13310 | 14641 | 16105 |
| Advertisement \& Publicity | 10000 | 10000 | 11000 | 12100 | 13310 | 14641 | 16105 |
| Other Miscellaneous Expenses | 8000 | 8000 | 8800 | 9680 | 10648 | 11713 | 12884 |
| Rent (if) | 60000 | 60000 | 66000 | 72600 | 79860 | 87846 | 96631 |

iii Manufacturing Cost

| Variable Production <br> Cost |  | 384402 |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: |

## Courtesy :

| Fixed Production Cost |  | 649000 | 649000 | 686150 | 725628 | 767596 | 812231 | 859724 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Total | 4599030 | 3414021 | 353017 |  | 2 |  |  |

- Elements of Working Capital \& Amount of Working Capital

|  |  |  |  |  | 1st Year | 2nd <br> Year | 3rd Year | 4th Year | 5th Year | 6th Year |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \mathrm{Si} \\ & \text { No } \end{aligned}$ | Item | Days | Basis | Amount | 70\% | 72\% | 74\% | 76\% | 78\% | 80\% |


| 1 | \|Raw Material | 10 | Material Cost | 125826 | 88078 | 90595 | 93111 | 95628 | 98144 | 100661 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | Work in Process | 1 | Production Cost | 13167 | 9217 | 9480 | 9743 | 10007 | 10270 | 10533 |
| 3 | Finished Goods | 1 | $\begin{aligned} & \text { Manufacturi } \\ & \mathrm{n} \\ & \mathrm{~g} \text { Cost } \\ & \hline \end{aligned}$ | 16257 | 11380 | 11767 | 12162 | 12565 | 12978 | 13399 |
| 4 | Receivab les | 7 | Manufacturi <br> n <br> g Cost | 113801 | 79660 | 82371 | 85135 | 87958 | 90843 | 93794 |
| 5 | Working Expense S | 25 | Fixed Cost | 54083 | 54083 | 57179 | 60469 | 63966 | 67686 | 71644 |
|  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | 323134 | 242419 | 251392 | 260621 | 270124 | 279920 | 290031 |
| W.C. can be withdrawn from WCL <br> Acc. |  |  |  | $258000$ | $258000$ | $258000$ | $258000$ | $258000$ | $258000$ | $258000$ |
| Margin of WC to be invested |  |  |  | 65134 | 0 | 0 | 2621 | 12124 | 21920 | 32031 |

Project Cost
\& Means of
Finance i Total

## Courtesy :

Project Cost


- Schedule of Repayment of

Term Loan \& Working
Capital Loan i Term Loan

| Year | Opening <br> Balance | Closing <br> Installment | Interest @ 13\% |  |
| :--- | :---: | :---: | :---: | :---: |
| 1st Year | 560000 | 124444 | 435556 | 72800 |
| 2nd Year | 435556 | 186667 | 248889 | 56622 |
| 3rd Year | 248889 | 186667 | 62222 | 32356 |
| 4th Year | 62222 | 62222 | 0 | 8089 |
| 5th Year | 0 | 0 | 0 | 0 |
| 6th Year | 0 | 0 | 0 | 0 |
| 7th Year | 0 | 0 | 0 | 0 |
| 8th Year | 0 | 0 | 0 | 0 |

ii Working Capital Loan
(Installment of Working Capital is shown as if the WCL is also closed along with the Term Loan)

| Year | Opening Balance | Installment | Closing <br> Balance | Interest @ <br> $13.5 \%$ |
| :--- | :--- | :--- | :--- | :--- |


| 1st Year | 258000 | 57333 | 200667 | 34830 |
| :---: | :---: | :---: | :---: | :---: |
| 2nd Year | 200667 | 86000 | 114667 | 27090 |
| 3rd Year | 114667 | 86000 | 28667 | 15480 |
| 4th Year | 28667 | 28667 | 0 | 3870 |
| 5th Year | 0 | 0 | 0 | 0 |
| 6th Year | 0 | 0 | 0 | 0 |
| 7th Year | 0 | 0 | 0 | 0 |
| 8th Year | 0 | 0 | 0 | 0 |

## Schedule of Depreciation on Fixed Assets

| i |  |  |  |  |  |  |  |  | Building | @ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1st Year | 2nd Year | 3rd Year | 4th Year | 5th Year | 6th Year | 7th Year |  |  |  |
| Opening Balance | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |
| Depreciation | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |
| Closing Balance | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |


|  | Machinery \& Fixtures @ |  |  | 10\% |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1st Year | 2nd Year | 3 rd Year | 4th Year | 5th Year | 6th Year | 7th Year |
| Opening Balance | 638750 | 574875 | 517388 | 465649 | 419084 | 377175 | 339458 |
| Depreciation | 63875 | $\begin{gathered} 57487 . \\ 5 \\ \hline \end{gathered}$ | $\begin{gathered} 51738 . \\ 75 \\ \hline \end{gathered}$ | 46564.88 | $\begin{gathered} 41908 . \\ 39 \\ \hline \end{gathered}$ | 37718 | 33946 |
| Closing Balance | 574875 | 517388 | 465649 | 419084 | 377175 | 339458 | 305512 |

iii

| Botal Depreciation | 0 | 0 | 0 | 0 | 0 | 0 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Building | 0 | 0 | 57488 | 51739 | 46565 | 41908 | 37718 |
| Machinery | 63875 | 53946 |  |  |  |  |  |
| Total | 63875 | 57488 | 51739 | 46565 | 41908 | 37718 | 33946 |

## Financial Analysis of Project

| I | Projected Profit \& Loss Account |  |  |  | In Lakhs |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Particulars | $\begin{aligned} & 1 \mathrm{st} \\ & \text { Year } \end{aligned}$ | $\begin{aligned} & \text { 2nd } \\ & \text { Year } \end{aligned}$ | $\begin{array}{r} \text { 3rd } \\ \text { Year } \end{array}$ | $\begin{array}{r} \text { 4th } \\ \text { Year } \end{array}$ | $\begin{array}{r} 5 \mathrm{th} \\ \text { Year } \end{array}$ | $\begin{array}{r} \text { 6th } \\ \text { Year } \end{array}$ | $\begin{array}{r} \text { 7th } \\ \text { Year } \end{array}$ |
| Capacity Utilization | 70\% | 72\% | 74\% | 76\% | 78\% | 80\% | 82\% |
| Sales Or Receipts | $\begin{array}{r} \hline 41.343 \\ 75 \end{array}$ | 42.525 | $\begin{array}{r} \hline 43.706 \\ 25 \end{array}$ | $\begin{gathered} 44.887 \\ 5 \end{gathered}$ | $\begin{array}{r} \hline 46.068 \\ 75 \end{array}$ | 47.25 | 48.431 |

Manufacturing Expenses

| Manufacturing Expenses |
| :--- |
| Raw Materials |


| Repairs \& Maintenance | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 |
| :--- | :---: | :---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Power \& Fuel | 1.09 | 1.12 | 1.15 | 1.18 | 1.21 | 1.24 | 1.27 |
| Other Overhead expenses | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 |
|  |  |  |  |  |  |  |  |
| Depreciation | 0.64 | 0.57 | 0.52 | 0.47 | 0.42 | 0.38 | 0.34 |



## Administrative

Expenses

| Salary | 5.55 | 5.83 | 6.12 | 6.42 | 6.75 | 7.08 | 7.44 | 7.81 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Telephone |  |  |  |  |  |  |  |  |
| Expenses |  |  |  |  |  |  |  |  |
| Stationery \& | 0.06 | 0.07 | 0.07 | 0.08 | 0.09 | 0.10 | 0.11 | 0.12 |
| Postage |  |  |  |  |  |  |  |  |
| Advertisement \& | 0.10 | 0.11 | 0.12 | 0.13 | 0.15 | 0.16 | 0.18 | 0.19 |
| licity |  |  |  |  |  |  |  |  |
| Other | 0.10 | 0.11 | 0.12 | 0.13 | 0.15 | 0.16 | 0.18 | 0.19 |
| Miscellaneous |  |  |  |  |  |  |  |  |
| Expenses | 0.08 | 0.09 | 0.10 | 0.11 | 0.12 | 0.13 | 0.14 | 0.16 |
| Rent (if) | 0.60 |  |  |  |  |  |  |  |
|  |  | 0.66 | 0.73 | 0.80 | 0.88 | 0.97 | 1.06 | 1.17 |
|  |  | 6.86 | 7.26 | 7.68 | 8.12 | 8.60 | 9.10 | 9.64 |
|  |  |  |  |  |  |  |  |  |

Interest on Bank Loan

| @ |  |
| :--- | :--- |
| Term Loan | 13 |
| $\%$ |  |$|$


| Cost of Sale | 35.86 | 36.79 | 37.68 | 38.59 | 39.70 | 40.92 | 42.18 | 43.48 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  <br> Contingency. written- <br> off | 0.20 | 0.20 | 0.20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Net Profit before <br> Tax | 5.28 | 5.53 | 5.83 | 6.30 | 6.37 | 6.33 | 6.25 | 6.14 |
| Less Tax | 0.03 | 0.05 | 0.08 | 0.13 | 0.14 | 0.13 | 0.13 | 0.11 |
| Net Profit | 5.26 | 5.48 | 5.74 | 6.17 | 6.23 | 6.19 | 6.13 | 6.02 |
| Retained Profit | 5.26 | 10.73 | 16.48 | 22.64 | 28.88 | 35.07 | 41.19 | 47.22 |

## Courtesy :

## Rate of Return (Return on

| Particulars | 1st Year | 2nd Year | 3rd Year | 4th Year | 5th Year | 6th Year | 7th Year | 8th Year |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Net Profit | 5.26 | 5.48 | 5.74 | 6.17 | 6.23 | 6.19 | 6.13 | 6.02 |
| Total Investment | 10.23 | 10.23 | 10.23 | 10.23 | 10.23 | 10.23 | 10.23 | 10.23 |
| Rate of Return | $51 \%$ | $54 \%$ | $56 \%$ | $60 \%$ | $61 \%$ | $61 \%$ | $60 \%$ | $59 \%$ |
| Average Rate of Return |  |  |  |  |  |  |  |  |


| III |  |  | Credit Ratio( D.S.C.R.) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Particulars | 1st Year | 2nd Year | 3rd Year | 4th Year | 5th Year | 6th Year | 7th Year | 8th Year |
| Net Profit | 5.26 | 5.48 | 5.74 | 6.17 | 6.23 | 6.19 | 6.13 | 6.02 |
| Add: |  |  |  |  |  |  |  |  |
| Deprecia Interest | 1.37 | 1.14 | 0.84 | 0.55 | 0.42 | 0.38 | 0.34 | 0.31 |
| Total - A | 6.62 | 6.62 | 6.58 | 6.71 | 6.65 | 6.57 | 6.46 | 6.33 |
| Payments: |  |  |  |  |  |  |  |  |
| On Term Loan |  |  |  |  |  |  |  |  |
| Interest | 0.73 | 0.57 | 0.32 | 0.08 | 0.00 | 0.00 | 0.00 | 0.00 |
| Installme | 1.24 | 1.87 | 1.87 | 0.62 | 0.00 | 0.00 | 0.00 | 0.00 |
| On Working Capital |  |  |  |  |  |  |  |  |
| Interest | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 |
|  |  |  |  |  |  |  |  |  |
| $\begin{array}{\|l} \hline \text { DSCR = } \\ \text { A/B } \\ \hline \end{array}$ | 2.85 | 2.38 | 2.59 | 6.39 | 19.10 | 18.87 | 18.56 | 18.17 |
| Average DSCR |  |  |  | 2.61 |  |  |  |  |

IV
Cash Flow
$\qquad$

| Source | Im <br> period | 1st Year | 2nd Year | 3rd Year | 4th Year | 5th Year | 6th Year | 7th Year |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Gross Profit | 0.00 | 6.36 | 6.44 | 6.50 | 6.73 | 6.72 | 6.68 | 6.60 |
| Add: Depreciation |  | 0.64 | 0.57 | 0.52 | 0.47 | 0.42 | 0.38 | 0.34 |
| Term Loan | 5.60 |  |  |  |  |  |  |  |
| Working Capital Loan |  | 2.58 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Promoters Capital | 1.40 | 0.00 | 0.00 | 0.03 | 0.10 | 0.10 | 0.10 | 0.10 |
| Preliminary \& Pre- <br> Operative <br> \& Contingency Written <br> off |  |  |  |  |  |  |  |  |
| Total | 0.20 | 0.20 | 0.20 | 0.00 | 0.00 | 0.00 | 0.00 |  |


| Application |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Fixed Capitallnvested | 7.00 |  |  |  |  |  |  |  |  |
| Increase in Current <br> Assets |  | 2.42 | 0.09 | 0.09 | 0.10 | 0.10 | 0.10 | 0.10 |  |
| Repayment of Term <br> Loan |  | 1.24 | 1.87 | 1.87 | 0.62 | 0.00 | 0.00 | 0.00 |  |
| Interest on Term Loan |  | 0.73 | 0.57 | 0.32 | 0.08 | 0.00 | 0.00 | 0.00 |  |
| Interest on WC Loan |  | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 |  |
| Income Tax |  | 0.03 | 0.05 | 0.08 | 0.13 | 0.14 | 0.13 | 0.13 |  |
| Total | 7.00 | 4.77 | 2.92 | 2.71 | 1.28 | 0.58 | 0.58 | 0.58 |  |


| Opening Balance | 0.00 | 0.00 | 5.01 | 9.31 | 13.84 | 19.85 | 26.50 | 33.07 |
| :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Surplus | 0.00 | 5.01 | 4.30 | 4.53 | 6.01 | 6.65 | 6.57 | 6.46 |
| Closing Balance | 0.00 | 5.01 | 9.31 | 13.84 | 19.85 | 26.50 | 33.07 | 39.54 |

Projected Balance
v Sheet

| Particulars | 1st Year | 2nd Year | 3rd Year | 4th Year | 5th Year | 6th Year | 7th Year | 8th Year |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Liabilities |  |  |  |  |  |  |  |  |


| Promoters Capitalperiodic | 1.40 | 1.40 | 1.43 | 1.52 | 1.62 | 1.72 | 1.82 | 1.93 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Retained Profit | 5.26 | 10.73 | 16.48 | 22.64 | 28.88 | 35.07 | 41.19 | 47.22 |
| Term Loan O/S | 4.36 | 2.49 | 0.62 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Working Capital Loan | 2.58 | 2.58 | 2.58 | 2.58 | 2.58 | 2.58 | 2.58 | 2.58 |
| Current Liabilities | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Sundry Creditors | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| $\begin{aligned} & \text { Tota } \\ & \mathrm{I} \\ & \hline \end{aligned}$ | 13.59 | 17.20 | 21.10 | 26.74 | 33.07 | 39.37 | 45.60 | 51.73 |
| Assets |  |  |  |  |  |  |  |  |
| Gross Fixed Assets | 6.39 | 5.75 | 5.17 | 4.66 | 4.19 | 3.77 | 3.39 | 3.06 |
| Less: Depreciation | 0.64 | 0.57 | 0.52 | 0.47 | 0.42 | 0.38 | 0.34 | 0.31 |
| Net Fixed Assets | 5.75 | 5.17 | 4.66 | 4.19 | 3.77 | 3.39 | 3.06 | 2.75 |
| $\begin{array}{\|l\|} \hline \text { Balance of Preliminary } \\ \& \\ \text { Pre-Op \& Contingency } \\ \hline \end{array}$ | 0.41 | 0.20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Current Assets | 2.42 | 2.51 | 2.61 | 2.70 | 2.80 | 2.90 | 3.00 | 3.11 |
| Cash in Bank / Hand | 5.01 | 9.31 | 13.84 | 19.85 | 26.50 | 33.07 | 39.54 | 45.87 |


| Tota I | 13.59 | 17.20 | 21.10 | 26.74 | 33.07 | 39.37 | 45.60 | 51.73 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  Break Even <br> VI -i Analysis |  |  |  |  |  |  |  |  |
| FIXED COST |  |  |  |  |  |  |  |  |
| Salaries | 5.55 | 5.83 | 6.12 | 6.42 | 6.75 | 7.08 | 7.44 | 7.81 |
| Repair \& Maintenance | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 |
| Insurance | 0.60 | 0.66 | 0.73 | 0.80 | 0.88 | 0.97 | 1.06 | 1.17 |
| Administrative expenses | 0.94 | 1.03 | 1.14 | 1.25 | 1.38 | 1.51 | 1.67 | 1.83 |
| Depreciation | 0.64 | 0.57 | 0.52 | 0.47 | 0.42 | 0.38 | 0.34 | 0.31 |
| Interest on MM Ioan |  |  |  |  |  |  |  |  |
| Interest on Term Ioan | 0.73 | 0.57 | 0.32 | 0.08 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | 8.53 | 8.73 | 8.90 | 9.10 | 9.50 | 10.02 | 10.59 | 11.20 |

VARIABLE COST

| Raw Materials | 26.42 | 27.18 | 27.93 | 28.69 | 29.44 | 30.20 | 30.95 | 31.71 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Wages | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Power Charges | 1.09 | 1.12 | 1.15 | 1.18 | 1.21 | 1.24 | 1.27 | 1.30 |
| Selling expenses | 0.07 | 0.07 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 |
| Interest on WC Ioan | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 |

## Courtesy :

| Total | 27.93 | 28.72 | 29.50 | 30.29 | 31.08 | 31.87 | 32.66 | 33.44 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Break Even Point And Ratio Analysis |  |  |  |  |  |  |  |  |
| Particulars | 1st Year | $\begin{aligned} & \hline \text { 2nd } \\ & \text { Year } \end{aligned}$ | 3rd Year | 4th Year | 5th Year | 6th Year | 7th Year | 8th Year |
| Fixed Cost | 8.53 | 8.73 | 8.90 | 9.10 | 9.50 | 10.02 | 10.59 | 11.20 |
| Variable Cost | 27.93 | 28.72 | 29.50 | 30.29 | 31.08 | 31.87 | 32.66 | 33.44 |
| Total Cost | 36.46 | 37.45 | 38.40 | 39.39 | 40.58 | 41.89 | 43.24 | 44.64 |
| Sales | 41.34 | 42.53 | 43.71 | 44.89 | 46.07 | 47.25 | 48.43 | 49.61 |
| Contribution (Sales -VC) | 13.42 | 13.81 | 14.20 | 14.59 | 14.99 | 15.38 | 15.77 | 16.17 |
| $\begin{aligned} & \text { B.E.P in \% } \\ & =(\text { FC/Contributi } \end{aligned}$ | 64\% | 63\% | 63\% | 62\% | 63\% | 65\% | 67\% | 69\% |
| Break Even Sales $=($ BEP*Sale | 26.28 | 26.90 | 27.38 | 27.98 | 29.19 | 30.78 | 32.50 | 34.37 |
| Break Even Units in quantity | 500536 | 498135 | 493360 | 490851 | 499030 | 513041 | 528531 | 545521 |
| Current Ratio | 2.88 | 4.58 | 6.38 | 8.74 | 11.36 | 13.94 | 16.49 | 18.99 |
| Net Profit Ratio $=$ (Net Profit/Sales) | 13\% | 13\% | 13\% | 14\% | 14\% | 13\% | 13\% | 12\% |

## VII Debt Equity Ratio

DER $=$ LONG TERM LOAN LIABILITY/(CAPITAL)

| Particulars | 1st <br> Year | 2nd Year | 3rd <br> Year | 4th Year | 5th Year | 6th Year | 7th Year | 8th Year |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Term Loan O/S | 4.36 | 2.49 | 0.62 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |
| Promoters Capital- <br> periodic | 1.40 | 1.40 | 1.43 | 1.52 | 1.62 | 1.72 | 1.82 | 1.93 |  |
| DER | 3.11 | 1.78 | 0.44 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |
| DER (Average 4 yrs) | 1.07 |  |  |  |  |  |  |  |  |

VIII Pay Back Period

| Particulars | Oth Year | 1st Year | 2nd <br> Year | 3rd Year | 4th Year | 5th Year | 6th Year | 7 th Year |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Cash flows After Tax | -7.65 | 5.89 | 6.05 | 6.26 | 6.63 | 6.65 | 6.57 | 6.46 |
| PV factor @ K=.13 | 1.00 | 0.89 | 0.78 | 0.69 | 0.61 | 0.54 | 0.48 | 0.43 |

## Courtesy :

| Present Value @ K=.13 <br> Cumulative Cash | -7.65 | 5.22 | 4.74 | 4.34 | 4.07 | 3.60 | 3.15 | 2.75 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | -2.43 | 2.30 | 6.64 | 10.71 | 14.31 | 17.47 | 20.22 |
| Payback Period | 1 | In between 1 and 2 |  |  |  |  |  |  |
| year |  |  |  |  |  |  |  |  |


| Net Present Value (NPV) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Particulars | Oth Year | 1st Year | $\begin{aligned} & \text { 2nd } \\ & \text { Year } \end{aligned}$ | 3rd Year | 4th Year | 5th Year | 6th Year | 7th Year |
| Cash flows After Tax | $\begin{aligned} & - \\ & \hline 7.6 \\ & 5 \end{aligned}$ | 5.89 | 6.05 | 6.26 | 6.63 | 6.65 | 6.57 | 6.46 |
| Net Present Value | 17.90 |  |  |  |  |  |  |  |


| X Internal Rate of Return |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Particulars | Oth Year | 1st Year | 2nd Year | 3rd Year | 4th Year | 5th Year | 6th Year | 7th Year |
| Cash flows Before Tax | $\begin{array}{l\|} \hline- \\ 7.6 \\ 5 \\ \hline \end{array}$ | 5.92 | 6.10 | 6.34 | 6.76 | 6.79 | 6.70 | 6.59 |
| IRR Before Tax -5yrs | 75\% |  |  |  |  |  |  |  |
| Cash flows After Tax | $\begin{array}{l\|} \hline- \\ 7.6 \\ 5 \\ \hline \end{array}$ | 5.89 | 6.05 | 6.26 | 6.63 | 6.65 | 6.57 | 6.46 |
| IRR After Tax -5yrs | 75\% |  |  |  |  |  |  |  |

Source:- Udyami Mitra/Sidbi
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