



## **DETAILED PROJECT REPORT**

### **DRIED PRAWNS UNIT**

### **UNDER PMFME SCHEME**



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**1. PROJECT SUMMARY**

|   |   |  |
|---|---|--|
| 1. Name of the proposed project                   | : | Dried Prawns Unit  |
| 2. Nature of proposed project                     | : | Proprietorship/Company/Partnership   |
| 3. Proposed project capacity                      | : | 216000 Kg/annum (30,35,40,45&50% capacity utilization in 1 <sup>st</sup> to 5 <sup>th</sup> Year respectively) |
| 4. Raw material                                   | : | Fresh Prawns, Salt, Spices and condiments  |
| 5. Major product outputs                          | : | Dried Prawns   |
| 6. Total project cost                             | : | Rs. 39.96 Lakh   |
| • Land development, building & Civil Construction | : | Nil  |
| • Machinery and equipment's                       | : | Rs. 30.30 Lakh   |
| • Miscellaneous Fixed Assets                      | : | Rs. 2.00 Lakh  |
| • Working capital                                 | : | Rs. 7.66 Lakh  |
| 7. Means of Finance                               |   |  |
| • Subsidy (max 10lakhs)                           | : | Rs. 10.00 Lakh   |
| • Promoter's contribution (min10%)                | : | Rs. 5.29 Lakh  |
| • Term loan                                       | : | Rs. 17.77 Lakh   |
| • Working Capital Requirement                     | : | Rs. 6.89 Lakh  |
| 8. Profit after Depreciation, Interest & Tax      |   |  |
| • 1 <sup>st</sup> year                            | : | Rs. 2.06 Lakh  |
| • 2 <sup>nd</sup> year                            | : | Rs. 6.27 Lakh  |
| • 3 <sup>rd</sup> year                            | : | Rs. 9.89 Lakh  |
| • 4 <sup>th</sup> year                            | : | Rs. 13.97 Lakh   |
| • 5 <sup>th</sup> year                            | : | Rs. 18.46 Lakh   |
| 9. Average DSCR                                   | : | Rs. 3.19   |
| 10. Term loan repayment                           | : | 5 Years with 6 months grace period   |

## 2. ABOUT THE PRODUCT

### 2.1. PRODUCT INTRODUCTION:

Aquaculture is defined as underwater agriculture mainly to rise the production above the natural, wild level. It implies some form of intervention in the rearing process by exploiting water bodies to enhance production through related stocking density, feeding and protection from predators. There is increase in the culture of prawn because they are rich in protein, less in fat, rich in taste and high demand in both regional and global market.

The prawn *M. rosenbergii* is native to Indo-West Pacific from northwest India to Vietnam, Philippines, New Guinea and northern Australia. Prawns and shrimps are one of the most delicious seafood, its popularity has created its demand around the world. Fresh and clean prawns can be eaten cooked or uncooked with sauce.

From nutritional point of view, they are low in calories, low in saturated fats, high in protein, it includes all nine-essential amino acids. They are rich source of omega 3 fatty acid which reduces the risk of cardio vascular diseases. Prawn is source of astaxanthin and selenium, natural antioxidants. Eating prawns would provide Vitamin A (180 IU), Vitamin D (2 IU), Vitamin E (1.32 µg), Vitamin B12 (1.11 mg) and vitamin B3 (1.77mg). prawns are source of dietary minerals such as Ca, Fe etc.

Prawns deteriorate rapidly under ambient temperature because of high moisture content and presence of micro and macronutrients. Drying technique has been used all over the world since prehistoric time to preserve the food. Drying of prawns reduces moisture content thereby extending the shelf life, provides ease of handling, transportation and desirable flavour, colour and odour.

## **2.2. MARKET POTENTIAL:**

Prawns are important commodity accounting for 19% of international seafood trade. India is becoming a leading country in aquaculture production and trade.

There is rise in demand of dried prawns as there is growth in demand of ready to eat foods. With the rapid urbanization, hectic work schedules, nuclear families and increased number of working members of the family, there is evidence of healthy production of prawns and shrimp market.

Rising health concern is also one factor boosting the growth of prawn market, health benefits of prawns include rich in omega 3 Fatty acid, improved brain and bone health. During covid period there is rise in consumption of prawns and shrimps due to the fact that it will help fight the diseases owing to the presence of antioxidants.

Manufacturers are producing various prawns snack products such as chips, wafers and cracker. Prawn and shrimp snack industry is growing because of easy availability, long shelf life, nutrition as well as taste. Hence with increase in such product there is also increase in demand of dried prawns as they are used as raw material.

Prawns are not just used in food industry but also in pharmaceutical and cosmetics industry. Prawn has carotenoid astaxanthin which is used in anti-ageing and sunscreen by reducing ageing in the skin related to UV rays. Due to these properties manufactures are planning to use prawns in cosmetics products.

The Indian Government is promoting sustainable farming practices to produce high-quality 'sustainable' in order to minimize the environmental effects of prawn & shrimp aquaculture. Moreover, the Seafood Exporters Association of India (SEAI) and the Marine Products Export Development Authority (MPEDA) are supporting the export of prawn products such as dried, especially for ready-to-eat and ready-to-cook products.

### **2.3. RAW MATERIAL DESCRIPTION:**

The major raw material requirement for producing dried prawns are fresh prawns. The minor ingredient may contain salt, spices and condiments.

## **3. PROCESS FLOW CHART**

### **Receiving of the fresh prawns**

Prawns received for drying are head-on, small and fresh. They are delivered on ice by fishermen. Fishing method should be such that to minimize spoilage and damage to Prawn before landing. Chilling is the important way of maintaining quality and avoid microbial deterioration o of fresh prawns.

### **Sorting and washing of prawns**

After prawns are arrived at processing facility, they are sorting from other catch such as leaves, debris and impurities. Cooking of prawns with other catch can affect the quality, taste and colour of product. Prawns are also sorted by size such as small, large and medium because large prawns require more cooking time as compared to the smaller prawn.

After sorting based on size, fresh prawns are thoroughly cleaned with water to remove residual dirt, bacteria and to reduce microbial load.

### **Cooking and draining**

Cooking inactivates enzyme, reduces microbial growth, lowers water activity, enhances colour and flavour. Method used for cooking is high temperature and short time. Cooking too long will

affect the texture and reduces flavour. The end point of cooking is when prawn turn pink, curl up and feel firm when they are pressed. After cooking, prawns are removed water and water is drained.

### **Drying**

Drying reduces water content and prevents microbial deterioration of prawns. Drying of the prawns also makes de shelling easier. Sun drying as well as industrial drying can be used. The final moisture content after drying should be between 20 – 30% and salt content should be less than 7%.

### **Peeling**

Peeling involves removal of shell and head. Peeling can be done mechanically or manually. In case of large prawns and small quantity, manual peeling is done. Net bag is used after machine peeling to clean up the product. Peeling should be done in hygienic area free from contamination as well as pests such as cockroaches, flies and other insects.

### **Grading and weighing**

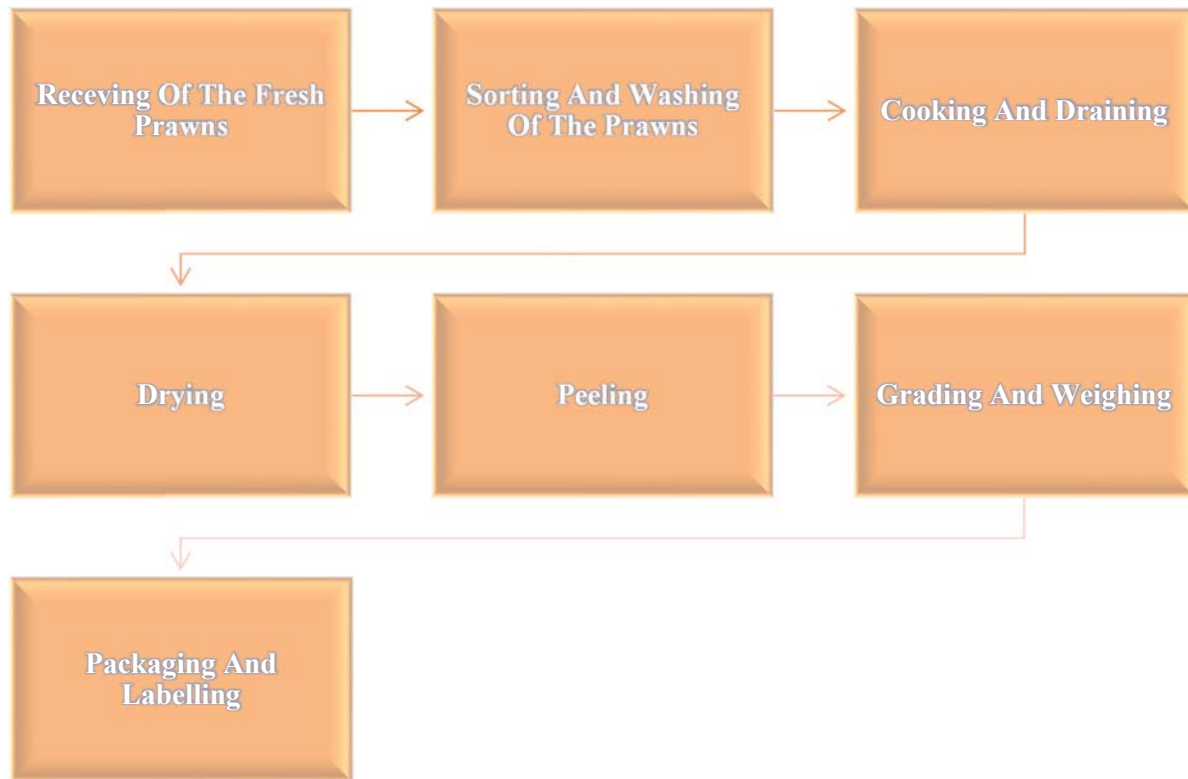
Grading into different sizes, separating out shell, broken pieces, stones, leaves and other impurities improves the quality of final product.

Weighing into different size of dried prawns determine the selling price and potential value of the final product.

### **Packing and labelling**

Packaging material should protect the material from foreign contamination, mechanical damage, dirt, dust, microbial contamination and preserve the quality. Dried prawns should be packed as soon into food grade plastics bags or containers to prevent absorption of moisture into final product.

Labelling should contain essential information about product such as storage conditions, shelf life and nutritional information.



**Flow chart of dried prawns' production**



## **4. ECONOMICS OF THE PROJECT**

### **4.1. BASIS & PRESUMPTIONS**

1. Production Capacity of Dried Prawns is 800 Kg. per day. First year, Capacity has been taken @ 30%.
2. Working shift of 8 hours per day has been considered.
3. Raw Material stock is for 5 days and Finished goods Closing Stock has been taken for 5 days.
4. Credit period to Sundry Debtors has been given for 14 days.
5. Credit period by the Sundry Creditors has been provided for 7 days.
6. Depreciation and Income tax has been taken as per the Income tax Act, 1961.
7. Interest on working Capital Loan and Term loan has been taken at 11%.
8. Salary and wages rates are taken as per the Current Market Scenario.
9. Power Consumption has been taken at 30 KW.
10. Increase in sales and raw material costing has been taken @ 5% on a yearly basis.

## 4.2. CAPACITY, UTILIZATION, PRODUCTION & OUTPUT

| <b>COMPUTATION OF PRODUCTION OF DRIED PRAWNS</b> |        |             |
|--|--------|-------------|
| <b>Items to be Manufactured</b>                  |        |             |
| Dried Prawns                                     |        |             |
|  |        |             |
| Total working Hours                              | 8      |             |
| Plant capacity Per Day                           | 800    | Kg          |
| Working days in a month                          | 25     | Days        |
| Working days per annum                           | 300    |             |
| Wastage Considered                               | 10%    |             |
| Raw material requirement                         | 240000 | Kg          |
| Final Output per annum after wastage             | 216000 | Kg          |
| Final Product to be packed in 1 Kg Packet        |        |             |
| Number of Packets per annum                      | 216000 | 1 kg Packet |

| <b>Production of Dried Prawns</b> |                 |           |
|-----------------------------------|-----------------|-----------|
| <b>Production</b>                 | <b>Capacity</b> | <b>KG</b> |
| 1st year                          | 30%             | 64,800    |
| 2nd year                          | 35%             | 75,600    |
| 3rd year                          | 40%             | 86,400    |
| 4th year                          | 45%             | 97,200    |
| 5th year                          | 50%             | 1,08,000  |




| <b>Raw Material Cost</b> |                             |                       |                             |
|--------------------------|-----------------------------|-----------------------|-----------------------------|
| <b>Year</b>              | <b>Capacity Utilisation</b> | <b>Rate (per kg.)</b> | <b>Amount (Rs. in lacs)</b> |
| 1st year                 | 30%                         | 120.00                | 86.40                       |
| 2nd year                 | 35%                         | 126.00                | 105.84                      |
| 3rd year                 | 40%                         | 132.00                | 126.72                      |
| 4th year                 | 45%                         | 139.00                | 150.12                      |
| 5th year                 | 50%                         | 146.00                | 175.20                      |





| <b>COMPUTATION OF SALE</b> |                 |                 |                 |                 |                 |
|----------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| <b>Particulars</b>         | <b>1st year</b> | <b>2nd year</b> | <b>3rd year</b> | <b>4th year</b> | <b>5th year</b> |
| Op Stock                   | -               | 1,080           | 1,260           | 1,440           | 1,620           |
| Production                 | 64,800          | 75,600          | 86,400          | 97,200          | 1,08,000        |
| Less : Closing Stock       | 1,080           | 1,260           | 1,440           | 1,620           | 1,800           |
| <b>Net Sale</b>            | <b>63,720</b>   | <b>75,420</b>   | <b>86,220</b>   | <b>97,020</b>   | <b>1,07,820</b> |
| Sale price per packet      | 210.00          | 221.00          | 232.00          | 244.00          | 256.00          |
| <b>Sales (in Lacs)</b>     | <b>133.81</b>   | <b>166.68</b>   | <b>200.03</b>   | <b>236.73</b>   | <b>276.02</b>   |

### 4.3. PREMISES/INFRASTRUCTURE

The approximate total area required for complete factory setup is 2500-3500 Sq. ft. for smooth production including storage area. It is expected that the premises will be on rental.

#### 4.4. MACHINERY & EQUIPMENTS

| Machine Name           | Description   | Machine Image.  |
|------------------------|---|---|
| Prawn cleaning machine | The machine cleans and removes impurities from prawn. It consists of water pump that turn on water in stainless steel pool so that water can clean impurities. The machine works for both headless as well as prawns with head.                   |    |
| Prawn cooking machine  | Prawn cooking machine is used for cooking live fresh prawns. Steam from boiler with high temperature heats water in the stainless-steel pool.   |   |
| Prawn cooling machine  | Cooled water cooling is used after cooking the prawn and placed after cooking machine. This equipment consists of a conveyer belt, a driving device, a groove type upper supporting roller, a transmission drum, an electric control device, etc. |  |
| Prawns drying machine  | Industrial prawn drying machine / Hot air-drying machine is made with stainless steel and equipped with plastic, stainless steel and customized drying racks.   |   |

|   |  |   |
|---|--|---|
|   |  |    |
| Prawn peeling and de heading machine    | In De heading production line worker removes shell and head from the cooked prawns. The equipment consists of driving device, conveyor belt and electronic control device.   |    |
| Prawns grading machine                  | Grading machine is used to sort prawns in different sizes. Its working principle is to grade prawns based on their diameters adjusting the distance of rollers. Grading the prawns through machine reduces the labour cost and increases the productivity to 98%.  |   |
| Packaging machine                       | Packaging machine is used for filling, sealing, cutting, heating pouches. packaging speed can be changed according to the speed of production. touch screen display for setting up different parameters. It involves setting up of parameter such as bag length and weight followed by sealing of bag and final product delivered by conveyor. |  |
| Material handling and other Equipment's | These Equipment's are used for material handling. Other equipment's like water pumps, motors, etc are also used.   |   |

PM FME- Detailed Project Report of Dried Prawns Unit



| Machine   | Unit | Rate   | Price  |
|---|------|--------|--------|
| Prawn cleaning machine  | 1    | 350000 | 350000 |
| Prawn cooking machine   | 1    | 384000 | 384000 |
| Prawn cooling machine   | 1    | 320000 | 320000 |
| Prawns drying machine   | 1    | 306000 | 306000 |
| Prawn peeling and de heading machine                                      | 1    | 635000 | 635000 |
| Prawns grading machine  | 1    | 765000 | 765000 |
| Packaging machine   | 1    | 220000 | 220000 |
| Material handling and other equipment's (Trolley, weighing machine, etc.) | -    | 50000  | 50000  |

**Note:** Total Machinery cost shall be Rs 30.30 lakh including equipment's but excluding GST and Transportation Cost.

#### 4.5. MISCELLANEOUS FIXED ASSETS

- Water Supply Arrangements
- Furniture & Fixtures
- Computers & Printers

#### 4.6. TOTAL COST OF PROJECT

| <b>COST OF PROJECT</b> |               |
|------------------------|---------------|
|                        | (in Lacs)     |
| <b>PARTICULARS</b>     | <b>Amount</b> |
| Land & Building        | Owned/Rented  |
| Plant & Machinery      | 30.30         |
| Miscellaneous Assets   | 2.00          |
| Working capital        | 7.66          |
| <b>Total</b>           | <b>39.96</b>  |

#### 4.7. MEANS OF FINANCE

| <b>MEANS OF FINANCE</b>        |               |
|--------------------------------|---------------|
|                                |               |
| <b>PARTICULARS</b>             | <b>AMOUNT</b> |
| Own Contribution (min 10%)     | 5.29          |
| Subsidy @35%(Max. Rs 10 Lac)   | 10.00         |
| Term Loan @ 55%                | 17.77         |
| Working Capital (Bank Finance) | 6.89          |
| <b>Total</b>                   | <b>39.96</b>  |

**4.8. TERM LOAN:** Term loan of Rs. 17.77 Lakh is required for project cost of Rs. 39.96 Lakh

#### 4.9. TERM LOAN REPAYMENT& INTEREST SCHEDULE

| REPAYMENT SCHEDULE OF TERM LOAN |                 |        |          |       |          |           |                 |
|---------------------------------|-----------------|--------|----------|-------|----------|-----------|-----------------|
|                                 |                 |        |          |       |          | Interest  | 11.00%          |
| Year                            | Particulars     | Amount | Addition | Total | Interest | Repayment | Closing Balance |
| <b>1st</b>                      | Opening Balance |        |          |       |          |           |                 |
|                                 | 1st month       | -      | 17.77    | 17.77 | -        | -         | 17.77           |
|                                 | 2nd month       | 17.77  | -        | 17.77 | 0.16     | -         | 17.77           |
|                                 | 3rd month       | 17.77  | -        | 17.77 | 0.16     | -         | 17.77           |
|                                 | 4th month       | 17.77  | -        | 17.77 | 0.16     | -         | 17.77           |
|                                 | 5th month       | 17.77  | -        | 17.77 | 0.16     | -         | 17.77           |
|                                 | 6th month       | 17.77  | -        | 17.77 | 0.16     | -         | 17.77           |
|                                 | 7th month       | 17.77  | -        | 17.77 | 0.16     | 0.33      | 17.44           |
|                                 | 8th month       | 17.44  | -        | 17.44 | 0.16     | 0.33      | 17.11           |
|                                 | 9th month       | 17.11  | -        | 17.11 | 0.16     | 0.33      | 16.78           |
|                                 | 10th month      | 16.78  | -        | 16.78 | 0.15     | 0.33      | 16.45           |
|                                 | 11th month      | 16.45  | -        | 16.45 | 0.15     | 0.33      | 16.12           |
|                                 | 12th month      | 16.12  | -        | 16.12 | 0.15     | 0.33      | 15.79           |
|                                 |                 |        |          |       | 1.75     | 1.97      |                 |
| <b>2nd</b>                      | Opening Balance |        |          |       |          |           |                 |
|                                 | 1st month       | 15.79  | -        | 15.79 | 0.14     | 0.33      | 15.46           |
|                                 | 2nd month       | 15.46  | -        | 15.46 | 0.14     | 0.33      | 15.13           |
|                                 | 3rd month       | 15.13  | -        | 15.13 | 0.14     | 0.33      | 14.80           |
|                                 | 4th month       | 14.80  | -        | 14.80 | 0.14     | 0.33      | 14.48           |



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|            |                 |       |   |       |             |             |       |
|------------|-----------------|-------|---|-------|-------------|-------------|-------|
|            | 5th month       | 14.48 | - | 14.48 | 0.13        | 0.33        | 14.15 |
|            | 6th month       | 14.15 | - | 14.15 | 0.13        | 0.33        | 13.82 |
|            | 7th month       | 13.82 | - | 13.82 | 0.13        | 0.33        | 13.49 |
|            | 8th month       | 13.49 | - | 13.49 | 0.12        | 0.33        | 13.16 |
|            | 9th month       | 13.16 | - | 13.16 | 0.12        | 0.33        | 12.83 |
|            | 10th month      | 12.83 | - | 12.83 | 0.12        | 0.33        | 12.50 |
|            | 11th month      | 12.50 | - | 12.50 | 0.11        | 0.33        | 12.17 |
|            | 12th month      | 12.17 | - | 12.17 | 0.11        | 0.33        | 11.84 |
|            |                 |       |   |       | <b>1.54</b> | <b>3.95</b> |       |
| <b>3rd</b> | Opening Balance |       |   |       |             |             |       |
|            | 1st month       | 11.84 | - | 11.84 | 0.11        | 0.33        | 11.51 |
|            | 2nd month       | 11.51 | - | 11.51 | 0.11        | 0.33        | 11.19 |
|            | 3rd month       | 11.19 | - | 11.19 | 0.10        | 0.33        | 10.86 |
|            | 4th month       | 10.86 | - | 10.86 | 0.10        | 0.33        | 10.53 |
|            | 5th month       | 10.53 | - | 10.53 | 0.10        | 0.33        | 10.20 |
|            | 6th month       | 10.20 | - | 10.20 | 0.09        | 0.33        | 9.87  |
|            | 7th month       | 9.87  | - | 9.87  | 0.09        | 0.33        | 9.54  |
|            | 8th month       | 9.54  | - | 9.54  | 0.09        | 0.33        | 9.21  |
|            | 9th month       | 9.21  | - | 9.21  | 0.08        | 0.33        | 8.88  |
|            | 10th month      | 8.88  | - | 8.88  | 0.08        | 0.33        | 8.55  |
|            | 11th month      | 8.55  | - | 8.55  | 0.08        | 0.33        | 8.22  |
|            | 12th month      | 8.22  | - | 8.22  | 0.08        | 0.33        | 7.90  |
|            |                 |       |   |       | <b>1.10</b> | <b>3.95</b> |       |
| <b>4th</b> | Opening Balance |       |   |       |             |             |       |
|            | 1st month       | 7.90  | - |       | 0.07        | 0.33        | 7.57  |

PM FME- Detailed Project Report of Dried Prawns Unit

|            |                 |   |      |             |             |      |  |
|------------|-----------------|---|------|-------------|-------------|------|--|
|            |                 |   |      | 7.90        |             |      |  |
| 2nd month  | 7.57            | - | 7.57 | 0.07        | 0.33        | 7.24 |  |
| 3rd month  | 7.24            | - | 7.24 | 0.07        | 0.33        | 6.91 |  |
| 4th month  | 6.91            | - | 6.91 | 0.06        | 0.33        | 6.58 |  |
| 5th month  | 6.58            | - | 6.58 | 0.06        | 0.33        | 6.25 |  |
| 6th month  | 6.25            | - | 6.25 | 0.06        | 0.33        | 5.92 |  |
| 7th month  | 5.92            | - | 5.92 | 0.05        | 0.33        | 5.59 |  |
| 8th month  | 5.59            | - | 5.59 | 0.05        | 0.33        | 5.26 |  |
| 9th month  | 5.26            | - | 5.26 | 0.05        | 0.33        | 4.93 |  |
| 10th month | 4.93            | - | 4.93 | 0.05        | 0.33        | 4.61 |  |
| 11th month | 4.61            | - | 4.61 | 0.04        | 0.33        | 4.28 |  |
| 12th month | 4.28            | - | 4.28 | 0.04        | 0.33        | 3.95 |  |
|            |                 |   |      | <b>0.67</b> | <b>3.95</b> |      |  |
| <b>5th</b> | Opening Balance |   |      |             |             |      |  |
| 1st month  | 3.95            | - | 3.95 | 0.04        | 0.33        | 3.62 |  |
| 2nd month  | 3.62            | - | 3.62 | 0.03        | 0.33        | 3.29 |  |
| 3rd month  | 3.29            | - | 3.29 | 0.03        | 0.33        | 2.96 |  |
| 4th month  | 2.96            | - | 2.96 | 0.03        | 0.33        | 2.63 |  |
| 5th month  | 2.63            | - | 2.63 | 0.02        | 0.33        | 2.30 |  |
| 6th month  | 2.30            | - | 2.30 | 0.02        | 0.33        | 1.97 |  |
| 7th month  | 1.97            | - | 1.97 | 0.02        | 0.33        | 1.64 |  |
| 8th month  | 1.64            | - | 1.64 | 0.02        | 0.33        | 1.32 |  |
| 9th month  | 1.32            | - | 1.32 | 0.01        | 0.33        | 0.99 |  |
| 10th month | 0.99            | - | 0.99 | 0.01        | 0.33        | 0.66 |  |
| 11th month | 0.66            | - |      | 0.01        | 0.33        | 0.33 |  |

|                                      |      |        |      |             |             |   |
|--------------------------------------|------|--------|------|-------------|-------------|---|
|                                      |      |        | 0.66 |             |             |   |
| 12th month                           | 0.33 | -      | 0.33 | 0.00        | 0.33        | - |
|                                      |      |        |      | <b>0.24</b> | <b>3.95</b> |   |
| DOOR TO DOOR<br>MORATORIUM<br>PERIOD | 60   | MONTHS |      |             |             |   |
|                                      | 6    | MONTHS |      |             |             |   |
| REPAYMENT PERIOD                     | 54   | MONTHS |      |             |             |   |

#### 4.10. WORKING CAPITAL CALCULATIONS

| <b>COMPUTATION OF CLOSING STOCK &amp; WORKING CAPITAL</b> |                 |                 |                 |                 | (in Lacs)       |
|---|-----------------|-----------------|-----------------|-----------------|-----------------|
| <b>PARTICULARS</b>  | <b>1st year</b> | <b>2nd year</b> | <b>3rd year</b> | <b>4th year</b> | <b>5th year</b> |
| <b><u>Finished Goods</u></b>                              |                 |                 |                 |                 |                 |
|   | 1.99            | 2.39            | 2.84            | 3.32            | 3.83            |
| <b><u>Raw Material</u></b>                                |                 |                 |                 |                 |                 |
|   | 1.44            | 1.76            | 2.11            | 2.50            | 2.92            |
| <b>Closing Stock</b>                                      | <b>3.43</b>     | <b>4.16</b>     | <b>4.95</b>     | <b>5.82</b>     | <b>6.75</b>     |

| <b>COMPUTATION OF WORKING CAPITAL REQUIREMENT</b> |               |                   |             |                     |             |
|---|---------------|-------------------|-------------|---------------------|-------------|
| <b>TRADITIONAL METHOD</b>                         |               |                   |             |                     | (in Lacs)   |
| <b>Particulars</b>                                | <b>Amount</b> | <b>Own Margin</b> |             | <b>Bank Finance</b> |             |
| Finished Goods & Raw Material                     | 3.43          |                   |             |                     |             |
| Less : Creditors                                  | 2.02          |                   |             |                     |             |
| <b>Paid stock</b>                                 | <b>1.41</b>   | <b>10%</b>        | <b>0.14</b> | <b>90%</b>          | <b>1.27</b> |
| <b>Sundry Debtors</b>                             | <b>6.24</b>   | <b>10%</b>        | <b>0.62</b> | <b>90%</b>          | <b>5.62</b> |
|   | <b>7.66</b>   |                   | <b>0.77</b> |                     | <b>6.89</b> |
| <b>MPBF</b>                                       |               |                   |             |                     | <b>6.89</b> |
| <b>WORKING CAPITAL LIMIT DEMAND ( from Bank)</b>  |               |                   |             |                     | <b>6.89</b> |
| <b>Working Capital Margin</b>                     |               |                   |             |                     | <b>0.77</b> |

**4.11. SALARY & WAGES**

| <b><u>BREAK UP OF LABOUR CHARGES</u></b> |                      |                  |                 |
|--|----------------------|------------------|-----------------|
| <b>Particulars</b>                       | <b>Wages</b>         | <b>No of</b>     | <b>Total</b>    |
|  | <b>Rs. per Month</b> | <b>Employees</b> | <b>Salary</b>   |
| Plant Operator                           | 15,000               | 3                | 45,000          |
| Supervisor                               | 18,000               | 1                | 18,000          |
| Skilled (in thousand rupees)             | 12,000               | 2                | 24,000          |
| Unskilled (in thousand rupees)           | 8,000                | 4                | 32,000          |
| <b>Total salary per month</b>            |                      |                  | <b>1,19,000</b> |
| <b>Total annual labour charges</b>       | <b>(in lacs)</b>     |                  | <b>14.28</b>    |

| <b><u>BREAK UP OF STAFF SALARY CHARGES</u></b> |                      |                  |               |
|--|----------------------|------------------|---------------|
| <b>Particulars</b>                             | <b>Salary</b>        | <b>No of</b>     | <b>Total</b>  |
|  | <b>Rs. per Month</b> | <b>Employees</b> | <b>Salary</b> |
| Administrative Staff                           | 7,000                | 2                | 14,000        |
| Manager  | 18,000               | 1                | 18,000        |
| Accountant                                     | 15,000               | 1                | 15,000        |
| <b>Total salary per month</b>                  |                      |                  | <b>47,000</b> |
| <b>Total annual Staff charges</b>              | <b>(in lacs)</b>     |                  | <b>5.64</b>   |

## 4.12 POWER REQUIREMENT

| <b>Utility Charges (per month)</b> |              |                    |
|------------------------------------|--------------|--------------------|
| <b>Particulars</b>                 | <b>value</b> | <b>Description</b> |
| Power connection required          | 30           | KWH                |
| consumption per day                | 240          | units              |
| Consumption per month              | 6,000        | units              |
| Rate per Unit                      | 10           | Rs.                |
| power Bill per month               | 60,000       | Rs.                |

## 4.13. DEPRECIATION CALCULATION

| <b>COMPUTATION OF DEPRECIATION</b> |                              |                     | (in Lacs)    |
|------------------------------------|------------------------------|---------------------|--------------|
| <b>Description</b>                 | <b>Plant &amp; Machinery</b> | <b>Miss. Assets</b> | <b>TOTAL</b> |
| Rate of Depreciation               | <b>15.00%</b>                | <b>10.00%</b>       |              |
| <b>Opening Balance</b>             | -                            | -                   | -            |
| Addition                           | 30.30                        | 2.00                | 32.30        |
| Total                              | 30.30                        | 2.00                | 32.30        |
| Less : Depreciation                | 4.55                         | 0.20                | 4.75         |
| <b>WDV at end of Year</b>          | <b>25.76</b>                 | <b>1.80</b>         | <b>27.56</b> |
| Additions During The Year          | -                            | -                   | -            |
| Total                              | 25.76                        | 1.80                | 27.56        |
| Less : Depreciation                | 3.86                         | 0.18                | 4.04         |
| <b>WDV at end of Year</b>          | <b>21.89</b>                 | <b>1.62</b>         | <b>23.51</b> |
| Additions During The Year          | -                            | -                   | -            |
| Total                              | 21.89                        | 1.62                | 23.51        |
| Less : Depreciation                | 3.28                         | 0.16                | 3.45         |
| <b>WDV at end of Year</b>          | <b>18.61</b>                 | <b>1.46</b>         | <b>20.07</b> |
| Additions During The Year          | -                            | -                   | -            |
| Total                              | 18.61                        | 1.46                | 20.07        |
| Less : Depreciation                | 2.79                         | 0.15                | 2.94         |
| <b>WDV at end of Year</b>          | <b>15.82</b>                 | <b>1.31</b>         | <b>17.13</b> |
| Additions During The Year          | -                            | -                   | -            |
| Total                              | 15.82                        | 1.31                | 17.13        |
| Less : Depreciation                | 2.37                         | 0.13                | 2.50         |
| <b>WDV at end of Year</b>          | <b>13.44</b>                 | <b>1.18</b>         | <b>14.63</b> |

**4.14. REPAIR & MAINTENANCE:** Repair & Maintenance is 3.0% of Gross Sale.

**4.15. PROJECTIONS OF PROFITABILITY ANALYSIS:**

| <b><u>PROJECTED PROFITABILITY STATEMENT</u></b> |                 |                 |                 |                 | <b>(in Lacs)</b> |
|---|-----------------|-----------------|-----------------|-----------------|------------------|
| <b>PARTICULARS</b>                              | <b>1st year</b> | <b>2nd year</b> | <b>3rd year</b> | <b>4th year</b> | <b>5th year</b>  |
| Capacity Utilisation %                          | <b>30%</b>      | <b>35%</b>      | <b>40%</b>      | <b>45%</b>      | <b>50%</b>       |
| <b><u>SALES</u></b>                             |                 |                 |                 |                 |                  |
| <b>Gross Sale</b>                               |                 |                 |                 |                 |                  |
| Dried Prawns                                    | 133.81          | 166.68          | 200.03          | 236.73          | 276.02           |
| <b>Total</b>                                    | <b>133.81</b>   | <b>166.68</b>   | <b>200.03</b>   | <b>236.73</b>   | <b>276.02</b>    |
| <b><u>COST OF SALES</u></b>                     |                 |                 |                 |                 |                  |
| Raw Material Consumed                           | 86.40           | 105.84          | 126.72          | 150.12          | 175.20           |
| Electricity Expenses                            | 7.20            | 8.28            | 9.52            | 10.95           | 12.05            |
| Depreciation                                    | 4.75            | 4.04            | 3.45            | 2.94            | 2.50             |
| Wages & labour                                  | 14.28           | 17.14           | 20.56           | 23.44           | 26.26            |
| Repair & maintenance                            | 4.01            | 5.00            | 6.00            | 7.10            | 8.28             |
| Packaging                                       | 2.68            | 3.33            | 4.00            | 4.73            | 5.52             |
| <b>Cost of Production</b>                       | <b>119.32</b>   | <b>143.63</b>   | <b>170.25</b>   | <b>199.29</b>   | <b>229.81</b>    |
| <b>Add: Opening Stock /WIP</b>                  | <b>-</b>        | <b>1.99</b>     | <b>2.39</b>     | <b>2.84</b>     | <b>3.32</b>      |
| <b>Less: Closing Stock /WIP</b>                 | <b>1.99</b>     | <b>2.39</b>     | <b>2.84</b>     | <b>3.32</b>     | <b>3.83</b>      |
| Cost of Sales                                   | 117.33          | 143.23          | 169.81          | 198.80          | 229.30           |
| <b>GROSS PROFIT</b>                             | <b>16.48</b>    | <b>23.45</b>    | <b>30.22</b>    | <b>37.93</b>    | <b>46.72</b>     |
|   | <b>12.32%</b>   | <b>14.07%</b>   | <b>15.11%</b>   | <b>16.02%</b>   | <b>16.93%</b>    |
| Salary to Staff                                 | 5.64            | 6.77            | 8.12            | 9.10            | 10.46            |
| Interest on Term Loan                           | 1.75            | 1.54            | 1.10            | 0.67            | 0.24             |
| Interest on working Capital                     | 0.76            | 0.76            | 0.76            | 0.76            | 0.76             |
| Rent  | 3.60            | 3.96            | 4.36            | 4.79            | 5.27             |
| selling & adm exp                               | 2.68            | 3.67            | 4.40            | 5.21            | 6.07             |
| <b>TOTAL</b>                                    | <b>14.42</b>    | <b>16.69</b>    | <b>18.74</b>    | <b>20.52</b>    | <b>22.80</b>     |
| <b>NET PROFIT</b>                               | <b>2.06</b>     | <b>6.76</b>     | <b>11.48</b>    | <b>17.40</b>    | <b>23.93</b>     |
|   | <b>1.54%</b>    | <b>4.06%</b>    | <b>5.74%</b>    | <b>7.35%</b>    | <b>8.67%</b>     |
| Taxation  | -               | 0.49            | 1.59            | 3.43            | 5.47             |
| <b>PROFIT (After Tax)</b>                       | <b>2.06</b>     | <b>6.27</b>     | <b>9.89</b>     | <b>13.97</b>    | <b>18.46</b>     |

#### 4.16. BREAK EVEN POINT ANALYSIS

| <b>BREAK EVEN POINT ANALYSIS</b>              |               |               |               |               |               |
|---|---------------|---------------|---------------|---------------|---------------|
| <b>Year</b>                                   | <b>I</b>      | <b>II</b>     | <b>III</b>    | <b>IV</b>     | <b>V</b>      |
| <b>Net Sales &amp; Other Income</b>           | 133.81        | 166.68        | 200.03        | 236.73        | 276.02        |
| Less : Op. WIP Goods                          | -             | 1.99          | 2.39          | 2.84          | 3.32          |
| Add : Cl. WIP Goods                           | 1.99          | 2.39          | 2.84          | 3.32          | 3.83          |
| <b>Total Sales</b>                            | <b>135.80</b> | <b>167.08</b> | <b>200.47</b> | <b>237.21</b> | <b>276.53</b> |
| <b>Variable &amp; Semi Variable Exp.</b>      |               |               |               |               |               |
| Raw Material Consumed                         | 86.40         | 105.84        | 126.72        | 150.12        | 175.20        |
| Electricity Exp/Coal Consumption at 85%       | 6.12          | 7.04          | 8.09          | 9.31          | 10.24         |
| Wages & Salary at 60%                         | 11.95         | 14.34         | 17.21         | 19.52         | 22.03         |
| Selling & administrative Expenses 80%         | 2.14          | 2.93          | 3.52          | 4.17          | 4.86          |
| Interest on working Capital                   | 0.758058      | 0.758058      | 0.758058      | 0.758058      | 0.758058      |
| Repair & maintenance                          | 4.01          | 5.00          | 6.00          | 7.10          | 8.28          |
| Packaging                                     | 2.68          | 3.33          | 4.00          | 4.73          | 5.52          |
| <b>Total Variable &amp; Semi Variable Exp</b> | <b>114.06</b> | <b>139.25</b> | <b>166.30</b> | <b>195.71</b> | <b>226.88</b> |
| <b>Contribution</b>                           | <b>21.74</b>  | <b>27.84</b>  | <b>34.17</b>  | <b>41.50</b>  | <b>49.64</b>  |
| <b>Fixed &amp; Semi Fixed Expenses</b>        |               |               |               |               |               |
| Electricity Exp/Coal Consumption at 15%       | 1.08          | 1.24          | 1.43          | 1.64          | 1.81          |
| Wages & Salary at 40%                         | 7.97          | 9.56          | 11.47         | 13.02         | 14.69         |
| Interest on Term Loan                         | 1.75          | 1.54          | 1.10          | 0.67          | 0.24          |
| Depreciation                                  | 4.75          | 4.04          | 3.45          | 2.94          | 2.50          |
| Selling & administrative Expenses 20%         | 0.54          | 0.73          | 0.88          | 1.04          | 1.21          |
| Rent  | 3.60          | 3.96          | 4.36          | 4.79          | 5.27          |
| <b>Total Fixed Expenses</b>                   | <b>19.67</b>  | <b>21.08</b>  | <b>22.69</b>  | <b>24.10</b>  | <b>25.72</b>  |
| <b>Capacity Utilization</b>                   | <b>30%</b>    | <b>35%</b>    | <b>40%</b>    | <b>45%</b>    | <b>50%</b>    |
| <b>OPERATING PROFIT</b>                       | <b>2.06</b>   | <b>6.76</b>   | <b>11.48</b>  | <b>17.40</b>  | <b>23.93</b>  |
| <b>BREAK EVEN POINT</b>                       | <b>27%</b>    | <b>27%</b>    | <b>27%</b>    | <b>26%</b>    | <b>26%</b>    |
| <b>BREAK EVEN SALES</b>                       | <b>122.90</b> | <b>126.51</b> | <b>133.11</b> | <b>137.74</b> | <b>143.25</b> |

**4.17. PROJECTED BALANCE SHEET**

| <b>PROJECTED BALANCE SHEET</b> |                 |                 |                 |                 | <b>(in Lacs)</b> |
|--------------------------------|-----------------|-----------------|-----------------|-----------------|------------------|
| <b>PARTICULARS</b>             | <b>1st year</b> | <b>2nd year</b> | <b>3rd year</b> | <b>4th year</b> | <b>5th year</b>  |
| <b><u>Liabilities</u></b>      |                 |                 |                 |                 |                  |
| Capital                        |                 |                 |                 |                 |                  |
| opening balance                |                 | 14.36           | 16.12           | 18.52           | 21.49            |
| Add:- Own Capital              | 5.29            |                 |                 |                 |                  |
| Add:- Retained Profit          | 2.06            | 6.27            | 9.89            | 13.97           | 18.46            |
| Less:- Drawings                | 3.00            | 4.50            | 7.50            | 11.00           | 14.50            |
| Subsidy/grant                  | 10.00           |                 |                 |                 |                  |
| Closing Balance                | 14.36           | 16.12           | 18.52           | 21.49           | 25.44            |
| Term Loan                      | 15.79           | 11.84           | 7.90            | 3.95            | -                |
| Working Capital Limit          | 6.89            | 6.89            | 6.89            | 6.89            | 6.89             |
| Sundry Creditors               | 2.02            | 2.47            | 2.96            | 3.50            | 4.09             |
| Provisions & Other Liab        | 0.40            | 0.50            | 0.60            | 0.72            | 0.86             |
| <b>TOTAL :</b>                 | <b>39.45</b>    | <b>37.83</b>    | <b>36.86</b>    | <b>36.55</b>    | <b>37.29</b>     |
| <b><u>Assets</u></b>           |                 |                 |                 |                 |                  |
| <b>Fixed Assets ( Gross)</b>   | 32.30           | 32.30           | 32.30           | 32.30           | 32.30            |
| Gross Dep.                     | 4.75            | 8.79            | 12.23           | 15.17           | 17.67            |
| <b>Net Fixed Assets</b>        | <b>27.56</b>    | <b>23.51</b>    | <b>20.07</b>    | <b>17.13</b>    | <b>14.63</b>     |
| <b>Current Assets</b>          |                 |                 |                 |                 |                  |
| Sundry Debtors                 | 6.24            | 7.78            | 9.33            | 11.05           | 12.88            |
| Stock in Hand                  | 3.43            | 4.16            | 4.95            | 5.82            | 6.75             |
| Cash and Bank                  | 2.23            | 2.38            | 2.51            | 2.55            | 3.03             |
| <b>TOTAL :</b>                 | <b>39.45</b>    | <b>37.83</b>    | <b>36.86</b>    | <b>36.55</b>    | <b>37.29</b>     |



**4.18. CASH FLOW STATEMENT**

| <b><u>PROJECTED CASH FLOW STATEMENT</u></b> |                 |                 |                 |                 | <b>(in Lacs)</b> |
|---|-----------------|-----------------|-----------------|-----------------|------------------|
| <b>PARTICULARS</b>                          | <b>1st year</b> | <b>2nd year</b> | <b>3rd year</b> | <b>4th year</b> | <b>5th year</b>  |
| <b><u>SOURCES OF FUND</u></b>               |                 |                 |                 |                 |                  |
| Own Margin                                  | 5.29            |                 |                 |                 |                  |
| Net Profit                                  | 2.06            | 6.76            | 11.48           | 17.40           | 23.93            |
| Depriciation & Exp. W/off                   | 4.75            | 4.04            | 3.45            | 2.94            | 2.50             |
| Increase in Cash Credit                     | 6.89            | -               | -               | -               | -                |
| Increase In Term Loan                       | 17.77           | -               | -               | -               | -                |
| Increase in Creditors                       | 2.02            | 0.45            | 0.49            | 0.55            | 0.59             |
| Increase in Provisions & Oth lib            | 0.40            | 0.10            | 0.10            | 0.12            | 0.14             |
| Sunsidy/grant                               | 10.00           |                 |                 |                 |                  |
| <b>TOTAL :</b>                              | <b>49.17</b>    | <b>11.36</b>    | <b>15.51</b>    | <b>21.01</b>    | <b>27.16</b>     |
| <b><u>APPLICATION OF FUND</u></b>           |                 |                 |                 |                 |                  |
| Increase in Fixed Assets                    | 32.30           |                 |                 |                 |                  |
| Increase in Stock                           | 3.43            | 0.73            | 0.79            | 0.87            | 0.93             |
| Increase in Debtors                         | 6.24            | 1.53            | 1.56            | 1.71            | 1.83             |
| Repayment of Term Loan                      | 1.97            | 3.95            | 3.95            | 3.95            | 3.95             |
| Drawings                                    | 3.00            | 4.50            | 7.50            | 11.00           | 14.50            |
| Taxation                                    | -               | 0.49            | 1.59            | 3.43            | 5.47             |
| <b>TOTAL :</b>                              | <b>46.95</b>    | <b>11.20</b>    | <b>15.38</b>    | <b>20.97</b>    | <b>26.68</b>     |
| Opening Cash & Bank Balance                 | -               | 2.23            | 2.38            | 2.51            | 2.55             |
| Add : Surplus                               | 2.23            | 0.15            | 0.13            | 0.04            | 0.48             |
| Closing Cash & Bank Balance                 | <b>2.23</b>     | <b>2.38</b>     | <b>2.51</b>     | <b>2.55</b>     | <b>3.03</b>      |

#### 4.19. DEBT SERVICE COVERAGE RATIO

| <b><u>CALCULATION OF D.S.C.R</u></b> |                 |                 |                 |                 |                 |
|--------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| <b>PARTICULARS</b>                   | <b>1st year</b> | <b>2nd year</b> | <b>3rd year</b> | <b>4th year</b> | <b>5th year</b> |
| CASH ACCRUALS                        | 6.81            | 10.31           | 13.34           | 16.91           | 20.96           |
| Interest on Term Loan                | 1.75            | 1.54            | 1.10            | 0.67            | 0.24            |
| <b>Total</b>                         | <b>8.56</b>     | <b>11.85</b>    | <b>14.44</b>    | <b>17.58</b>    | <b>21.19</b>    |
| <b><u>REPAYMENT</u></b>              |                 |                 |                 |                 |                 |
| Instalment of Term Loan              | 1.97            | 3.95            | 3.95            | 3.95            | 3.95            |
| Interest on Term Loan                | 1.75            | 1.54            | 1.10            | 0.67            | 0.24            |
| <b>Total</b>                         | <b>3.72</b>     | <b>5.49</b>     | <b>5.05</b>     | <b>4.62</b>     | <b>4.18</b>     |
| <b>DEBT SERVICE COVERAGE RATIO</b>   | <b>2.30</b>     | <b>2.16</b>     | <b>2.86</b>     | <b>3.81</b>     | <b>5.07</b>     |
| <b>AVERAGE D.S.C.R.</b>              | <b>3.19</b>     |                 |                 |                 |                 |