

## TAMIL NADU RURAL TRANSFORMATION PROJECT

### Business Plan for Banana chips Manufacturing unit

|                                  |  |
|----------------------------------|--|
| 1. Village Panchayat:            | AA   |
| 2. Block:                        | BB   |
| 3. District:                     | DD   |
| 4. Applicant:                    | Mrs.AAA  |
| 5. Activity:                     | Banana chips manufacturing   |
| 6. Classification:               | MSME - Manufacturing   |
| 7. Sector classification (TNRTP) | Micro  |
| 8. Purpose of Note:              | To recommend for sanction of the following limits: <b>Term Loan/Working Capital Demand Loan/Composite Loan</b> |
| 9. Nature of Facility            | Term loan – Composite loan   |
| 10. Purpose                      | For expansion of existing Banana Chips manufacturing unit.   |
| 11. Limit required               | Rs.9.45 Lakhs  |
| 12. Margin                       | 10% of the project cost of Rs.10.50 lakhs<br>i.e Rs.1.05 Lakhs   |

**I.Introduction:** (Details of Promoter name, age, qualification and experience, activity to be financed, existing or new unit, any existing facilities with Banks etc. The present request for loan and purpose.)

Mrs. AAA aged 34 years is from AA village panchayat, BB Block, DD District. The applicant propose to expand the existing Banana chips manufacturing unit.

The borrower has been associated with this activity for 7 years and has adequate experience in the line of activity. The applicant presently is not enjoying any facility with any Bank. The present request is for term loan – composite loan of Rs 9.45 Lakhs under TNRTP Matching Grant Programme for expansion of existing Banana chips manufacturing unit as well as for working capital for smooth conduct of day to day operations.

#### **About the product:**

The banana is a versatile fruit for preparing several processed foods through simple processing methods. Banana can be processed by using several techniques for manufacture of various products such as pulp, juice, canned slices, jam, deep-fat-fried chips (crisps), toffee, fig, fruit bars etc. Banana has excellent digestive and nutritive value, pleasant flavour, high

palatability and availability in abundance at a very cheap rate. Banana is a popular fruit in India available throughout the year except for a few months. The nutritive value of the fruit is very high and thus it is an ideal crop for processing and value addition.

In recent times dried fruits or candied fruits are running fast in the market. Amongst the aforesaid usages Chips (Banana Chips) is the widely popular and most liked by the people.

### **Nutritional value of Banana.**

The nutrition facts for 1 medium-sized banana (100 grams) are:

- Calories: 89
- Water: 75%
- Protein: 1.1 grams
- Carbs: 22.8 grams
- Sugar: 12.2 gram
- Fibre: 2.6 grams
- Fat: 0.3 grams

Bananas are a good source of several vitamins and minerals, especially potassium, vitamin B6, and vitamin C.

### **Market (About Industry in general and demand)**

Banana chips are popular worldwide owing to their nutritional content. In the food industry, the demand for banana chips has been increasing more particularly from the snacks and ready to cook food segment. Food processing segment is expected to gain higher percentage in market share. Food processing is primarily driven by growing urbanization and rapidly surging population as well as increasing awareness among consumers regarding organic food products in the market. The Fruit based products such as cookies, snacks are part and parcel of consumption pattern both in rural and urban India.

The fruit based food consumption is picking up due to increasing income and changing food habits. Therefore, demand for fruit based products are prevalent across the length and breadth of the country throughout the year. Therefore, any kind of Ready to Serve (RTS) fruit based foods have huge potential across India. Further, Banana being high in calories and low in

fats but rich in vital vitamins (Vitamin – B complex, Vitamin-A) minerals (Potassium, Calcium, Magnesium, Phosphorus), dietary fibre, and antioxidants can play a pivotal role to prevent cancers, aging, infections etc.

Therefore, Banana Chips if highlighted properly for all these health benefits can occupy significant food market.

## II. Category of Loan: Micro

### 1. Profile of the Entrepreneur

|   |   |
|---|---|
| Name                                      | AAA   |
| Spouse Name                               |   |
| Age                                       | 34 Years  |
| Education                                 | 12th  |
| Aadhaar Card No                           | 86XXXX111111  |
| Address                                   |   |
| Phone No                                  | -   |
| Mobile No                                 | 9111111111  |
| Email ID                                  |   |
| Number of years of experience in business | 7 Years   |
| Trainings attended (no. and hours)        | Yes, 2 days training.   |
| Spouse's occupation                       | Business  |
| If Special category                       | SC / ST / Differently abled / Widow / Separated woman - <b>NO</b> |

### 2. Enterprise Profile

|                          |                             |
|--------------------------|-----------------------------|
| Name of the Enterprise   | AAA chips                   |
| Legal form of Enterprise | Cottage Industries          |
| Registration No          | 2222222222                  |
| Registration Date        | 01.02.21                    |
| Registered with whom     |                             |
| GST No (if available)    | Applied for. Under process. |
| Udhayam Registration     | To be completed.            |

### 3. Bank Linkage Details

|  |  |
|--|--|
| Whether the enterprise has separate bank account | No   |
| If any bank credit availed                       | No   |
| Name of the bank and branch details              | Individual having account in ABC Bank, AA Village. |
| Nature of the bank facility                      | Not applicable                                     |
| Limit sanctioned                                 | Nil  |
| Balance outstanding as on date                   | Rs.1.10 lakhs in individual account                |

### 4. Enterprise Nature

|   |   |
|---|---|
| Type of enterprise  | Manufacturing   |
| Product to be produced:   | Banana chips manufacturing.   |
| Present Demand  | <p>The unit is located in a central place in the village, well connected to the road and easy approach to the consumers.</p> <p>There is good demand for the Banana chips manufactured in Tirunelveli district in view of the unique quality of bananas suitable for chips, are grown in the district. Apart from the local consumers who directly purchase, bulk procurement of Chips on a regular basis is being done by consumers from Erode, Bangalore etc. Demand is not a constraint for chips manufactured in Tirunelveli.</p> |
| Current Supply - Current issues in the supply and how the entrepreneur will address this in her / his venture? What is the USP to overcome the competition? | <p>Raw materials are available on a continuous basis except for a few months. The production is planned for 300 days based on the availability of raw materials. In the first year the capacity utilization is assumed at 55%.</p> <p>Further though similar units are present in the district, since there is considerable demand for the product</p>  |

|  |   |
|--|---|
|  | from other districts also, no issues are envisaged in the supply side. The usage of good quality Banana crop and good quality coconut oil is the USP. |
|--|---|

### III. TECHNICAL FEASIBILITY:

| <b>Location / Infrastructure:</b>   |  |
|---|--|
| <b>1. Location</b><br>Brief on Location – Whether well connected to market by road etc.,                            | The unit is located in a central place in the village, well connected to markets through the Main Highway Main road and is easily approachable to the consumers as well as suppliers of raw materials.   |
| <b>2. Land</b><br>Extent of Land, sq.ft.<br>Panchayat approval,<br>own/leased                                       | The business is proposed to be run in own premises. The required land space of around 200 sq.mts is available. Panchayat approval for the proposed activity is to be obtained.   |
| <b>3. Building</b><br>Approved plan from local body, sq,ft, whether sufficient for the proposed activity            | The applicant owns a shed with an area of 1500 sq.ft. This shed is to be utilized for housing the machines proposed to be purchased. Approval/License from Village Panchayat is to be obtained. The cost of land and building is not included in the Project cost. |
| <b>4. Power</b><br>Whether required power connection is available   | The required power for running the unit will be around 1000 units per month at Rs.7/- per unit. The required three phase connection is to be obtained.   |
| <b>5. Water</b><br>Whether adequate water is available.   | Around 1000 liters of water is required every day. Adequate water resource is available at the site to be drawn through bore well.   |
| <b>6. Approval</b><br>Pollution control Board/GST/FSSAI approvals or any other approval is required. Present Status | The applicant has applied for GST Registration, FSSAI and Pollution Control Board approvals. Follow up is being made by the applicant.   |

|  |   |                                    |      |                     |  |
|--|---|------------------------------------|------|---------------------|--|
|  | <p>The applicant is yet to register under UDYAM. He has applied for and the same is under process.</p>  |                                    |      |                     |  |
| <p><b>7. Materials Needed</b><br/>Quantity / Cost / Availability / Delivery Time to be discussed.</p> <p>a. Raw materials :<br/>b. Equipment :<br/>c. Technology :</p> | <p><b><u>Raw-materials</u></b><br/>Bananas and Oil are the main raw material for manufacturing Chips.</p> <p>Around 3.25kgs of Bananas are required to manufacture 1 kg of Banana chips. Unripe Banana with bright color and characteristic flavor will be selected. The variety and maturity of fruit influence the flavour and quality of the final product. Cost per Kg of Banana is assumed at Rs.10/- and per kg of oil is assumed at Rs.150/- . Banana crop is available through-out the year except for a few months.</p> <p><b>Equipment:</b><br/>The promoter requires a set of machines for different processes involved such as, peeling, drying, slicing, frying etc. The required machineries are detailed in Annexure A. The machineries are to be procured indigenously from different suppliers from Coimbatore, Theni, Chennai etc.(Quotations are enclosed)</p> <p><b>Technology:</b><br/>The applicant has necessary experience in the line of activity. No specific technology is required in the production process. In case of any technical issues the required technological support will be provided by the supplier itself.</p> |                                    |      |                     |  |
| <p><b>8. Cost of capital assets:</b><br/>Details of equipment/machinery with cost of individual item required along with quotations.</p>                               | <p style="text-align: right;">(Rs in lakhs)</p> <table border="0" style="width: 100%;"> <tr> <td style="width: 70%;">1.Machineries &amp; other Fixed Assets</td> <td style="width: 30%; text-align: right;">6.00</td> </tr> <tr> <td colspan="2">(As per Annexure A)</td> </tr> </table>  | 1.Machineries & other Fixed Assets | 6.00 | (As per Annexure A) |  |
| 1.Machineries & other Fixed Assets   | 6.00  |                                    |      |                     |  |
| (As per Annexure A)  |   |                                    |      |                     |  |

|  |   |
|--|---|
|  | 2. Working capital<br>(As per annexure B)                          4.50<br><br>Total Project cost    10.50  |
| <b>9. Cost of working capital for one operating cycle</b><br>a. raw-materials,<br>b. Semi-finished goods,<br>c. finished goods,<br>d. receivables outstanding<br>Total working capital needs<br><br>(The value of raw-materials, semi-finished goods, finished goods, receivables outstanding to be arrived) | The working capital requirement is arrived at Rs.4.50 lakhs as per Annexure B.  |
| <b>OR</b>  |   |
| 25% of projected annual sales turnover if necessary.<br>(The projected annual sales should be reasonable and acceptable)   | The assessment has been done as per holding levels detailed in annexure B.  |
| <b>10.Skills Requirements:</b> skilled labour available / Not available<br><br>If not available: whether people can be trained? If so, training period and training facility?  | The promoter is experienced in the line of activity for seven years and has the required skills to run the unit. The unit requires 6 persons i.e. One supervisor, one technician, one helper, two semi-skilled workers and one sales man. The total monthly wages/salary works out to Rs.60000/-. The wages/salary expenditure is estimated to increase by 5% every year. |
| <b>11.Production Process:</b>  |   |
| <b>a. Production Plan/cycle</b><br>(operating cycle may be one-day / week / month or one year as per the activity selected):   | <b>The process is detailed below:</b><br><br><b>Selection of Banana:</b><br>Unripe Banana with bright color and characteristic flavor are selected. The   |

variety and maturity of fruit influence the flavor and keeping quality of its final product.

**Sorting:**

Sorting is the process of grouping according to size, shape, color and weight as well as removal of damaged fruits.

**Peeling:**

The outer skin is removed either manually or mechanically.

**Washing:**

Washing and sanitizing the fruits is required to remove the pesticide residues, plant debris and other possible contamination as well as microorganisms responsible for quality loss and decay.

**Slicing:**

Slicing of bananas can be done manually or mechanically. In manual process, it should be done with hands using a serrated knife.

Mechanically, it can be done using a fruit slicer machine. Banana fruits are sliced into thin slices for quick moisture reduction.

**Drying**

- Tradition Drying Method: Sun Drying

Drying of bananas takes place by utilizing the heat energy radiated by sun. The sliced bananas are spread on any available space and allowed under sun until it is completely dried. Alternatively machine is used for quick drying.



|  |  |
|--|--|
|  | <p><b>Frying</b><br/>Deep fat frying of dried banana slices take place. Deep fat frying replaces the moisture content with oil.</p> <p><b>Packaging</b><br/>The banana chips can be packed using the form fill sealer in plastic or foil bags. It can also be packed in tins and glass containers</p> <p>The operating cycle is assumed at 30 days for the unit as detailed in Annexure B.</p> |
|--|--|

#### IV. COMMERCIAL FEASIBILITY:

|   |  |
|---|--|
| <p>Marketing strategy :</p> <p>a. Direct to customers :</p> <p>b. Bulk to Institutions :</p> <p>c. Through Retailers / Wholesalers:</p> <p>d. Through Online:</p> | <p>It is a product widely used every day in the Southern states and some parts of North India. It is used as a snack for consumption in view of its nutritional value and taste.</p> <p>The focus will be on direct sales to customers as there is good demand for chips manufactured in Tirunelveli in view of the quality of the Banana (Nendram) grown in that area. Further high quality coconut oil is to be used to maintain the taste of the product. Further focus will also be on bulk sales to customers from other districts such as Erode, Bangalore as well as to tap other type of consumers/retailers such as bakeries, restaurants and retail shops.</p> |
| <p>e. Pricing &amp; Discounts :</p>   | <p>The price for one Kg of Banana chips is conservatively fixed at Rs.170/- per Kg. Bulk supply will be encouraged with a discount in price.</p>   |

|  |   |
|--|---|
| <p>f. Market promotion strategies:</p>       | <ul style="list-style-type: none"> <li>• To target direct sales to customers in the local area and nearby districts.</li> <li>• Further to explore the possibility of selling under a "brand name" through distributors after obtaining 'Quality Certificate' from NSIC.</li> <li>• Different methods/attractive packing materials will be used for packing the groundnut oil to attract different types of customers.</li> <li>• Bulk sales through agents who procure the chips in bulk quantities for sales in Erode, Bangalore etc.,</li> </ul> |
| <p>g. Physical and digital connectivity:</p> | <p>While the payments are also accepted by way of cash, digital payments will be encouraged with appropriate equipment installed and cost will be borne by the applicant.</p>   |
| <p>h. Risks and risk mitigation planned:</p> | <p>Market risk – The unit is one of a few units working in the village and nearby areas. Further high quality will be maintained in view of the quality of Bananas to be procured and quality oil to be used for frying.</p>  |

## V. ENVIRONMENT ASSESSMENT

| <b>To be entered as per the required category of the enterprise proposed: Orange (code 2007) – Medium polluting. The enterprise to obtain Consent to operate from TNPCB.</b> |  |  |                                   |                                 |
|--|--|--|-----------------------------------|---------------------------------|
| <b>Environment Issue identified</b>  | <b>Environment Guidelines or mitigation measures Integrated</b><br>(Please tick) | <b>Greening Measures identified</b><br><br>(for green, orange and red categories)          | <b>Support needed</b>             |                                 |
|  |  |  | Implement the mitigation measures | Implement the greening measures |
| <b>Exploitation of local resources (water and energy)</b>  | <ul style="list-style-type: none"> <li>•Electricity</li> <li>•Water</li> </ul>   | To ensure adequate measures for Proper disposal of waste water                             | NA                                | NA                              |
| <b>Waste generation and disposal</b>   | <ul style="list-style-type: none"> <li>•Dust/air pollutants</li> </ul>           | To ensure adequate measures for Proper disposal of dust and waste fixing exhaust fans etc. | NA                                | NA                              |
| <b>Worker and Community safety</b>   | <ul style="list-style-type: none"> <li>•Safety measures / gadgets</li> </ul>     | Safety masks, gloves, chappals to be provided.   | NA                                | NA                              |

Whether the activity proposed is in the negative list: No

## VI. FINANCIAL VIABILITY

### 1. Cost of the project and Means of the project:

|  |  |
|--|--|
| a. Cost of the Project:  | (Rs in lakhs)  |
| i. Fixed capital<br>Cost of all the equipment's /machinery/construction(excluding land cost)   | Machineries – 6.00   |
| ii. Working capital  | Working capital 4.50   |
| iii. Pre-operative expenses*   | Nil  |
| Total cost of the project (i + ii + iii)   | 10.50  |
| *Pre-operative expenses such as salaries to permanent staff before commencement of operations, Interest during holiday period etc to be met by the borrower from his own source. |  |
| b. Means of the project:   |  |
| i. Loan from financial Institution / Bank (95% or 90%):  | 9.45   |
| ii. Margin money -Borrower's contribution (5% or 10%):   | 1.05   |
| Total means of the project ( i + ii )  | 10.50  |
| c. Matching grant from the project**   | 3.15   |
| Whether the entrepreneur has the sufficient means to bring in the margin money and has enough buffer to manage any cost escalations  | Yes. The applicant has deposited to the extent of Rs.110000/- in the Bank. |

\*\*Matching Grant is @30% of the total cost of the project (excluding pre-operative expenses, land cost, lease). As Matching Grant will be kept in a "Subsidy Reserve Fund" account of the bank as a back-ended grant, it is not shown under the Means of the project. The matching grant to be adjusted as below:

|   |               |
|---|---------------|
|   | (Rs in Lakhs) |
| Loan initially disbursed by the Bank              | - 9.45        |
| Less 30% matching grant                           | - 3.15        |
| Balance principal amount to be repaid by Borrower | - 6.30        |

Upon completion of minimum period of 18 months and upon repayment of principal amount of Rs.6.30 lakhs and the interest portion, the matching grant of Rs.3.15 lakhs can be adjusted to the loan account of the borrower and the loan account can be closed.

## 2. Repayment capacity

### Calculation of Debt service coverage ratio (DSCR). (Profitability based on Projections in Annex D and assumptions Annexure C)

- Loan amount of Rs.945000/- repayable in 48 months @ 12% after Holiday period of 6 months.
- Monthly instalment - principal amount is Rs.22500/-
- Though the repayment is fixed for 48 months, upon prompt repayment the loan is closed on the 34th month itself with matching grant amount of Rs.315000/- which is eligible for the project.
- 50% of net profit and depreciation is taken for DSCR Calculation in the I Year since only six months operation in I Year
- Interest calculation details available in Annexure E.

| Particulars                        | YEAR 1(6 M) | YEAR 2 | YEAR 3 | YEAR 4 |
|------------------------------------|-------------|--------|--------|--------|
| Net profit after tax less drawings | 4.83        | 12.39  | 15.48  | 20.17  |
| Depreciation                       | 0.30        | 0.60   | 0.60   | 0.60   |
| Interest                           | 0.38        | 0.61   | 0.28   | 0.02   |
| Grant                              |             |        |        |        |
| Cash surplus A                     | 5.51        | 13.60  | 16.36  | 20.79  |
|                                    |             |        |        |        |
| Principal Repayment                | 0.68        | 2.70   | 2.70   | 3.37   |
| Interest                           | 0.38        | 0.61   | 0.28   | 0.02   |
|                                    |             |        |        |        |
| Repayment obligation B             | 1.06        | 3.31   | 2.98   | 3.39   |
|                                    |             |        |        |        |
| DSCR A/B                           | 5.21        | 4.11   | 5.48   | 6.13   |
| Average DSCR                       | 5.23        |        |        |        |

**The average DSCR is 5.23 which is above the minimum DSCR of 1.5: 1 as required by MGP guidelines. The repayment capacity is comfortable.**

### VII. Recommendation:

As the proposal is viable and complies with the guidelines in respect of Matching Grant Programme, we may recommend to the concerned Bank.

Prepared by SGR.

### ANNEXURE – A

| Sl.No        | Description                | Qty.<br>(No.) | Rate.<br>Rs   | Amount<br>(Rs.) |
|--------------|----------------------------|---------------|---------------|-----------------|
| 1            | Washing Tank               | 1             | 40000         | 40000           |
| 2            | Banana cutter/slicer       | 1             | 40000         | 40000           |
| 3            | Dryer                      | 1             | 220000        | 220000          |
| 4.           | Deep frying kettle         | 1             | 50000         | 50000           |
| 5.           | Continuous Sealing machine | 1             | 25000         | 25000           |
| 6.           | Accessories                | 1             | 50000         | 50000           |
| 7.           | Peeling Machine            | 1             | 50000         | 50000           |
|              | Weighing Machine           | 1             | 5000          | 5000            |
| <b>Total</b> |                            |               | <b>480000</b> | <b>480000</b>   |

#### Other Fixed Assets

(Rs. In lakhs)

|                      |               |
|----------------------|---------------|
| Furniture & Fixtures | 70000         |
| Plastic trays        | 20000         |
| Electrical fittings  | 30000         |
| <b>Total</b>         | <b>120000</b> |

**Total Machineries and Equipments required – Rs.6 Lakhs**

## **Annexure - B**

### **Working Capital Assessment**

| Particulars                 | Holding Period | Year I | Year II | Year III | Year IV |
|-----------------------------|----------------|--------|---------|----------|---------|
| Raw material stock          | 7 days         | 0.68   | 0.80    | 0.92     | 1.11    |
| Packing material            | 10 days        | 0.06   | 0.07    | 0.08     | 0.09    |
| Work in Progress            | 3 days         | 0.43   | 0.50    | 0.56     | 0.66    |
| Finished goods              | 10 days        | 1.44   | 1.65    | 1.87     | 2.20    |
| Receivables                 | 10 days        | 1.87   | 2.21    | 2.55     | 3.06    |
| Gross working Capital       |                | 4.47   | 5.23    | 5.98     | 7.11    |
| Trade creditors             |                | 0.00   | 0.00    | 0.00     | 0.00    |
| Working capital requirement |                | 4.47   | 5.23    | 5.98     | 7.11    |
| Rounded off                 |                | 4.5    | 5.25    | 6        | 7       |

**The operating cycle is assumed at 30 days excluding holding period of packing materials. The working capital requirement for the I year is Rs 4.50 Lakhs. The Creditors are assumed as Zero since purchases are on cash and carry basis.**

## Annexure C

### BASIS & PRESUMPTIONS

Assumptions for working out economics of a 60 MT/ Annum capacity of Banana Chips manufacturing unit.

1. Total Installed Capacity 60 MT per annum of Banana chips.
2. The unit will operate in a single shift of 10 hours for 300 days.
3. Capacity utilization: 1st year – 55%, 2nd year – 65%, and 3rd Year 75% 4<sup>th</sup> year onwards 90%.
4. The selling price of Banana chips is fixed at Rs.170/Kg on an average.
5. For one kg of Banana chips, 3.25 kgs of Banana is required.
6. For one kg of Banana chips, 350 gms of oil is required.
7. Cost of Banana is assumed at Rs.10/- per kg. Cost of oil is assumed at Rs.150/- per kg.
8. Wages/Salaries are as below:

| S.No. | Designation                          | No. | Salary*(Rs.) | Amount(Rs) |
|-------|--------------------------------------|-----|--------------|------------|
| 1     | Supervisor – In charge of Production | 1   | 18000        | 18000      |
| 2     | Technician                           | 1   | 14000        | 14000      |
| 3     | Helper                               | 1   | 5000         | 5000       |
| 4     | Semi skilled workers                 | 2   | 7500         | 15000      |
| 5.    | Sales man                            | 1   | 8000         | 8000       |
|       | Total                                |     |              | 60000      |

\*To increase by 5% every year.

- 9.Packing material at Rs.5 per kg of chips manufactured.
- 10.Fuel cost & power is estimated at 1% of raw material cost.
- 11.Repairs and maintenance is assumed at Rs.5000/- per month.
- 12.Other materials at Rs.3/- per kg.
13. Miscellaneous expenses at Rs.10000/- per month.
- 14.Depreciation at 10% on straight line method.
- 15.Interest on Composite loan is assumed at 12% per annum.
- 16.Tax at 20% on profit.



## ANNEXURE D

### Profitability projection for Banana Chips Manufacturing unit (Rs in Lakhs)

| Particulars   | Yr 1  | Yr 2                  | Yr3   | Yr 4  | Yr 5  |
|---|-------|-----------------------|-------|-------|-------|
|   |       | Amount Rs<br>in lakhs |       |       |       |
| A. Production of Chips at 100% capacity (in Kgs)                | 60000 | 60000                 | 60000 | 60000 | 60000 |
| Capacity utilisation %  | 55%   | 65%                   | 75%   | 90%   | 90%   |
| Production at capacity utilisation                              | 33000 | 39000                 | 45000 | 54000 | 54000 |
| A.Sales Banana Chips (Rs.170/- per Kg average price)            | 56.10 | 66.30                 | 76.50 | 91.80 | 91.80 |
| B.Cost of Production  |       |                       |       |       |       |
| Banana (3.25 kgs for 1 kg of chips) at Rs.10/- per kg           | 10.73 | 12.68                 | 14.63 | 17.55 | 17.55 |
| Oil (For 1 Kg of chips 0.35 kg of oil required) Rs.150/- per kg | 17.33 | 20.48                 | 23.63 | 28.35 | 28.35 |
| Packing Materials at Rs.5 per kg                                | 1.65  | 1.95                  | 2.25  | 2.7   | 2.7   |
| Other materials (At Rs.3/- per kg                               | 0.99  | 1.17                  | 1.35  | 1.62  | 1.62  |
| Utilities (Fuel and Electricity) (at 1% of RM cost)             | 2.81  | 3.32                  | 3.83  | 4.59  | 4.59  |
| Salaries and wages(5% increase every year)                      | 7.20  | 7.56                  | 7.94  | 8.33  | 8.75  |
| Repair & Maintenance at Rs.5000 p.m                             | 0.6   | 0.6                   | 0.6   | 0.6   | 0.6   |
| Other expenses including insurance @1% of Sales                 | 0.56  | 0.66                  | 0.77  | 0.92  | 0.92  |
| Misc. Expenses(Rs.10000/- p.m)                                  | 1.20  | 1.20                  | 1.20  | 1.20  | 1.20  |
| Cost of Production(B)   | 43.06 | 49.61                 | 56.18 | 65.86 | 66.28 |
| Gross Profit(A-B)   | 13.04 | 16.69                 | 20.32 | 25.94 | 25.52 |
| Depreciation 10% on Rs.6 lakhs                                  | 0.6   | 0.6                   | 0.6   | 0.6   | 0.6   |
| Interest  | 0.36  | 0.61                  | 0.37  | 0.13  | 0     |
| Cost of Sales   | 44.02 | 50.82                 | 57.15 | 66.59 | 66.88 |
| Net Profit  | 12.08 | 15.48                 | 19.35 | 25.21 | 24.92 |
| <u>Tax@20%</u>  | 2.42  | 3.10                  | 3.87  | 5.04  | 4.98  |
| <u>Net Profit after tax</u>                                     | 9.67  | 12.39                 | 15.48 | 20.17 | 19.94 |
| Cash Surplus  | 10.27 | 12.99                 | 16.08 | 20.77 | 20.54 |

**Annexure E**  
**Interest Calculation**

Loan amount Rs.9,45,000/-

Grant – Rs.3,15,000/-

Repayment Period – 48 Months including holiday period of 6 months

Interest rate – 12% on the Net loan amount i.e.(loan amount – Grant)

| <b>Date</b> | <b>Particulars</b> | <b>Debit</b> | <b>Credit</b> | <b>Balance</b> | <b>Interest *</b> | <b>Interest Per annum</b> | <b>Principal repayment P.A.</b> |
|-------------|--------------------|--------------|---------------|----------------|-------------------|---------------------------|---------------------------------|
| 01.09.2021  | To loan            | 945000       |               | 945000         |                   |                           |                                 |
| 1           | By repayment       |              | 0             | 945000         | 6300.00           |                           |                                 |
| 2           |                    |              | 0             | 945000         | 6300.00           |                           |                                 |
| 3           |                    |              | 0             | 945000         | 6300.00           |                           |                                 |
| 4           |                    |              | 0             | 945000         | 6300.00           |                           |                                 |
| 5           |                    |              | 0             | 945000         | 6300.00           |                           |                                 |
| 6           |                    |              | 0             | 945000         | 6300.00           | 37800                     | 0                               |
| 7           |                    |              | 22500         | 922500         | 6300.00           |                           |                                 |
| 8           |                    |              | 22500         | 900000         | 6075.00           |                           |                                 |
| 9           |                    |              | 22500         | 877500         | 5850.00           |                           |                                 |
| 10          |                    |              | 22500         | 855000         | 5625.00           |                           |                                 |
| 11          |                    |              | 22500         | 832500         | 5400.00           |                           |                                 |
| 12          |                    |              | 22500         | 810000         | 5175.00           |                           |                                 |
| 13          |                    |              | 22500         | 787500         | 4950.00           |                           |                                 |
| 14          |                    |              | 22500         | 765000         | 4725.00           |                           |                                 |
| 15          |                    |              | 22500         | 742500         | 4500.00           |                           |                                 |
| 16          |                    |              | 22500         | 720000         | 4275.00           |                           |                                 |
| 17          |                    |              | 22500         | 697500         | 4050.00           |                           |                                 |
| 18          |                    |              | 22500         | 675000         | 3825.00           | 60750                     | 270000                          |
| 19          |                    |              | 22500         | 652500         | 3600.00           |                           |                                 |
| 20          |                    |              | 22500         | 630000         | 3375.00           |                           |                                 |
| 21          |                    |              | 22500         | 607500         | 3150.00           |                           |                                 |
| 22          |                    |              | 22500         | 585000         | 2925.00           |                           |                                 |
| 23          |                    |              | 22500         | 562500         | 2700.00           |                           |                                 |
| 24          |                    |              | 22500         | 540000         | 2475.00           |                           |                                 |
| 25          |                    |              | 22500         | 517500         | 2250.00           |                           |                                 |
| 26          |                    |              | 22500         | 495000         | 2025.00           |                           |                                 |
| 27          |                    |              | 22500         | 472500         | 1800.00           |                           |                                 |
| 28          |                    |              | 22500         | 450000         | 1575.00           |                           |                                 |

|    |  |               |        |        |         |             |        |
|----|--|---------------|--------|--------|---------|-------------|--------|
| 29 |  |               | 22500  | 427500 | 1350.00 |             |        |
| 30 |  |               | 22500  | 405000 | 1125.00 | 28350       | 270000 |
| 31 |  |               | 22500  | 382500 | 900.00  |             |        |
| 32 |  |               | 22500  | 360000 | 675.00  |             |        |
| 33 |  |               | 22500  | 337500 | 450.00  |             |        |
| 34 |  |               | 22500  | 315000 | 225.00  |             |        |
|    |  | Grant<br>@30% | 315000 | 0      | 0.00    | 2250.0<br>0 | 405000 |
|    |  | 945000        | 945000 |        |         | 129150      | 945000 |

\*Interest calculated on reducing balance outstanding.

\*Interest assumed to be serviced every month on the due date.

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