



## **Model Detailed Project Report**

### **HONEY PROCESSING UNIT**

**Prepared by**

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## **1. INTRODUCTION**



Honey means the natural sweet substance produced by honey bees from the nectar of blossoms or from secretions of plants which honey bees collect, transform store in honey combs for ripening. It shall be free from any foreign matter such as mould, dirt, scum, pieces of beeswax, the fragments of bees and other insects and from any other extraneous matter. Honey is among the most popular and widely used sweetener with enormous health benefits. It is used by several cultures around the world serving as a base for many traditional medicines, especially in Ayurveda. It is used in strengthens immune system, preparing cosmetic products, health tonic and food processing industries for preparing different types of drinks, bakery products, sweets etc. Beekeeping is an ideal activity for development as a subsidiary occupation providing supplementary income. Beekeeping is feasible in areas where adequate bee flora available for a minimum period of 6 months. Honey produced by Indian hive bees is collected by modern extractor. The extracted honey contains hemophilic yeasts, which causes fermentation and destroy the quality of honey. To maintain the qualitative and quantitative value of honey the processing in modern Honey Processing plant is essential.

## **2. MARKET POTENTIAL:**

Honey is a major consumable in the international market both as a food item as well as in industries such as Pharmaceuticals, Cosmetics and Confectionary. The demand is especially high for refined, high quality honey free pesticides, insecticides and other agrochemicals.

In the domestic market very little amount of honey is use for personal consumption, while majority is utilized by the pharmaceutical and confectionary industry. With changing life style and increasing health consciousness, honey is been increasing consumes as health food. This is likely to drive the domestic demand in future.

As per the information available from Agricultural & Processed Food Products Export Development Authority, India has exported 51547.31 MT of Natural Honey to the world for the worth of Rs. 653.58 crore/ 101.32 USD Million during the year of 2017-18 and the Major Export Destinations (2017-18) are USA, Saudi Arab, U Arab Emts, Canada and Qatar.

### **3. PRODUCT DESCRIPTION**

#### **3.1 PRODUCT & ITS APPLICATION**

From centuries, honey has been used as a natural sweetening agent and in the preparation of confectionaries. It has vast application in the pharmaceutical industry, and it is also considered as a medicine by Ayurved. It is popularly used as a household cure for cough and hence used as vehicle for medicines in many popular brands of Cough Syrup. It is a preferred consumable for people on dieting. Honey is also used for making lozenges. However, it is mostly sold in glass Jars as pure honey. In bottled honey normally moisture content of honey is reduced. Good quality honey has high demand in the international market and it has the potential to generate substantial foreign exchange for the Country.

#### **3.2 RAW MATERIAL**

Only honey and basic packing material (bottle, lids and labels) are required for raw material.

### 3.3 MANUFACTURING PROCESS

The industry of honey is not a simple sequential chain of processing operations, although the normal consumer may consider it in this way, at first sight. It should be noted that each processing step, from the initial extraction to the packaging of the final food product, is the answer to peculiar problems concerning the physicochemical and biological features of different honeys.

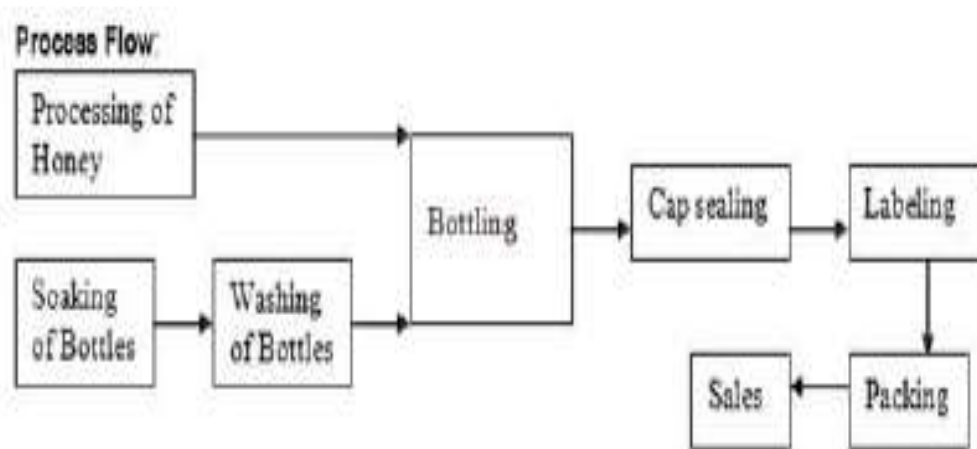
In general, the following integrated steps are given below:



After the initial harvest, the material (e.g. honeycombs, frames) is introduced into the so-called honey extractor: a container able to remove honey by means of the centrifugal force. The operation has to be carried out into special rooms, with possibility of heating. At the exit from the extractor, the honey is (a) collected by gravity in tanks placed often on the floor (wax is separated from honey) and (b) sent to the decanters with the aid of pumps from the same floor. The extraction must be performed by a desired degree of purification with the aim of eliminating wax particles and air bubbles, which are possibly mixed with honey during extraction.

The purification is carried out with two different techniques: decanting and filtration. By the safety viewpoint, it should also be considered that extraction procedure (with the collection and other processing steps) may affect negatively the quality of produced honeys, with special reference to honey for medical purposes. Consequently, physicochemical and microbiological features of the final product can be assured on condition that a certain number of precautionary measures are taken before the final commercialization.

The processed honey is immediately bottled in clean wide mouthed bottles. It is then sealed by PP Caps. Bottles are wiped dry and labelled. Filled, sealed & labeled bottles are then packed in labeled cardboard boxes.











## 4. PROJECT COMPONENTS

### 4.1 Land & Building

The approximate total area required for complete factory setup is 3000-4000 Sq. ft. approximately smooth production including storage area.

## 4.2 Plant & Machinery

<p><b>Water Treatment unit</b></p>	<p>Water treatment plant and system operators run the equipment, control the processes, and monitor the plants that treat water to make it safe to drink.</p>	
<p><b>Boiler</b></p>	<p>It's a steam generating equipment which along with its accompanying systems generates &amp; delivers steam at required temperature &amp; pressure.</p>	
<p><b>S.S. Tank</b></p>	<p>It's a stainless-steel tank used to store given liquid &amp; particulate solid.</p>	
<p><b>Jacketed Storage Tank Inner</b></p>	<p>a jacketed vessel is a container that is designed for controlling temperature of its contents, by using a cooling or heating "jacket" around the vessel through which a cooling or heating fluid is circulated.</p>	

<p><b>Semi-Automatic Single Head Machine</b></p>	<p>To fill viscous products, I Premade Pouches/Jars/Containers with piston operated filling system. Model able single filling station machine with adjustable tray. Feeding System: Volumetric Piston Operated filling system Production Speed: 8 to 20 fill/min (depends on materials) Filling Range: +/- 2-3 gms No. of filling counter: Adjustable screw system AirCompressor-3.0 HP</p>	
<p><b>Bottling plant (including bottle washer, filter, crown corking m/c &amp; sterilizer)</b></p>	<p>This is an entire system of machines used to wash, dry, fill, cap, sterilize &amp; package bottles.</p>	
<p><b>Testing equipment</b></p>	<p>There are different equipment's used to test quality of final product like lactometer, gravity meter etc.</p>	
<p><b>Weighing balance</b></p>	<p>It's a simple weight measuring device use to determine weight of given object using standard weights.</p>	

**Note:** Approx. Total Machinery cost shall be Rs 48.23 lakhs excluding GST and Transportation Cost.

### **4.3 Power Requirement**

The borrower shall require power load of 30 KW which shall be applied with Power Corporation. However, for standby power arrangement the borrower shall purchase DG Set.

### **4.4 Manpower Requirement**

18 Manpower are required for the Honey Processing Unit.

Includes:

1 Plant Operator

4 Skilled Labour

8 Unskilled Labour

4 Administrative Staffs

1 Accountant



## 5. FINANCIALS

### 5.1 Cost of Project

<b>FINANCIAL ASSISTANCE REQUIRED</b>				
Term Loan of Rs. 37.07 lakh and Working Capital limit of Rs.8.7 Lacs				
(in Lacs)				
<b><u>COST OF PROJECT</u></b>	<b>PARTICULARS</b>	<b>AMOUNT</b>	<b>Own Contribution</b>	<b>Bank Finance</b>
	<b>Land &amp; Building</b>		25.00%	75.00%
			Owned /rented	
	<b>Plant &amp; Machinery</b>	48.23	12.06	36.17
	<b>Furniture &amp; Fixtures and Other Assets</b>	1.20	0.30	0.90
	<b>Working capital</b>	11.60	2.90	8.70
	<b>Total</b>	<b>61.03</b>	<b>15.26</b>	<b>45.77</b>

### 5.2 Means of Finance

<b><u>MEANS OF FINANCE</u></b>	<b>PARTICULARS</b>	<b>AMOUNT</b>
	Own Contribution	15.26
	Bank Loan	37.07
	Working capital Limit	8.70
	<b>Total</b>	<b>61.03</b>

### 5.3 Projected Balance Sheet

(in Lacs)					
<b>PROJECTED BALANCE SHEET</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		14.73	16.39	20.62	26.30
Add:- Own Capital	15.26				
Add:- Retained Profit	3.47	7.66	12.23	15.68	19.61
Less:- Drawings	4.00	6.00	8.00	10.00	12.00
Closing Blance	14.73	16.39	20.62	26.30	33.91
Term Loan	32.95	24.72	16.48	8.24	-
Working Capital Limit	8.70	8.70	8.70	8.70	8.70
Sundry Creditors	2.69	3.06	3.45	3.89	4.35
Provisions & Other Liab	0.35	0.42	0.50	0.60	0.73
<b>TOTAL :</b>	<b>59.42</b>	<b>53.28</b>	<b>49.75</b>	<b>47.73</b>	<b>47.68</b>
<b><u>Assets</u></b>					
<b>Fixed Assets ( Gross)</b>	49.43	49.43	49.43	49.43	49.43
Gross Dep.	7.35	13.61	18.94	23.47	27.32
<b>Net Fixed Assets</b>	<b>42.08</b>	<b>35.82</b>	<b>30.49</b>	<b>25.96</b>	<b>22.11</b>
<b>Current Assets</b>					
Sundry Debtors	5.57	6.54	7.40	8.32	9.32
Stock in Hand	8.72	9.86	11.05	12.37	13.78
Cash and Bank	3.05	1.07	0.81	1.07	2.47
<b>TOTAL :</b>	<b>59.42</b>	<b>53.28</b>	<b>49.75</b>	<b>47.73</b>	<b>47.68</b>

## 5.4 Projected Cash Flow

(in Lacs)					
<b>PROJECTED CASH FLOW STATEMENT</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	15.26				
Net Profit	3.47	7.80	13.58	18.53	24.23
Depreciation & Exp. W/off	7.35	6.26	5.32	4.53	3.86
Increase in Cash Credit	8.70	-	-	-	-
Increase In Term Loan	37.07	-	-	-	-
Increase in Creditors	2.69	0.37	0.39	0.44	0.46
Increase in Provisions & Oth lib	0.35	0.07	0.08	0.10	0.12
<b>TOTAL :</b>	<b>74.89</b>	<b>14.50</b>	<b>19.38</b>	<b>23.60</b>	<b>28.67</b>
<b><u>APPLICATION OF FUND</u></b>					
Increase in Fixed Assets	49.43				
Increase in Stock	8.72	1.14	1.19	1.32	1.41
Increase in Debtors	5.57	0.97	0.87	0.92	1.00
Repayment of Term Loan	4.12	8.24	8.24	8.24	8.24
Drawings	4.00	6.00	8.00	10.00	12.00
Taxation	-	0.14	1.35	2.86	4.62
<b>TOTAL :</b>	<b>71.84</b>	<b>16.49</b>	<b>19.64</b>	<b>23.34</b>	<b>27.27</b>
Opening Cash & Bank Balance	-	3.05	1.07	0.81	1.07
Add : Surplus	3.05	(1.98)	(0.26)	0.26	1.39
Closing Cash & Bank Balance	<b>3.05</b>	<b>1.07</b>	<b>0.81</b>	<b>1.07</b>	<b>2.47</b>

## 5.5 Projected Profitability

(in Lacs)					
<b>PROJECTED PROFITABILITY STATEMENT</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>60%</b>	<b>65%</b>	<b>70%</b>	<b>75%</b>	<b>80%</b>
<b><u>SALES</u></b>					
<b>Gross Sale</b>					
Honey Processing	167.04	196.06	222.07	249.64	279.74
<b>Total</b>	<b>167.04</b>	<b>196.06</b>	<b>222.07</b>	<b>249.64</b>	<b>279.74</b>
<b>COST OF SALES</b>					
Raw Material Consumed	115.20	131.04	147.84	166.50	186.24
Electricity Expenses	4.32	4.75	5.23	5.75	6.32
Depreciation	7.35	6.26	5.32	4.53	3.86
Wages & labour	16.20	17.82	19.60	21.56	23.72
Repair & maintenance	3.34	4.90	5.55	6.24	6.99
<b>Cost of Production</b>	<b>146.42</b>	<b>164.77</b>	<b>183.55</b>	<b>204.58</b>	<b>227.13</b>
<b>Add: Opening Stock /WIP</b>	<b>-</b>	<b>4.88</b>	<b>5.49</b>	<b>6.12</b>	<b>6.82</b>
<b>Less: Closing Stock /WIP</b>	<b>4.88</b>	<b>5.49</b>	<b>6.12</b>	<b>6.82</b>	<b>7.57</b>
Cost of Sales	141.53	164.16	182.92	203.88	226.38
<b>GROSS PROFIT</b>	<b>25.51</b>	<b>31.90</b>	<b>39.15</b>	<b>45.76</b>	<b>53.36</b>
	<b>15.27%</b>	<b>16.27%</b>	<b>17.63%</b>	<b>18.33%</b>	<b>19.07%</b>
Salary to Staff	5.10	5.61	6.17	6.79	7.47
Interest on Term Loan	3.64	3.21	2.30	1.40	0.49
Interest on working Capital	0.87	0.87	0.87	0.87	0.87

Rent	2.40	2.64	2.90	3.19	3.51
selling & adm exp	10.02	11.76	13.32	14.98	16.78
<b>TOTAL</b>	<b>22.04</b>	<b>24.09</b>	<b>25.57</b>	<b>27.23</b>	<b>29.13</b>
NET PROFIT	3.47	7.80	13.58	18.53	24.23
	<b>2.08%</b>	<b>3.98%</b>	<b>6.11%</b>	<b>7.42%</b>	<b>8.66%</b>
Taxation		0.14	1.35	2.86	4.62
PROFIT (After Tax)	3.47	7.66	12.23	15.68	19.61

## 5.6 Production and Yield

<b>COMPUTATION OF PRODUCTION OF HONEY PROCESSING</b>		
<b>Items to be Manufactured</b>		
Honey Processing		
Machine Production capacity per Hour	50.000	kg
Working hours in a day	8	
Production Per Day	400.00	kg
No of Working Days in Month	25	
No of Working Days in a Year	300	
Machine capacity per annum	120,000	kg
<b>Production per annum</b>	<b>120,000</b>	<b>kg</b>

<b>Production of Honey Processing</b>		
<b>Production</b>	<b>Capacity</b>	<b>KG</b>
1st year	60%	72,000.00
2nd year	65%	78,000.00
3rd year	70%	84,000.00
4th year	75%	90,000.00
5th year	80%	96,000.00

<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	60%	160.00	115.20
2nd year	65%	168.00	131.04
3rd year	70%	176.00	147.84
4th year	75%	185.00	166.50
5th year	80%	194.00	186.24

## 5.7 Sales Revenue

<b><u>COMPUTATION OF SALE</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>
Op Stock	-	2,400.00	2,600.00	2,800.00	3,000.00
Production	72,000.00	78,000.00	84,000.00	90,000.00	96,000.00
Less : Closing Stock	2,400.00	2,600.00	2,800.00	3,000.00	3,200.00
<b>Net Sale</b>	<b>69,600.00</b>	<b>77,800.00</b>	<b>83,800.00</b>	<b>89,800.00</b>	<b>95,800.00</b>
Avg sale price per Kg	240.00	252.00	265.00	278.00	292.00
<b>Sales (in Lacs)</b>	<b>167.04</b>	<b>196.06</b>	<b>222.07</b>	<b>249.64</b>	<b>279.74</b>

## 5.8 Working Capital Assessment

(in Lacs)					
<b>COMPUTATION OF CLOSING STOCK &amp; WORKING CAPITAL</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>Finished Goods</u></b>					
	4.88	5.49	6.12	6.82	7.57
<b><u>Raw Material</u></b>					
	3.84	4.37	4.93	5.55	6.21
<b>Closing Stock</b>	<b>8.72</b>	<b>9.86</b>	<b>11.05</b>	<b>12.37</b>	<b>13.78</b>

<b>COMPUTATION OF WORKING CAPITAL REQUIREMENT</b>					
(in Lacs)					
<b>TRADITIONAL METHOD</b>					
<b>Particulars</b>	<b>Amount</b>	<b>Own Margin</b>		<b>Bank Finance</b>	
Finished Goods & Raw Material	8.72				
Less : Creditors	2.69				
<b>Paid stock</b>	<b>6.03</b>	<b>25%</b>	<b>1.51</b>	<b>75%</b>	<b>4.52</b>
<b>Sundry Debtors</b>	<b>5.57</b>	<b>25%</b>	<b>1.39</b>	<b>75%</b>	<b>4.18</b>
	<b>11.60</b>		<b>2.90</b>		<b>8.70</b>
<b>WORKING CAPITAL LIMIT DEMAND ( from Bank)</b>					
				<b>8.70</b>	

## 5.9 Power, Salary & Wages Calculation

<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.

<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>
Skilled (in thousand rupees)	12,000	4	48,000
Plant Operator	15,000	1	15,000
Unskilled (in thousand rupees)	9,000	8	72,000
<b>Total salary per month</b>			<b>135,000</b>
<b>Total annual labour charges</b>	<b>(in lacs)</b>		<b>16.20</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>
Accountant	12,500	1	12,500
Administrative Staffs	7,500	4	30,000
<b>Total salary per month</b>			<b>42,500</b>
<b>Total annual Staff charges</b>	<b>(in lacs)</b>		<b>5.10</b>



## 5.10 Depreciation

			(in Lacs)
<b>COMPUTATION OF DEPRECIATION</b>			
Description	Plant & Machinery	Furniture	TOTAL
Rate of Depreciation	<b>15.00%</b>	<b>10.00%</b>	
<b>Opening Balance</b>	-	-	-
Addition	48.23	1.20	49.43
Total	48.23	1.20	49.43
Less : Depreciation	7.23	0.12	7.35
<b>WDV at end of Year</b>	<b>41.00</b>	<b>1.08</b>	<b>42.08</b>
Additions During The Year	-	-	-
Total	41.00	1.08	42.08
Less : Depreciation	6.15	0.11	6.26
<b>WDV at end of Year</b>	<b>34.85</b>	<b>0.97</b>	<b>35.82</b>
Additions During The Year	-	-	-
Total	34.85	0.97	35.82
Less : Depreciation	5.23	0.10	5.32
<b>WDV at end of Year</b>	<b>29.62</b>	<b>0.87</b>	<b>30.49</b>
Additions During The Year	-	-	-
Total	29.62	0.87	30.49
Less : Depreciation	4.44	0.09	4.53
<b>WDV at end of Year</b>	<b>25.18</b>	<b>0.79</b>	<b>25.96</b>
Additions During The Year	-	-	-
Total	25.18	0.79	25.96
Less : Depreciation	3.78	0.08	3.86
<b>WDV at end of Year</b>	<b>21.40</b>	<b>0.71</b>	<b>22.11</b>

## 5.11 Repayment 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	-	37.07	37.07	-	-	37.07
	2nd month	37.07	-	37.07	0.34	-	37.07
	3rd month	37.07	-	37.07	0.34	-	37.07
	4th month	37.07	-	37.07	0.34	-	37.07
	5th month	37.07	-	37.07	0.34	-	37.07
	6th month	37.07	-	37.07	0.34	-	37.07
	7th month	37.07	-	37.07	0.34	0.69	36.39
	8th month	36.39	-	36.39	0.33	0.69	35.70
	9th month	35.70	-	35.70	0.33	0.69	35.01
	10th month	35.01	-	35.01	0.32	0.69	34.33
	11th month	34.33	-	34.33	0.31	0.69	33.64
	12th month	33.64	-	33.64	0.31	0.69	32.95
					3.64	4.12	
<b>2nd</b>	Opening Balance						
	1st month	32.95	-	32.95	0.30	0.69	32.27
	2nd month	32.27	-	32.27	0.30	0.69	31.58
	3rd month	31.58	-	31.58	0.29	0.69	30.89
	4th month	30.89	-	30.89	0.28	0.69	30.21
	5th month	30.21	-	30.21	0.28	0.69	29.52
	6th month	29.52	-	29.52	0.27	0.69	28.83
	7th month	28.83	-	28.83	0.26	0.69	28.15
	8th month	28.15	-	28.15	0.26	0.69	27.46
	9th month	27.46	-	27.46	0.25	0.69	26.77
	10th month	26.77	-	26.77	0.25	0.69	26.09
	11th month	26.09	-	26.09	0.24	0.69	25.40
	12th month	25.40	-	25.40	0.23	0.69	24.72
					3.21	8.24	
<b>3rd</b>	Opening Balance						
	1st month	24.72	-	24.72	0.23	0.69	24.03
	2nd month	24.03	-	24.03	0.22	0.69	23.34
	3rd month	23.34	-	23.34	0.21	0.69	22.66
	4th month	22.66	-	22.66	0.21	0.69	21.97
	5th month	21.97	-	21.97	0.20	0.69	21.28
	6th month	21.28	-	21.28	0.20	0.69	20.60
	7th month	20.60	-	20.60	0.19	0.69	19.91
	8th month	19.91	-	19.91	0.18	0.69	19.22
	9th month	19.22	-	19.22	0.18	0.69	18.54

	10th month	18.54	-	18.54	0.17	0.69	17.85
	11th month	17.85	-	17.85	0.16	0.69	17.16
	12th month	17.16	-	17.16	0.16	0.69	16.48
					<b>2.30</b>	<b>8.24</b>	
<b>4th</b>	Opening Balance						
	1st month	16.48	-	16.48	0.15	0.69	15.79
	2nd month	15.79	-	15.79	0.14	0.69	15.10
	3rd month	15.10	-	15.10	0.14	0.69	14.42
	4th month	14.42	-	14.42	0.13	0.69	13.73
	5th month	13.73	-	13.73	0.13	0.69	13.04
	6th month	13.04	-	13.04	0.12	0.69	12.36
	7th month	12.36	-	12.36	0.11	0.69	11.67
	8th month	11.67	-	11.67	0.11	0.69	10.98
	9th month	10.98	-	10.98	0.10	0.69	10.30
	10th month	10.30	-	10.30	0.09	0.69	9.61
	11th month	9.61	-	9.61	0.09	0.69	8.92
	12th month	8.92	-	8.92	0.08	0.69	8.24
					<b>1.40</b>	<b>8.24</b>	
<b>5th</b>	Opening Balance						
	1st month	8.24	-	8.24	0.08	0.69	7.55
	2nd month	7.55	-	7.55	0.07	0.69	6.87
	3rd month	6.87	-	6.87	0.06	0.69	6.18
	4th month	6.18	-	6.18	0.06	0.69	5.49
	5th month	5.49	-	5.49	0.05	0.69	4.81
	6th month	4.81	-	4.81	0.04	0.69	4.12
	7th month	4.12	-	4.12	0.04	0.69	3.43
	8th month	3.43	-	3.43	0.03	0.69	2.75
	9th month	2.75	-	2.75	0.03	0.69	2.06
	10th month	2.06	-	2.06	0.02	0.69	1.37
	11th month	1.37	-	1.37	0.01	0.69	0.69
	12th month	0.69	-	0.69	0.01	0.69	-
					<b>0.49</b>	<b>8.24</b>	
	DOOR TO DOOR	60		MONTHS			
	MORATORIUM PERIOD	6		MONTHS			
	REPAYMENT PERIOD	54		MONTHS			

## 5.12 Financial Ratio Analysis

<b>FINANCIAL INDICATORS</b>					
<b>PARTICULARS</b>	<b>1st year</b>	<b>2nd year</b>	<b>3rd year</b>	<b>4th year</b>	<b>5th year</b>
TURNOVER	167.04	196.06	222.07	249.64	279.74
GROSS PROFIT	25.51	31.90	39.15	45.76	53.36
<b>G.P. RATIO</b>	<b>15.27%</b>	<b>16.27%</b>	<b>17.63%</b>	<b>18.33%</b>	<b>19.07%</b>
NET PROFIT	3.47	7.80	13.58	18.53	24.23
<b>N.P. RATIO</b>	<b>2.08%</b>	<b>3.98%</b>	<b>6.11%</b>	<b>7.42%</b>	<b>8.66%</b>
CURRENT ASSETS	17.34	17.47	19.26	21.77	25.57
CURRENT LIABILITIES	11.74	12.18	12.65	13.19	13.77
<b>CURRENT RATIO</b>	<b>1.48</b>	<b>1.43</b>	<b>1.52</b>	<b>1.65</b>	<b>1.86</b>
TERM LOAN	32.95	24.72	16.48	8.24	-
TOTAL NET WORTH	14.73	16.39	20.62	26.30	33.91
<b>DEBT/EQUITY</b>	<b>2.24</b>	<b>1.51</b>	<b>0.80</b>	<b>0.31</b>	<b>-</b>
TOTAL NET WORTH	14.73	16.39	20.62	26.30	33.91
TOTAL OUTSIDE LIABILITIES	44.69	36.89	29.13	21.43	13.77
<b>TOL/TNW</b>	<b>3.03</b>	<b>2.25</b>	<b>1.41</b>	<b>0.81</b>	<b>0.41</b>
PBDIT	15.34	18.14	22.08	25.33	29.45
INTEREST	4.51	4.08	3.17	2.27	1.36
<b>INTEREST COVERAGE RATIO</b>	<b>3.40</b>	<b>4.45</b>	<b>6.96</b>	<b>11.17</b>	<b>21.64</b>
WDV	42.08	35.82	30.49	25.96	22.11
TERM LOAN	32.95	24.72	16.48	8.24	-
<b>FACR</b>	<b>1.28</b>	<b>1.45</b>	<b>1.85</b>	<b>3.15</b>	<b>-</b>

### 5.13 DSCR

<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	10.82	13.92	17.56	20.21	23.46
Interest on Term Loan	3.64	3.21	2.30	1.40	0.49
<b>Total</b>	<b>14.47</b>	<b>17.13</b>	<b>19.86</b>	<b>21.61</b>	<b>23.95</b>
<b><u>REPAYMENT</u></b>					
Instalment of Term Loan	4.12	8.24	8.24	8.24	8.24
Interest on Term Loan	3.64	3.21	2.30	1.40	0.49
Total	7.76	11.45	10.54	9.64	8.73
<b>DEBT SERVICE COVERAGE RATIO</b>	<b>1.86</b>	<b>1.50</b>	<b>1.88</b>	<b>2.24</b>	<b>2.74</b>
<b>AVERAGE D.S.C.R.</b>	<b>2.02</b>				

### 5.14 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>	167.04	196.06	222.07	249.64	279.74
Less : Op. WIP Goods	-	4.88	5.49	6.12	6.82
Add : Cl. WIP Goods	4.88	5.49	6.12	6.82	7.57
<b>Total Sales</b>	<b>171.92</b>	<b>196.67</b>	<b>222.70</b>	<b>250.35</b>	<b>280.49</b>
<b>Variable &amp; Semi Variable Exp.</b>					

Raw Material Consumed	115.20	131.04	147.84	166.50	186.24
Electricity Exp/Coal Consumption at 85%	3.67	4.04	4.44	4.89	5.38
Wages & Salary at 60%	12.78	14.06	15.46	17.01	18.71
Selling & administrative Expenses 80%	8.02	9.41	10.66	11.98	13.43
Interest on working Capital	0.87	0.87	0.87	0.87	0.87
Repair & maintenance	3.34	4.90	5.55	6.24	6.99
<b>Total Variable &amp; Semi Variable Exp</b>	<b>143.88</b>	<b>164.32</b>	<b>184.83</b>	<b>207.49</b>	<b>231.62</b>
<b>Contribution</b>	<b>28.04</b>	<b>32.35</b>	<b>37.87</b>	<b>42.85</b>	<b>48.87</b>
<b>Fixed &amp; Semi Fixed Expenses</b>					
Electricity Exp/Coal Consumption at 15%	0.65	0.71	0.78	0.86	0.95
Wages & Salary at 40%	8.52	9.37	10.31	11.34	12.47
Interest on Term Loan	3.64	3.21	2.30	1.40	0.49
Depreciation	7.35	6.26	5.32	4.53	3.86
Selling & administrative Expenses 20%	2.00	2.35	2.66	3.00	3.36
Rent	2.40	2.64	2.90	3.19	3.51
<b>Total Fixed Expenses</b>	<b>24.57</b>	<b>24.54</b>	<b>24.29</b>	<b>24.32</b>	<b>24.64</b>
<b>Capacity Utilization</b>	<b>60%</b>	<b>65%</b>	<b>70%</b>	<b>75%</b>	<b>80%</b>
<b>OPERATING PROFIT</b>	<b>3.47</b>	<b>7.80</b>	<b>13.58</b>	<b>18.53</b>	<b>24.23</b>
<b>BREAK EVEN POINT</b>	<b>53%</b>	<b>49%</b>	<b>45%</b>	<b>43%</b>	<b>40%</b>
<b>BREAK EVEN SALES</b>	<b>150.65</b>	<b>149.22</b>	<b>142.84</b>	<b>142.08</b>	<b>141.42</b>

## **6. LICENSE & APPROVALS**

- Obtain the GST registration.
- Additionally, obtain the Udyog Aadhar registration Number.
- Fire/pollution license as required.
- FSSAI License
- Factory License
- Choice of a Brand Name of the product and secure the name with Trademark if required.

## **7. ASSUMPTIONS**

1. Production Capacity of Honey is 400 Kg per day. First year, Capacity has been taken @ 60%.
2. Working shift of 8 hours per day has been considered.
3. Raw Material stock is for 10 days and Finished goods Closing Stock has been taken for 10 days.
4. Credit period to Sundry Debtors has been given for 10 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 KW.
10. Increase in sales and raw material costing has been taken @ 5% on a yearly basis.

## **Limitations of the Model DPR and Guidelines for Entrepreneurs**

### **Limitations of the Model DPR**

- i. This model DPR has provided only the basic standard components and methodology to be adopted by an entrepreneur while submitting a proposal under the Formalization of Micro Food Processing Enterprises Scheme of MoFPI.
- ii. This is a model DPR made to provide general methodological structure not for specific entrepreneur/crops/location. Therefore, information on the entrepreneur, forms and structure (proprietorship/partnership/cooperative/ FPC/joint stock company) of his business, details of proposed DPR, project location, raw material base/contract sourcing, entrepreneurs own SWOT analysis, detailed market research, rationale of the project for specific location, community advantage/benefit from the project, employment generation and many more detailed aspects not included.
- iii. The present DPR is based on certain assumptions on cost, prices, interest, capacity utilization, output recovery rate and so on. However, these assumptions in reality may vary across places, markets and situations; thus the resultant calculations will also change accordingly.