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: Proprietorship

## **CHAPTER - I**

## HIGHLIGHTS OF THE PROJECT REPORT

### A. ABOUT THE PROMOTER

8. Constitution

| PARTICULARS                  | ABOUT THE PROMOTER   |
|------------------------------|--|
| 1. Name                      | : Avdhesh Kumar  |
| 2. Address                   | : Village-Bhauja Nagla post-Har Harpur Block-Nawabganj, Dist-Bareilly U.P. |
| 3. Contact number            | : 9458245865   |
| 4. Date of birth             | : 24   |
| 5. Educational qualification | : Intermediate Agriculture   |
| 6. Project location          | : Bhauja   |
| 7. Professional Experience   | : 2  |
|                              |  |

# **B. PROJECT PROFILE (FINANCIAL)**

| PARAMETERS                     |                 | VALUES     |  |
|--------------------------------|-----------------|------------|--|
| 1. Unit size (colonies)        |                 | 800        |  |
| 2. Product                     |                 | Honey, Wax |  |
| 3. Cost of the project         |                 | 507,300    |  |
| 4. Bank loan                   |                 | 380,475    |  |
| 5. Margin money                |                 | 126,825    |  |
| 6. Financial Indicators        |                 |            |  |
|                                | BCR at 15% DF   | 2.35:1     |  |
|                                | NPW 15% DF(Rs.) | 1,006,211  |  |
|                                | IRR (%)         | 78.13      |  |
|                                | Average DSCR    | 4.2        |  |
| 7. Interest rate (% per annum) |                 | 12         |  |
| 8. Repayment period            |                 | 5 years    |  |

#### **CHAPTER - II**

#### PROJECT DESCRIPTION

#### Introduction

The Indian agriculture needs to be diversified so as to generate more income to farmers. Considering this aspect Khadi and Village Industries Board is promoting Bee-Keeping industry from years together in the country. Honey and Bees are known to the mankind since times immemorial. Honey is a nutritious fluid collected by Honey Bees which is good for human health. Honey is used by mankind since very ancient period as food, medicine etc. Bee-Keeping industry also plays important role in increase in yield of crop through pollination. This industry plays important role to create employment opportunities among the rural mass. The Government is implementing various programmes so as to promote this industry at large extent.

### **Manufacturing Process:-**

The preparation of good quality honey starts at bee yard. Bee-keeping activity should ideally located where there are minimum movements of human-beings with very little noise. Forest area is, therefore, suited with many flowering plants naturally grown. Movable wooden frames with boxes are placed at such locations and these boxes are spread with honey spice to attract more and more honey-bees. These bees leave fresh honey sucked from flowers in the cells of honey-comb provided in the boxes to eat bee feed. When these cells are full of honey, they are hermetically sealed by capping with wax and then honey is extracted from these cells. Freshly extracted honey is warm and easy to bottle. Honey should be stored in dry places as it readily absorbs moisture.

### **CHAPTER - III**

### MARKET POTENTIAL

Bee's Honey is natural, un refined food consumed as much in fresh or canned state. Honey has substantial medicinal properties and is used in India since long. Procurement of natural or pure honey is becoming difficult due to urbanization and de-forestation. Simultaneously, its demand is steadily increasing as ayurvedic medicines are becoming more and more popular. Honey is used extensively in making ayurvedic medicines. Many health conscious people consume it regularly. Natural honey is always in demand round the year. It is also used in making certain health food preparations.

Therefore, the government is also encouraging this activity and many government agencies extends many incentives as well as marketing support.

### **CHAPTER - IV**

#### **EXTENSION ACTIVITIES**

- 1. Before starting Honey bee-keeping project, the entrepreneurs/ farmers are generally advised to undergo training. They can contact local Horticulture Department staffs/ Horticulture College/ Agriculture University etc. for the purpose. However availability of training facilities & resources are inadequate. Hence I will provide training on Honey bee-keeping to farmers both onsite and off-site. During training program special thrust on scientific production technology & marketing will be given.
- 2. For the farmers of nearby locality, visits will be arranged on my Honey bee-keeping & they will be educated on scientific lines regarding various aspects of Honey bee-keeping. It will help them to improve their knowledge and skill regarding scientific practices so as to enable them to adopt the same.
- 3. Capability among Honey bee-keeping growers and processors will be build to produce quality product.
- 4. Initiatives will be taken to strengthen linkages between State Departments, Horticulture Development agencies, NGO's and farmers.
- 5. For farmers who have decided to avail loan from bank for Honey bee-keeping project, assistance will be provided to prepare their bankable project report.
- 6. For the marketing of Honey, farmers will be provided necessary support & guidance.
- 7. Visits of farmers will be arranged to exhibitions with the prime objective of exposing them the technological innovations.
- 8. Nowadays internet has become important tool to get latest information. There are various websites available on Honey bee-keeping which provides useful content. This information will be shared to farmers.
- 9. Necessary assistance will be given to farmers for setting up model Honey bee-keeping unit .
- 10. Field visits of Honey producer farmers will be arranged to progressive farmers & research stations which will motivate them to adapt good scientific practices.

## CHAPTER - V SWOT ANALYSIS

#### Strengths:

- Its principal product honey is already popular hence market for shall take care.
- Processing of honey is not very difficult which can be done even at cottage scale with simple equipment's.
- It does not require labour
- It brings cohesion and cooperation among the villagers.
- It increases the crop yield due to population.
- Bee boxes can easily to prepared at village level with a little training and providing standard specification.

### **Opportunities:**

- Honey market can be expanded if organized properly.
- Scope for extraction of royal jelly shall increase potentiality since it has demand for preparation of pharmaceutical preparations.
- Bees wax can be utilized for manufacture of utility and fancy items.
- Bee venum if extracted can be used for various medicinal preparations.
- Various value added items and recipes can be prepared out of honey.
- Beekeeping can bring green revolution due to cross pollination.
- Stinges of dead bees can be used for medicinal preparations.
- Honey as regular food shall ensure better national health hence shall decrease expenditure on health budget.
- Propolish if collected can be used as medicine.
- There is very good export potential for good guality and original honey obtained from Bee's comb.

#### Weakness

- Details about honey of various floras are not available.
- Beekeeping as we find today is heavily subsidized. We have to see whether it can run without subsidy or not since subsidies may not be available for ever.
- Beekeepers are not organized. Hence they are subject to exploitation by middle man.
- Although it can be trained easily for taming the bees and collecting honey, but it is not easy to train all beekeepers on bee diseases. For prevention or cure bee doctors are not available everywhere, hence epidemic can destroy entire bee population very fast

#### **Threats**

- Taking advantage of popularity of honey adulterated honey has taken bulk of market share which threatens honey marketing.
- Indiscriminate spraying of pesticides has not only killed bees but also made honey harmful.
- Graining of honey of certain floras has made even pure honey unpopular since consumers are not aware of its background.
- Marketing honey by some monopoly houses recently has exploited beekeepers

Kg. per colony

Rs.

0.1

200

## **CHAPTER - VI**

# **ECONOMICS OF THE PROJECT**

## A. BASIS & PRESUMPTIONS

3. Yield of bee wax

4. Rate of bee wax per kg.

| PARTICULARS                             | UNIT   | QUANTITY |  |  |  |  |  |  |  |
|---|--|----------|--|--|--|--|--|--|--|
| I. Techno-economic parameters           |  |          |  |  |  |  |  |  |  |
| It is assumed that beekeeping is starte | It is assumed that beekeeping is started in August to September to get maximun return. |          |  |  |  |  |  |  |  |
| II. Expenditure norms                   |  |          |  |  |  |  |  |  |  |
| 1. Cost of one colony                   | Rs.  | 100      |  |  |  |  |  |  |  |
| 2. No of colonies                       | Nos.   | 800      |  |  |  |  |  |  |  |
| 3. Requirement of suguar per colony     | Kg.  | 2        |  |  |  |  |  |  |  |
| 4. Rate of sugar                        | Rs   | 20       |  |  |  |  |  |  |  |
| 5. Cost of one hive                     | Rs.  | 400      |  |  |  |  |  |  |  |
| 6. Cost of one Nucleus box              | Rs.  | 300      |  |  |  |  |  |  |  |
| 7. Managing kits                        | Lumpsum  | 3,000    |  |  |  |  |  |  |  |
| 8. Handling kits                        | Lumpsum  | 2,000    |  |  |  |  |  |  |  |
| III. Revenue Parameters                 |  |          |  |  |  |  |  |  |  |
| 1. Honey yield per colony               | Kg.  | 4        |  |  |  |  |  |  |  |
| 2. Rate of honey per kg.                | Rs.  | 150      |  |  |  |  |  |  |  |

# **B. TOTAL COST OF PROJECT**

| PARTICULARS   | UNIT   | UNIT RATE | QUANTITY           | AMOUNT  |
|---|--------|-----------|--------------------|---------|
|   |        | in Rs.    |                    | in Rs.  |
| I. Capital Costs  |        |           |                    |         |
| 1. Cost of hives (Newton's Bee hive of teak wood)   | /hive  | 400       | 800                | 320,000 |
| 2. Nucleus boxes  | Nos.   | 400       | 160                | 64,000  |
| 3. Managing kits(Hive stand; queen cage; queen excluder; queen protecter; feeding bottle; queen gates-one with each box)  | Lumsum |           |                    | 300     |
| 4. Handling kits (honey extractor, smoker and other applianceslike bee viel, gloves; hive tool hammer; nail puller; swarm bag; frame gripper one per beekeeper) | Lumsum |           |                    | 3,000   |
|   |        |           | Total Capital Cost | 387,300 |
|   |        |           |                    |         |
| II. Working Capital (1st cycle requirement)   |        |           |                    | 120,000 |
| TOTAL COST OF PROJECT   |        |           |                    | 507,300 |

# C. MEANS OF FINANCE

| PARTICULARS                 | UNIT            | UNIT RATE          | AMOUNT Rs. |
|-----------------------------|-----------------|--------------------|------------|
| 1. Term loan                | %               | 75                 | 380,475    |
| 2. Own contribution         | %               | 25                 | 126,825    |
|                             |                 | TOTAL              | 507,300    |
| 3. Subsidy entitlement @36% | from NABARD und | er AC & ABC Scheme | 182,628    |

# D. PROJECTED PROFITABILITY

(Value in Rs.)

| PARTICULARS               | UNIT    | UNIT RATE | QUANTITY  | IYEAR   | IIYEAR  | IIIYEAR | IVYEAR  | VYEAR   |
|---------------------------|---------|-----------|-----------|---------|---------|---------|---------|---------|
| I. Income                 |         |           |           |         |         |         |         |         |
| a. Honey                  | Kg.     | 150       | 3,200     | 480,000 | 480,000 | 480,000 | 480,000 | 480,000 |
| b. Bees wax               | Kg.     | 200       | 80        | 16,000  | 16,000  | 16,000  | 16,000  | 16,000  |
| Interest on subsidy @ 6%  |         |           |           | 10,958  | 10,958  | 10,958  | 10,958  | -       |
| Subsidy                   |         |           |           | -       | -       | -       | -       | 182,628 |
|                           |         |           | TOTAL(A)  | 506,958 | 506,958 | 506,958 | 506,958 | 678,628 |
| II. Expenditure           |         |           |           |         |         |         |         |         |
| a. Cost of raw materials  |         |           |           |         |         |         |         |         |
| Sugar during death period | Kg.     | 20        | 1,600     | 32,000  | 32,000  | 32,000  | 32,000  | 32,000  |
| Colonies                  | Nos.    | 100       | 800       | 80,000  | 80,000  | 80,000  | 80,000  | 80,000  |
| b. Cost of Manpower       |         |           |           |         |         |         |         |         |
| Labour charges            | Mandays | 100       | 50        | 5,000   | 5,500   | 6,050   | 6,655   | 7,321   |
| c. Overhead Expenses      |         |           |           |         |         |         |         |         |
| Marketing expenses        | Lumpsum |           |           | 2,000   | 2,000   | 2,000   | 2,000   | 2,000   |
| Transportation            | Lumpsum |           |           | 1,000   | 1,000   | 1,000   | 1,000   | 1,000   |
|                           |         |           | TOTAL(B)  | 120,000 | 120,500 | 121,050 | 121,655 | 122,321 |
| III. Net Income           |         | T         | OTAL(A-B) | 376,000 | 386,458 | 385,908 | 385,303 | 556,307 |

# F. FINANCIAL ANALYSIS

(Value in Rs.)

| PARTICULARS  | I YEAR  | II YEAR | III YEAR | IV YEAR | V YEAR  | TOTAL     |
|--|---------|---------|----------|---------|---------|-----------|
| Capital costs  | 387,300 |         |          |         |         |           |
| Recurring costs  | 120,000 | 120,500 | 121,050  | 121,655 | 122,321 |           |
| TOTAL COST   | 507,300 | 120,500 | 121,050  | 121,655 | 122,321 |           |
| Benefit  | 496,000 | 496,000 | 496,000  | 496,000 | 496,000 |           |
| Depreciated value of building, fencing borewell etc @10% | ,       |         |          |         | 165,958 |           |
| TOTAL BENEFIT  | 165,958 | 496,000 | 496,000  | 496,000 | 661,958 |           |
| NET BENEFIT  | -11,300 | 375,500 | 374,950  | 374,345 | 539,637 |           |
| Discounting factor @15%                                  | 0.87    | 0.76    | 0.66     | 0.57    | 0.5     |           |
| NPV cost at 15% DF                                       | 441,351 | 91,580  | 79,893   | 69,343  | 61,161  | 743,328   |
| NPV benefits at 15% DF                                   | 431,520 | 376,960 | 327,360  | 282,720 | 330,979 | 1,749,539 |
| NPW at 15% DF  | 1006211 |         |          |         |         |           |
| BCR at 15% DF  | 2.35:1  |         |          |         |         |           |
| IRR%   | 78.13   |         |          |         |         |           |

# **G. TERM LOAN REPAYMENT**

Rate of interst - % per annum: 12

Opening balance of term loan : 380,475

(Value in Rs.)

| Year | Loan<br>Outstanding | Net Income | Principal | Interest | Total<br>Repayment | Net Surplus | DSCR |
|------|---------------------|------------|-----------|----------|--------------------|-------------|------|
| 1    | 380,475             | 376,000    | 76,095    | 45,657   | 121,752            | 254,248     | 3.1  |
| 2    | 304,380             | 386,458    | 76,095    | 36,526   | 112,621            | 273,837     | 3.4  |
| 3    | 228,285             | 385,908    | 76,095    | 27,394   | 103,489            | 282,419     | 3.7  |
| 4    | 152,190             | 385,303    | 76,095    | 18,263   | 94,358             | 290,945     | 4.1  |
| 5    | 76,095              | 556,307    | 76,095    | 9,131    | 85,226             | 471,081     | 6.5  |
|      |                     |            |           |          | A                  | verage DSCR | 4.2  |