

PROJECT PROFILE

ON

SHG - OTHER INDUSTRIES

BEE KEEPING

Month & Year
December 2008

**PREPARED BY
TANSTIA-FNF SERVICE CENTRE
B-22, INDUSTRIAL ESTATE
CHENNAI-600032**

Supported by

Friedrich Naumann
STIFTUNG **FÜR DIE FREIHEIT**

BEE KEEPING

INTRODUCTION

Beekeeping provides Honey. Honey is an aromatic viscous material derived from the nectars of plants through the collection of honey-bees and modified and stored by them as a dense liquid. It consists chiefly of sugar, dextrose and laevulose. It is estimated that 200 grams of honey is as nourishing as 1.135 kgs of milk or 1.658 kgs of cream cheese or 340 gm of meat or 425 gms of boneless cold fish or 8 oranges or 10 eggs. It is rich energy giving food , with milk it becomes a perfect food.

MARKET

Honey is used for human consumption. With the health conciseness becoming more are more important every day, the demand for the honey is going up. Presently a large amount of honey in consumer packs is being sold throughout the retail outlets of Khadi and Village Industries commission. Private supermarkets also sell a lot of Honey in consumer packs. Honey is used in various food preparations.

INSTALLED CAPACITY

The production capacity of the proposed beekeeping unit is assumed at 30000 kgs of Honey per annum.

PLANT AND MACHINERY

The following items of plant and machinery are required for the project.

Items	Qty	Rate	Value Rs
Bee-keeping unit (250 colonies)			
Bee hives	250	1000	250000
Bee colonies	250	300	75000
Hive stands wooden	250	40	10000
Feeding pots	250	15	3750
Comb foundation	1750	15	26250
Crude honey extractor	1	3000	3000
Migration cards	250	60	15000

Honey processing unit- Honey strainer	1	2000	2000
Honey processing plant with electric heating and control system	1	6000	6000
Cap sealing machine	1	15000	15000
Laboratory equipments such as Electric oven, Refractometer etc		25000	25000
Weighing scales	1	8000	8000
Table weighing scale		3000	3000
Total			442000

MANUFACTURING PROCESS

Three species of honey bees , namely Apis dorsta, Apis Flora and Apis Indica which are available in India are used for honey comb. In India various sizes of wooden frames which are movable are in use for honey comb. These are of standard sizes. They are placed in lonely places. To each box a honey spice is proved which collects more bees. All these bees fill the cells of honey comb. When these cells are filled, they are hermetically sealed by capping with wax. Before such combs are placed in the honey extractor, these cappings are removed with the help of an uncapping knife. The extractor should be worked slowly in the beginning at about 150 RPM for about 2 minutes. Then the side of the frame should be reversed and the extractor again worked for the same duration. The extractor should be emptied in to cistern when its honey chamber is two third full. It is advisable to make arrangements for straining and packing honey into this promptly to obviate a need of subsequent heating of the produce. Freshly extracted honey is warm and easy to stain.

RAW MATERIALS

The raw material required for the production at full capacity is given below

Items	Qty	Value
Bottles for filling	60000	300000
Cartons, Straps,		15000

		315000
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LOCATION LAND AND BUILDING

The infrastructural facilities required for the project by way of land and building are the following.

Built up area-Sq.ft	2000
Rent p.m.-Rs	4000
Advance-10 months.Rs	40000

UTILITIES

The utilities required for the project are the following

Power required- 2 Kw

Water required – Only for human consumption

MANPOWER

The manpower requirement for the project is given below

		Monthly wages	Total
Supervisor	1	3000	3000
Skilled	1	2000	2000
Helpers	3	1500	4500
sub total			9500
Add benefits		20%	1900
Total per month			11400
TOTAL PER ANNUM-Rs. lakhs			1.37

COST OF PROJECT AND MEANS OF FINANCE

The cost of project and Means of Finance is estimated as given below

1. COST OF PROJECT

[Rs.lakhs]

Land & Building (Advance)	0.40
Plant & Machinery	4.42
Other Misc. assets	0.03
Pre-Operative expenses	0.05
Margin for WC	0.05
	4.95

2. MEANS OF FINANCE

Capital	1.63
Term Loan	3.32
	4.95

- The term loan proposed is 75% of the Plant and machinery value
- The promoters will bring in the required capital contribution to the project.

COST OF PRODUCTION AND PROFITABILITY

A cost and profitability statement projected for the first 5 years of operations is given in Annexure. The profitability is based on the following assumptions.

Assumptions

Installed capacity	30000 kgs of Honey per annum
Capacity utilisation	Year-1 -60% Year -2 -70%

	Year-3 onwards- 80%
Selling price	Rs.75.00 per kg
Raw materials	As per the details given above
Packing materials	As per details given above
Power	Rs.0.23 lakh per annum at 100%
Wages and salaries	Rs. 1.37 lakhs with increase 5% every year.
Repairs and Maintenance	Rs.0.12 lakh per annum
Depreciation	Written down value method -15 % on machinery
Selling general and administrative expenses	Rs.10000 per month
Interest on Term loan	10% per annum
Interest on working capital	10 % per annum
Income tax	33.66 % on profits

ASSESSMENT OF WORKING CAPITAL

The working capital is not proposed for the unit as the minimum working capital will be met out of promoter's capital.

PROFITABILITY RATIOS

The project ensures good profits on investment and sales turnover.

DEBT SERVICE COVERAGE RATIO

The debt service coverage ratio of this concern is very high as the Term loan component is too low and the returns are high in this project.

BREAK EVEN LEVEL

The break even level of the unit is 20% of the installed capacity

LIST OF MACHINERY SUPPLIERS

The local fabricators can fabricate the Bee keeping machinery.

FINANCIAL ASPECTS

1. COST OF PROJECT

	[Rs.lakhs]
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Plant & Machinery	4.42
Other Misc. assets	0.03
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Margin for WC	0.05
	<u>4.95</u>

2. MEANS OF FINANCE

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Term Loan	3.32
	<u>4.95</u>

3. COST OF PRODUCTION & PROFITABILITY STATEMENT

	[Rs.lakhs]				
Years	1	2	3	4	5
Installed Capacity Kgs	30000	30000	30000	30000	30000
Utilisation	60%	70%	80%	80%	80%
Production/Sales Kgs	18000	21000	24000	24000	24000
Selling Price	Rs.75 per Kg				
Sales Value (Rs.lakhs)	13.50	15.75	18.00	18.00	18.00
Raw Materials	0.00	0.00	0.00	0.00	0.00
Packing Materials	2.70	3.15	3.60	3.60	3.60
Power& fuel	0.14	0.16	0.18	0.18	0.18

Wages & Salaries	1.37	1.40	1.42	1.45	1.48
Repairs & Maintenance	0.12	0.13	0.14	0.15	0.17
Depreciation	0.66	0.56	0.48	0.41	0.35
Cost of Production	4.99	5.40	5.82	5.79	5.78
Selling, Admin, & General exp	1.20	1.26	1.32	1.39	1.46
Interest on Term Loan	0.33	0.29	0.21	0.21	0.21
Interest on Working Capital	0.00	0.00	0.00	0.00	0.00
Total	6.52	6.95	7.35	7.39	7.45
Profit Before Tax	6.98	8.80	10.65	10.61	10.55
Provision for tax	2.35	2.96	3.58	3.57	3.55
Profit After Tax	4.63	5.84	7.07	7.04	7.00
Add: Depreciation	0.66	0.56	0.48	0.41	0.35
Cash Accruals	5.30	6.41	7.54	7.45	7.35
Repayment of Term loan	0.00	0.83	0.83	0.83	0.83

4. WORKING CAPITAL:

	Months Consumptions	Values	%	Margin Amount	Bank Finance
Raw Materials	0.50	0.00	25%	0.00	0.00
Expenses	1.00	0.05	100%	0.05	0.00
		0.05		0.05	0.00

6. PROFITABILITY RATIOS BASED ON 80% UTILISATION

$$\frac{\text{Profit after Tax}}{\text{Sales}} = \frac{7.07}{18.00} = 39\%$$

$$\frac{\text{Profit before Interest and Tax}}{\text{Total Investment}} = \frac{10.86}{4.95} = 219\%$$

$$\frac{\text{Profit after Tax}}{\text{Promoters Capital}} = \frac{7.07}{1.63} \quad 433\%$$

7. BREAK EVEN LEVEL

Fixed Cost
(FC):

	[Rs.lakhs]
Wages & Salaries	1.42
Repairs & Maintenance	0.14
Depreciation	0.48
Admin. & General expenses	1.32
Interest on TL	0.21
	<u>3.57</u>

Profit Before Tax (P) 10.65

$$\text{BEL} = \frac{\text{FC} \times 100}{\text{FC} + \text{P}} = \frac{3.57}{14.22} \times \frac{80}{100} \times 100$$

20% of installed capacity