



Pre-feasibility Study

HONEY PROCESSING

November 2020

“The figures and financial projections are approximate due to fluctuations in exchange rates, energy costs, and fuel prices etc. Users are advised to focus on understanding essential elements such as production processes and capacities, space, machinery, human resources, and raw material etc. requirements. Project investment, operating costs, and revenues can change daily. For accurate financial calculations, utilize financial calculators on SMEDA’s website and consult financial experts to stay current with market conditions.”

Small and Medium Enterprises Development Authority
Ministry of Industries and Production
Government of Pakistan

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1 DISCLAIMER

This information memorandum is to introduce the subject matter and provide a general idea and information on the said matter. Although, the material included in this document is based on data/information gathered from various reliable sources; however, it is based upon certain assumptions, which may differ from case to case. The information has been provided on as is where is basis without any warranties or assertions as to the correctness or soundness thereof. Although, due care and diligence has been taken to compile this document, the contained information may vary due to any change in any of the concerned factors, and the actual results may differ substantially from the presented information. SMEDA, its employees or agents do not assume any liability for any financial or other loss resulting from this memorandum in consequence of undertaking this activity. The contained information does not preclude any further professional advice. The prospective user of this memorandum is encouraged to carry out additional diligence and gather any information which is necessary for making an informed decision, including taking professional advice from a qualified consultant/technical expert before taking any decision to act upon the information.

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2 EXECUTIVE SUMMARY

The project of honey production, processing, packaging, and marketing envisages the farming of honeybees, extraction of honey followed by packaging and then distribution or supply to the consumer market.

The proposed honey processing unit is assumed to house 250 Hive Boxes and will produce 7,500 kgs of honey as an annual operating and installed capacity. Two types of honey i.e. Normal Honey and Berry Honey will be produced in five harvesting cycles (4 for normal honey and 1 for berry hone) in a year, approximately 73 days per harvesting cycle. Honey production is proposed to be located in areas where wild plantation and crop farming is common. In Punjab, Attock, Sargodha, Daska are ideal places, while in KPK, Haripur, Karak, Kohat, Sawat and Bannu are most suitable. In Balochistan and Sindh a few areas of Qallat and Sujawal respectively are also suitable for honey production.

The proposed Honey Processing unit entails a total investment of Rs. 3.037 million. This includes capital investment of Rs. 1.571 million and Rs. 1.466 million as initial working capital. The project assumed to be financed through 100% equity. The Net Present Value (NPV) of the project is Rs. 2.078 million with an Internal Rate of Return (IRR) of 32% and a Payback Period of 3.41 years.

Networking with the honey suppliers from all over the country and prior knowledge of the honey processing and bee keeping will be highly critical for the success of the venture. The legal business status of this project is assumed to be 'Sole Proprietorship'.

3 INTRODUCTION TO SMEDA

The Small and Medium Enterprises Development Authority (SMEDA) was established in October 1998 with an objective to provide fresh impetus to the economy through development of Small and Medium Enterprises (SMEs).

With a mission "to assist in employment generation and value addition to the national income, through development of the SME sector, by helping increase the number, scale and competitiveness of SMEs", SMEDA has carried out 'sectoral research' to identify policy, access to finance, business development services, strategic initiatives and institutional collaboration and networking initiatives.

Preparation and dissemination of prefeasibility studies in key areas of investment has been a successful hallmark of SME facilitation by SMEDA.

Concurrent to the prefeasibility studies, a broad spectrum of business development services is also offered to the SMEs by SMEDA. These services include identification

of experts and consultants and delivery of need based capacity building programs of different types in addition to business guidance through help desk services.

4 PURPOSE OF THE DOCUMENT

The objective of the pre-feasibility study is primarily to facilitate potential entrepreneurs in project identification for investment. The project pre-feasibility may form the basis of an important investment decision and in order to serve this objective, the document/study covers various aspects of project concept development, start-up, and production, marketing, finance and business management.

The purpose of this document is to facilitate potential investors in **Honey Processing** by providing them with a general understanding of the business with the intention of supporting potential investors in crucial investment decisions.

The need to come up with pre-feasibility reports for undocumented or minimally documented sectors attains greater imminence as the research that precedes such reports reveal certain thumb rules; best practices developed by existing enterprises by trial and error, and certain industrial norms that become a guiding source regarding various aspects of business set-up and its successful management.

Apart from carefully studying the whole document one must consider critical aspects provided later, which form basis of any Investment Decision.

5 BRIEF DESCRIPTION OF PROJECT & PRODUCT

Beekeeping is the process of preserving bee colonies, in man-made hives in order to collect their honey for commercial prospects. The collected honey is processed, packaged and sold in the market. Honey is widely used for human consumption as food supplement as well as an ingredient for various processed food, baked items and medicines etc. The place or location where bee are kept is called an 'Apiary' or 'Bee Yard'. Honey Processing business generally comprised of two separate locations; one for setting up 'Bee Hives Colony' and other for 'Honey Extraction, Refinement and Packaging'.

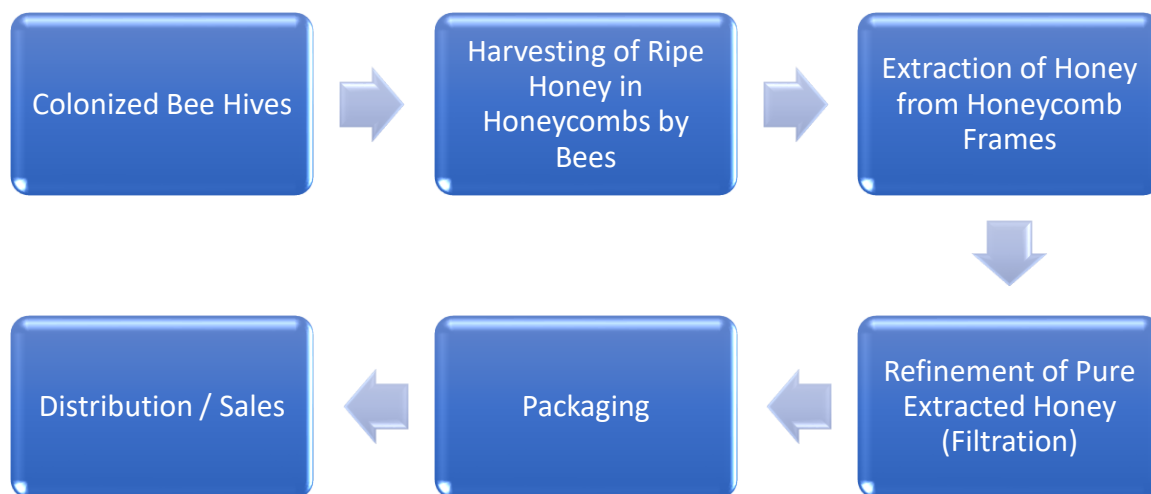
The proposed honey processing and packaging unit is mainly comprised of basic honey extracting and packaging equipment, including Manual Honey Extractor, De-Capping Knives & Utensils, Small Drums, Standard Hive Boxes and Camping Equipment for Apiary Staff. The proposed unit assumed to house 250 Hive Boxes with an annual capacity of producing 7,500 kgs of processed honey. Two types of honey i.e. Normal Honey and Berry Honey will be produced in five harvesting cycles (4 for normal honey and 1 for berry hone) in a year, approximately 73 days per harvesting cycle. The hives will be kept on places with abundant supply of nectar-secreting and

pollen bearing plants. Honey will be available in 125, 250, 500, and 1000 grams sizes of bottles. The produced honey will be sold in the local markets of major cities.

5.1 Production Process Flow

Extraction of honey from 'Honeycombs' is the main process of this business. The honey is stored by honey bees in the 'Honeycombs', which are made in the form of honeycomb frames in the hive boxes. So, honey is manually extracted from these honeycomb frames in a pure liquid form, through steel extractor and other utensils. This extracted honey in is pure form which is further refined through filtration. Afterwards, the honey is packed in different sizes of bottles or in bulk containers. Manual filling lines include bottle cleaning, filling, capping, front and back labelling and packing. The finished goods are then distributed in the market.

Figure 1: Process Flow Diagram



5.2 Installed And Operational Capacities

For this project it is assumed that the production will start from utilizing 250 Beehives. Average production from one colony is 30 Kg per year, where 24 Kg is Natural Honey and 6 Kg is Berry Honey. The initial total honey production would be 7500 Kg per year based on the above-mentioned assumptions.

6 CRITICAL FACTORS

Individuals considering entering the honey industry must carefully consider the following factors:

- ⇒ Networking with the honey suppliers from all over the country would be necessary to meet any excess requirement or shortfall
- ⇒ Consistent quality of refined honey from the production facility
- ⇒ Availability of skilled manpower
- ⇒ Wholesaler contracts
- ⇒ Access to crop and fields that provide foraging for bees and results in good produce of honey.

7 GEOGRAPHICAL POTENTIAL FOR INVESTMENT

Honey extraction, processing, packaging and marketing is considered to be a small-scale business in Pakistan. There are two types of honey known in the market, one is wild honey for which the largest source is FATA areas and Changa Manga (Punjab) due to abundant forestation, while, farm honey is produced largely in Punjab and some areas of NWFP & Sindh.

Particularly in Punjab, Attock, Sargodha, Duska are ideal places, while in KPK, Haripur, Karak, Kohat, Sawat and Bannu are most suitable. In Balochistan and Sindh a few areas of Qallat and Sujawal respectively are also suitable for honey production.

8 POTENTIAL TARGET CUSTOMERS / MARKETS

Honey is an important nutritive food having medicinal value as well, containing various kinds of sugar, protein, free amino acids, minerals, trace elements, enzymes and vitamins with a high caloric value. Due to its health benefits, it is being consumed all over Pakistan. While looking at major honey markets and honey demand, Karachi is the biggest urban market which consumes about one-third of the total production. All the major cities such as Lahore, Peshawar, Quetta, Rawalpindi, Faisalabad, Multan, Hyderabad etc. are attractive local markets while for international markets, Saudi Arabia, UAE, USA, Kuwait and Jordan are good potential markets for Natural Honey.

9 PROJECT COST SUMMARY

A detailed financial model has been developed to analyze the commercial viability of Honey Processing Unit. Various cost and revenue related assumptions along with results of the analysis are outlined in this section.

The projected Income Statement, Cash Flow Statement and Balance Sheet are attached as annexures.

9.1 Project Economics

All the figures in this financial model have been calculated for estimated sales of Rs. 5.574 Million in the year one. The capacity utilization during year one is worked out at 100%. To financially appraise the project, a 100% Equity Based Business Model has been assumed. The following tables show Internal Rate of Return, Payback Period Net Present Value and Breakeven of the proposed venture:

Table 1: Project Economics (Equity Finance)

Description	Details
Internal Rate of Return (IRR)	32%
Payback Period (Yrs.)	3.41
Net Present Value (Rs.)	2,076,878

However, for the purposes of further explanation the Project Economics based on Debt:Equity (i.e. 50:50) Model has also been computed. On the basis of Debt:Equity model the Internal Rate of Return, Payback Period and Net Present Value of the proposed project are provide in the table below:

Table 2: Project Economics Based on Debt (50%) : Equity (50%)

Description	Details
Internal Rate of Return (IRR)	32%
Payback Period (Yrs.)	3.47
Net Present Value (Rs.)	2,588,282

The financial assumptions for Debt:Equity are as follows:

Table 3: Financial Assumptions for Debt:Equity Model

Description	Details
Debt	50%
Equity	50%
Interest Rate on Debt	12%
Debt Tenure	5 Years

Debt Payment / Year

Annual

Table 4: Breakeven (100% Equity Based)

BREAKEVEN ANALYSIS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Break-Even Revenue	4,351,739	4,734,622	5,160,429	5,622,400	6,130,606	6,689,828	7,312,879	8,005,774	8,782,934	9,609,856
Break-Even Units	3,183	3,149	3,120	3,090	3,063	3,039	3,020	3,005	2,997	2,981
Margin of Safety	22%	23%	23%	24%	25%	25%	26%	26%	26%	27%

The projected Income Statement, Cash Flow Statement and Balance Sheet enclosed as annexures are based on 100% Equity Based Business Model. Calculation of break-even analysis is as follows:

9.2 Project Cost

Following fixed and working capital requirements have been identified for operations of the proposed business.

Table 5: Project Cost

Description	Amount Rs.
Capital Cost	
Machinery & Equipment	1,367,000
Furniture & Fixtures	125,900
Pre-operating Costs	40,000
Office Equipment	38,000
Total Capital Cost	1,570,900
Working Capital	
Initial Expenses (First 3 months)	1,191,441
Cash	250,000
Up-front Building Rent	25,000
Total Working Capital	1,466,441
Total Project Cost	3,037,341

9.3 Space Requirement

Honey will be produced using hives / boxes initially, placed at any suitable location which are leased or freely available on rent. Packaging and marketing will be managed from the factory office situated in semi commercial or industry cluster of any major city and can be set up on a monthly rental basis. Details of space requirement and related cost is given below.

Table 6: Space Requirement

Description	Estimated Area (Sq. ft.)	Expense per Month (Rs.)
Processing / Store Area	558	
Office	120	
Total for Office and Processing Area	678	25,000
Apiary Site	27,000	10,000

9.4 Machinery & Equipment Requirement

Plant, machinery, and equipment for the proposed project are stated below.

Table 7: Machinery & Equipment

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Hives (Boxes)	250	5,000	1,250,000
Camping Equipment For Apiary Staff	1	45,000	45,000
Manual Honey Extractor (Steel)	1	30,000	30,000
De-capping Knives / Utensils / Storage Drums	1	22,000	22,000
Packing / Filling Line	1	20,000	20,000
Total			1,367,000

9.5 Furniture & Fixtures Requirement

Details of the furniture and fixture required for the project are given below.

Table 8: Furniture & Fixture

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Shelves	3	15,000	45,000
Table and Chair for Owner	1	25,000	25,000
Table for Packing Area	1	18,000	18,000
Visitor Chairs	3	5,500	16,500
Bracket Fans	3	3,800	11,400
Chairs for Storage Room/Packing Area	4	1,500	6,000
Exhaust fans	1	2,200	2,200
LED Lights	6	300	1,800
Total			125,900

9.6 Office Equipment Requirement

Following office equipment will be required for the proposed Honey Processing Unit.

Table 9: Office Equipment

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Printer	1	20,000	20,000
Computer	1	18,000	18,000
Total	2		38,000

9.7 Human Resource Requirement

In order to run operations of Honey Processing Unit smoothly, details of human resources required along with number of employees and monthly salary are recommended as under.

Table 10: Human Resource Requirement

Description	No. of Employees	Monthly Salary per person (Rs.)
-------------	------------------	---------------------------------

Owner / Manager	1	40,000
Supervisor	1	20,000
Assistants	2	17,500
Total	4	

9.8 Utilities and other costs

An essential cost to be borne by the project is the cost of electricity. The electricity expenses are estimated to be around Rs. 1,804 per month, whereas water expenses are estimated to be Rs. 14,400 / year. Furthermore, promotional expense being essential for marketing of Honey Processing is estimated as 2% of revenue expenses.

9.9 Revenue Generation

Based on the capacity utilization of 100%, sales revenue during the first year of operations is estimated in below table.

Table 11: Revenue Generation (Year 1)

Description	Rate	Total Revenue (Rs.)
500 Gm Bottle Berry	750	1,125,000
1000 Gm Bottle Berry	1,500	1,125,000
250 Gm Bottle	140	1,008,000
500 Gm Bottle	270	972,000
125 Gm Bottle	75	720,000
1000 Gm Bottle	520	624,000
Total Revenue		5,574,000

10 CONTACT DETAILS

In order to facilitate potential investors, contact details of private sector Service Providers relevant to the proposed project be given.

Table 12: Machinery Suppliers

Name of Supplier	Address	Phone
Mr. Tanveer ul Hasan Cosmos International	S-6, A-206, Block 13-C Gulshan-e-Iqbal Karachi	2134979574 / 0301-2760137
Bizko Tech Engineering	Orangi No. 5, Near Police Station, Karachi.	+9221-35427334

Table 13: Technical Experts

Name	Address	Phone
Mr. Syed Asim Zafar Shah	Head Office: SHAH FARMS 4 & 6 Dilkusha Chamber Opp. Godeon Cinema Marston Road, Karachi, Pakistan	+92-42-35870222- 6549123
Mr. M. S. Munawar Principal Scientific Officer	Honeybee Research Institute National Agriculture Research Centre (NARC) Park Road, Islamabad	Tel: +92-51 9255061, +92-51 9255012 Cell: 0344- 8586397

11 USEFUL WEB LINKS

Small & Medium Enterprises Development Authority (SMEDA)	www.smeda.org.pk
Government of Pakistan	www.pakistan.gov.pk
Ministry of Industries & Production	www.moip.gov.pk
Government of Punjab	www.punjab.gov.pk
Government of Sindh	www.sindh.gov.pk
Government of Khyber Pakhtunkhwa	www.khyberpakhtunkhwa.gov.pk
Government of Balochistan	www.balochistan.gov.pk
Government of Gilgit Baltistan	www.gilgitbaltistan.gov.pk
Government of Azad Jamu Kashmir	www.ajk.gov.pk
Trade Development Authority of Pakistan (TDAP)	www.tdap.gov.pk
Security and Exchange Commission of Pakistan (SECP)	www.secp.gov.pk
Federation of Pakistan Chambers of Commerce and Industry (FPCCI)	www.fpcci.com.pk
State Bank of Pakistan (SBP)	www.sbp.org.pk
Punjab Vocational Training Council (PVTC)	www.pvtc.gov.pk
Technical Education and Vocational Training Authority (TEVTA)	www.tevta.org
University of Agriculture Faisalabad (UAF)	www.uaf.edu.pk
National Agriculture Research Council (NARC)	www.narc.gov.pk
Livestock & Dairy Development Department, Government of Punjab.	www.livestockpunjab.gov.pk

12 ANNEXURES

12.1 Income Statement

Calculations	SMEDA									
Income Statement										
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Revenue	5,574,000	6,131,400	6,744,540	7,418,994	8,160,893	8,976,983	9,874,681	10,862,149	11,948,364	13,143,200
<i>Cost of sales</i>										
Cost of goods sold 1	1,331,150	1,464,265	1,610,692	1,771,761	1,948,937	2,143,830	2,358,213	2,594,035	2,853,438	3,138,782
Operation costs 1 (direct labor)	1,320,000	1,452,000	1,597,200	1,756,920	1,932,612	2,125,873	2,338,461	2,572,307	2,829,537	3,112,491
Operating costs 2 (Hives maintenance)	111,480	122,628	134,891	148,380	163,218	179,540	197,494	217,243	238,967	262,864
Operating costs 3 (direct electricity)	4,329	4,762	5,238	5,762	6,338	6,972	7,669	8,436	9,280	10,208
Total cost of sales	2,766,959	3,043,655	3,348,020	3,682,823	4,051,105	4,456,215	4,901,837	5,392,020	5,931,223	6,524,345
Gross Profit	2,807,041	3,087,745	3,396,520	3,736,171	4,109,789	4,520,767	4,972,844	5,470,129	6,017,142	6,618,856
<i>General administration & selling expenses</i>										
Administration expense	480,000	528,000	580,800	638,880	702,768	773,045	850,349	935,384	1,028,923	1,131,815
Building rental expense	300,000	330,000	363,000	399,300	439,230	483,153	531,468	584,615	643,077	707,384
Electricity expense	17,316	17,316	17,316	17,316	17,316	17,316	17,316	17,316	17,316	17,316
Water expense	14,400	15,840	17,424	19,166	21,083	23,191	25,510	28,062	30,868	33,954
Travelling expense	48,000	52,800	58,080	63,888	70,277	77,304	85,035	93,538	102,892	113,181
Hives transportation expense	200,000	220,000	242,000	266,200	292,820	322,102	354,312	389,743	428,718	471,590
Living expenses apiary staff	720,000	792,000	871,200	958,320	1,054,152	1,159,567	1,275,524	1,403,076	1,543,384	1,697,722
Communications expense (phone, fax, mail, internet, etc.)	24,000	26,400	29,040	31,944	35,138	38,652	42,517	46,769	51,446	56,591
Office expenses (stationary, entertainment, janitorial services, etc)	27,870	30,657	33,723	37,095	40,804	44,885	49,373	54,311	59,742	65,716
Promotional expense	111,480	122,628	134,891	148,380	163,218	179,540	197,494	217,243	238,967	262,864
Professional fees (legal, audit, consultants, etc.)	27,870	30,657	33,723	37,095	40,804	44,885	49,373	54,311	59,742	65,716
Depreciation expense	161,957	161,957	161,957	163,953	163,953	163,953	166,265	166,265	166,265	168,940
Amortization of pre-operating costs	8,000	8,000	8,000	8,000	8,000	-	-	-	-	-
Bad debt expense	27,870	30,657	33,723	37,095	40,804	44,885	49,373	54,311	59,742	65,716
Miscellaneous expense	55,740	61,314	67,445	74,190	81,609	89,770	98,747	108,621	119,484	131,432
Subtotal	2,224,503	2,428,226	2,652,321	2,900,823	3,171,978	3,462,249	3,792,658	4,153,566	4,550,564	4,989,938
Operating Income	582,538	659,519	744,198	835,349	937,811	1,058,519	1,180,186	1,316,563	1,466,577	1,628,917
Other income (interest on cash)	45,823	66,493	89,170	114,381	142,682	173,799	208,181	246,328	288,145	335,055
Gain / (loss) on sale of office equipment	-	-	22,800	-	-	37,794	-	-	49,451	-
Earnings Before Interest & Taxes	628,361	726,012	856,168	949,729	1,080,493	1,270,111	1,388,367	1,562,891	1,804,173	1,963,972
Earnings Before Tax	628,361	726,012	856,168	949,729	1,080,493	1,270,111	1,388,367	1,562,891	1,804,173	1,963,972
Tax	12,836	22,601	35,617	44,973	58,049	80,517	98,255	124,434	160,626	184,596
NET PROFIT/(LOSS) AFTER TAX	615,525	703,411	820,551	904,756	1,022,443	1,189,595	1,290,112	1,438,457	1,643,547	1,779,376

12.2 Balance Sheet

Calculations											SMEDA
Balance Sheet											
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Assets											
<i>Current assets</i>											
Cash & Bank	1,441,441	2,224,423	3,095,041	4,038,534	5,111,916	6,302,653	7,601,251	9,053,198	10,653,048	12,398,551	14,405,816
Pre-paid building rent	25,000	27,500	30,250	33,275	36,603	40,263	44,289	48,718	53,590	58,949	-
Total Current Assets	1,466,441	2,251,923	3,125,291	4,071,809	5,148,519	6,342,916	7,645,540	9,101,916	10,706,638	12,457,499	14,405,816
<i>Fixed assets</i>											
Machinery & equipment	1,367,000	1,230,300	1,093,600	956,900	820,200	683,500	546,800	410,100	273,400	136,700	-
Furniture & fixtures	125,900	113,310	100,720	88,130	75,540	62,950	50,360	37,770	25,180	12,590	-
Office equipment	38,000	25,333	12,667	43,990	29,327	14,663	50,924	33,949	16,975	58,950	39,300
Total Fixed Assets	1,530,900	1,368,943	1,206,987	1,089,020	925,067	761,113	648,084	481,819	315,555	208,240	39,300
<i>Intangible assets</i>											
Pre-operation costs	40,000	32,000	24,000	16,000	8,000	-	-	-	-	-	-
Total Intangible Assets	40,000	32,000	24,000	16,000	8,000	-	-	-	-	-	-
TOTAL ASSETS	3,037,341	3,652,866	4,356,278	5,176,829	6,081,585	7,104,029	8,293,623	9,583,735	11,022,192	12,665,740	14,445,116
Liabilities & Shareholders' Equity											
<i>Current liabilities</i>											
Accounts payable	-	-	-	-	-	-	-	-	-	-	-
Short term debt	-	-	-	-	-	-	-	-	-	-	-
Other liabilities	-	-	-	-	-	-	-	-	-	-	-
Total Current Liabilities	-	-	-	-	-	-	-	-	-	-	-
<i>Other liabilities</i>											
Long term debt (Project Loan)	-	-	-	-	-	-	-	-	-	-	-
Long term debt (Working Capital Loan)	-	-	-	-	-	-	-	-	-	-	-
Total Long Term Liabilities	-	-	-	-	-	-	-	-	-	-	-
<i>Shareholders' equity</i>											
Paid-up capital	3,037,341	3,037,341	3,037,341	3,037,341	3,037,341	3,037,341	3,037,341	3,037,341	3,037,341	3,037,341	3,037,341
Retained earnings	-	615,525	1,318,936	2,139,487	3,044,244	4,066,687	5,256,282	6,546,394	7,984,851	9,628,398	11,407,775
Total Equity	3,037,341	3,652,866	4,356,278	5,176,829	6,081,585	7,104,029	8,293,623	9,583,735	11,022,192	12,665,740	14,445,116
TOTAL CAPITAL AND LIABILITIES	3,037,341	3,652,866	4,356,278	5,176,829	6,081,585	7,104,029	8,293,623	9,583,735	11,022,192	12,665,740	14,445,116

12.3 Cash Flow Statement

Calculations											SMEDA
Cash Flow Statement											
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
<i>Operating activities</i>											
Net profit		615,525	703,411	820,551	904,756	1,022,443	1,189,595	1,290,112	1,438,457	1,643,547	1,779,376
Add: depreciation expense		161,957	161,957	161,957	163,953	163,953	163,953	166,265	166,265	166,265	168,940
amortization of pre-operating costs		8,000	8,000	8,000	8,000	8,000	-	-	-	-	-
Pre-paid building rent	(25,000)	(2,500)	(2,750)	(3,025)	(3,328)	(3,660)	(4,026)	(4,429)	(4,872)	(5,359)	58,949
Accounts payable		-	-	-	-	-	-	-	-	-	-
Cash provided by operations	(25,000)	782,982	870,618	987,483	1,073,382	1,190,736	1,349,522	1,451,947	1,599,850	1,804,453	2,007,265
<i>Financing activities</i>											
Issuance of shares	3,037,341	-	-	-	-	-	-	-	-	-	-
Purchase of (treasury) shares											
Cash provided by / (used for) financing activities	3,037,341	-	-	-	-	-	-	-	-	-	-
<i>Investing activities</i>											
Capital expenditure	(1,570,900)	-	-	(43,990)	-	-	(50,924)	-	-	(58,950)	-
Acquisitions											
Cash (used for) / provided by investing activities	(1,570,900)	-	-	(43,990)	-	-	(50,924)	-	-	(58,950)	-
NET CASH	1,441,441	782,982	870,618	943,493	1,073,382	1,190,736	1,298,598	1,451,947	1,599,850	1,745,502	2,007,265

13 KEY ASSUMPTIONS

13.1 Operating Cost Assumptions

Description	Details
Medicine	Rs. 10,000 per Year
Wax Sheet	Rs. 700 / Box / Year
Supplement Feed	Rs. 1,275 / Box
Rent for Apiary Site	Rs. 10,000 per Year
Packing Cost (Weighted Avg. Cost)	Rs. 29.7 / Bottle
Traveling Expenses	10% of Administration Cost
Operating costs 2 (Hives maintenance)	2% of Revenue
Water Expense	3% of Administration Cost
Promotional Expenses	3% of Revenue
Communication Expense	5% of Administration Cost
Depreciation Method	Accelerated depreciation
Depreciation Rate	10% on Machinery 33% on Office Equipment 10% on Furniture & Fixture
Inflation Growth Rate	10%
Electricity Price Growth Rate	10%

13.2 Revenue Assumptions

Description	Details
Days Operational / Year	300
Sale price growth rate	10%

13.3 Capacity Utilization Assumptions

Description	Details
Maximum Operational Capacity	250 Boxes
Production capacity utilization	100%

Small and Medium Enterprises Development Authority

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