Pre-feasibility Study

Green / Poly House Farm
(Fresh Cut Roses)

Small and Medium Enterprises Development Authority

Ministry of Industries & Production

Government of Pakistan

www.smeda.org.pk

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August 2015

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Document Control

Document No.	PREF-49
Revision	4
Prepared by	SMEDA-Punjab
Revision Date	August 2015
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2 EXECUTIVE SUMMARY

Growing cut flowers especially roses is a profitable business if done properly as they are the most traded flowers around the world,. Local demand for cut flowers is growing tremendously due to increased usage as decorative items in weddings, birthday parties, seminars, and other social gatherings.

In Pakistan, this sector has not gained its full potential yet. The major reason for slow development of this sector has been the lack of requisite technical knowledge on part of the farmers, traders and retailers. The credit goes to small farmers / entrepreneurs who have kept on going without much technical and / or financial support over the years.

Production of high quality fresh cut roses, requires proper green / poly house with a controlled environment. An important aspect of using a greenhouse is that high quality flowers can be produced all year round, irrespective of the weather changes. Use of green / poly house increases annual cut rose production three times as compared to open cut flower farms. Low cost of labor combined with reasonable land lease rates and a suitable climate for most part of the year makes investment in this business a lucrative proposition.

The cost for setting up the proposed green / poly house farm for fresh cut roses at 01 acres land is Rs. 7.64 million and will provide employment to 3 individuals in addition to seasonal labor for picking and pruning etc. The project is proposed to be financed through 50% debt and 50% equity. The project NPV is projected Rs. 4.07 million, with an IRR of 30% and a payback period of 3.74 years. The legal status of the business is proposed as ‘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 **Green / Poly House Farm (Fresh Cut Roses)** 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 it's successful management.

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

5 BRIEF DESCRIPTION OF PROJECT & PRODUCT

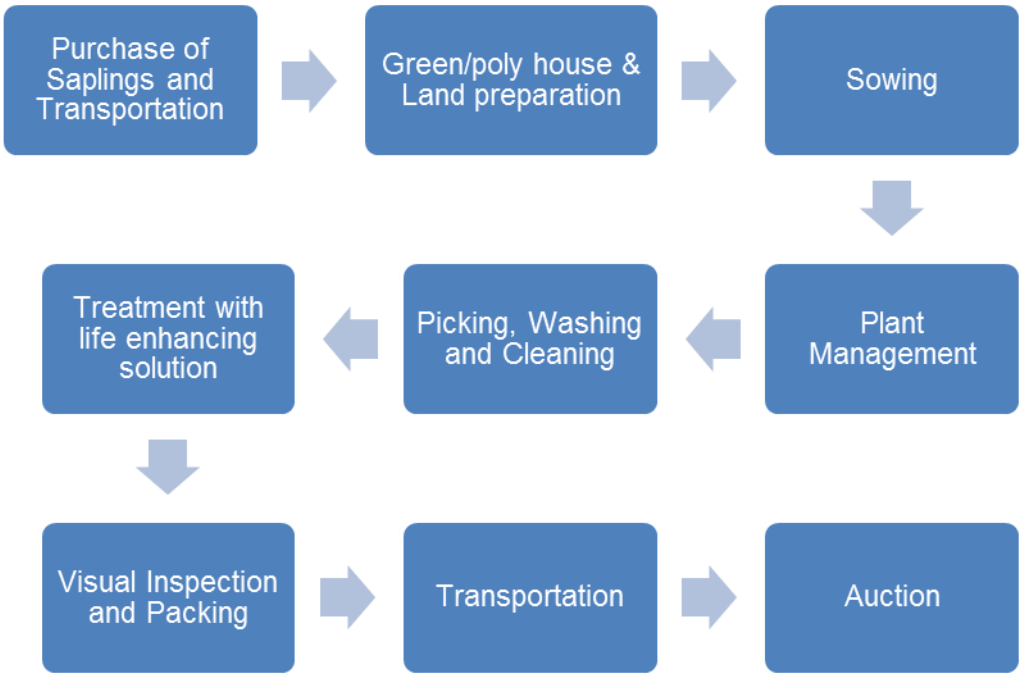
This pre-feasibility study is designed to provide information for establishing a fresh cut flower greenhouse farm for “Roses” at 01 acre of land. The land for the proposed farm is recommended to be purchased at an appropriate location as identified in the geographical potential section. In 01 acre of proposed land four green / poly sheds with each having ‘200 by 48’ feet dimensions will be installed. The basic function of a green / poly house is to protect the plants from severe climatic conditions and provide favorable environment that is required for optimal production of the crop.

The basic structure of green / poly house is made of ‘Galvanized Pipes’ which is covered by ‘Green Shade Net’ in summer and ‘Polythene Sheets’ in winter. Galvanized Pipes have a useful life of 10 years, whereas ‘Green Shade Net’ and ‘Polythene Sheets’ have useful life of 05 years and 01 year, respectively.

The farm will have 12 thousand rose plants having productive life of 10 years. On average, maximum yield of one plant is approximately 180 flowers per year. Accordingly, the farm will have a total production capacity of 2.16 million flowers per year, however, for the first year farm productivity is assumed at 40%. The cut flowers will be sold in the wholesale markets of the respective districts / metropolitan cities. Moreover, based on quality of flowers and efficient management of supply chain, export potential of cut rose flowers will also be tapped.

The cost of this project is Rs. 7.64 million, with Rs. 0.33 million for working capital and remaining Rs. 7.32 million as capital cost.

5.1 Production Process Flow



It is pertinent to highlight that picking of the flowers is the most important process as it plays vital role for determining the price of flowers. Following steps should be followed:

- Picking should always be done early in the morning.
- After picking wash the flowers in clean water.
- Flowers should be treated with life enhancing solutions to increase their life.
- Dry flowers with natural air after the use of preservatives.
- Inspect each flower for its quality then pack in wooden / cardboard boxes.
- Ready for delivery / distribution.

5.2 Installed And Operational Capacities

Four green / poly houses will be constructed for one-acre land with useful life of 10 years. On average there are 12,000 rose plants, which will be producing 2.16 million flowers per year, with adequate pruning, picking and delivery arrangements. However, 20% of the total production goes to rose petals, hence, quantity available for sale, as rose petals would be 1,080 kgs from 432,000 flowers.

Capacity utilization during first year of operation is assumed to be at 40%, whereas capacity utilization growth rate for subsequently years will be considered 20%. The maximum capacity utilization is worked out at 80% in the 3rd year of operation. This production capacity is estimated to be economically viable and justifies the capital as well as operational costs of the project.

The details of installed and operational capacities are provided in the table below:

Table 1: Installed and Operational Capacities

Description	Installed Capacity	Operational Capacity Year 1 (40%)	Maximum Capacity Utilization (80%)
Cut Flowers Produced (180 flowers per plant, total plants 12,000)	2,160,000	864,000	1,728,000
Cut Flowers Lost to Petals (20% of flowers produced)	432,000	172,800	345,600

6 CRITICAL FACTORS

The proposed project has following factors critical to success:

- Entrepreneur's knowledge, background and expertise in floriculture.
- Ability to identify and procure quality saplings from certified nurseries, preferably developing an in-house backup nursery.
- Availability / selection of suitable land and irrigation systems.
- Availability of trained farm labor for crop management and harvest.
- Forward linkages with the bulk buyers, and appropriate storage & transportation services.

7 GEOGRAPHICAL POTENTIAL FOR INVESTMENT

Although Kasur and Sheikhupura districts of Punjab, Matiari & Jhirk in Sindh and Swat and Quetta valley have developed some expertise in this field. However, as Pattoki still serves as the hub for floricultural trade in Pakistan, it is therefore considered the most appropriate location. All major cities of the country with comparable land and atmospheric conditions can be selected for establishment of this kind of business.

Patto 'mandi' is the major forum for buying and selling of fresh cut flowers, especially roses. Flowers are distributed to all parts of the country including Karachi, Peshawar, Lahore, and Islamabad from here.

There are few large players in this industry with an organized formal setup. Therefore, there is good potential to tap into this opportunity to start a cut flower business with a formal set up.

8 POTENTIAL TARGET CUSTOMERS / MARKETS

Potential markets for cut flowers (roses) are as under:

- Flower market such as Patto Mandi and Begumkot Mandi at Pattoki and Sheikhpura districts, respectively.
- Retail flower shops at major urban centers.
- Direct supply to corporate and institutional customers.
- Wholesales; bulk sales for social, cultural and religious events.

9 PROJECT COST SUMMARY

9.1 Project Economics

All the figures in this financial model have been calculated for estimated sales revenue of Rs.1.88 million in the year one. The capacity utilization during year one is worked out at 40% with 20% increase in subsequent years up to the maximum capacity utilization of 80%.

The following table shows internal rate of return, payback period and net present value of the proposed venture.

Table 2: Project Economics

Description	Details
Internal Rate of Return (IRR)	30%
Payback Period (Yrs.)	3.74
Net Present Value (Rs.)	4,070,401

9.2 Project Financing

Following table provides details of the equity required and variables related to bank loan:

Table 3: Project Financing

Description	Details
Total Equity (50%)	Rs. 3,821,578
Bank Loan (50%)	Rs. 3,821,578
Markup to the Borrower (%age / annum)	14%
Tenure of the Loan (Years)	5

9.3 Project Cost

Following requirements have been identified for operations of the proposed business.

Table 4: Project Cost

Capital Investment	**Amount (Rs.)**
Land	2,200,000
Building / Infrastructure	275,000
Land Tillage and Saplings	3,908,983
Furniture & Fixtures	105,000
Green Shade Net	312,000
Polythene Sheet	50,000
Pre-Operating Costs	465,333
Total Capital Cost	**7,316,316**
Working Capital Requirement	
Raw Material Inventory	151,840
Cash Requirement	175,000
Total Working Capital	**326,840**
Total Project Cost	**7,643,156**

9.4 Space Requirement

A one-acre plot would be required for the proposed green / poly house farm. For growing of rose flowers, four green / poly sheds with each having ‘200 by 48’ feet

dimensions will be installed, whereas a small storage room (around 250 sq. ft.) will also be constructed in the same plot. Although land is available on lease, but considering the amount of investment required for setting up a green / poly house it is better to own your own land. For this pre-feasibility study, the cost of 01-acrre of land is estimated as Rs. 2,200,000. The overall cost of building for the proposed farm is as follow:

Table 5: Space Requirement

Description	Area (sq. ft.)	Per Unit Cost (Rs.)	Total Cost(Rs.)
Store for General Purposes	200	1,000	200,000
Flower Storage Room (Manual Cold Store)	50	1,500	75,000
Total			**275,000**

9.5 Green / Poly Houses

Installation of green / poly houses are the crucial inputs of this project. Green / poly house will have useful life of 10 years and it will provide controlled environment to rose plants. Green shade net can be used for all weather conditions, however polythene sheet is used only during winter season. Useful life of green shade net is 5 years while polythene sheet has 1-year useful life. Major components of a green / poly house are:

- Galvanized Pipes
- Connecting Joints
- Installation Material (Cement, Crush, etc.)
- Green Shade net
- Polythene Sheet
- Water Pump with Water Tank

In this particular pre-feasibility study, it is recommended to install four green / poly houses on the acquired land; having the dimensions of “Length = 200 ft”, “Width = 48 ft” and “Height = 13 ft”. The proposed dimensions of green houses are easy to build and operate at small levels. The estimated costs of installation of green houses as well as rose sapling and land tillage costs are provided in the following table:

Table 6: Green / Poly House Requirement and Costs

Description	Unit	Qty	Unit Cost (Rs.)	Total Cost (Rs.)
Per Shed Infrastructure Cost				
Galvanized Pipes (20 Feet Long)	No	632	1,260	796,320
Connecting Joints	No	1	30,000	30,000
Installation Material (Cement, Crush, etc.)	No	1	10,000	10,000
Installation Cost (Labor)	No	1	37,500	37,500
Sub Total				**873,820**
Green / Poly Shed Infrastructure Cost	No	4	873,820	3,495,280
Rose Sapling	No	12,000	25	300,000
Water Pump with Water Tank (Including Transformer and Installation Cost)		1	30,000	30,000
Farm Tools		1	20,000	20,000
Land Tillage	-	1	25,000	25,000
Contingency (1% of Shed Infrastructure Cost)	-	-	-	38,703
Total				**3,908,983**

9.6 Furniture & Fixtures Requirement

Following table provides the list of tools, equipment and fixtures required for the proposed cut flower farm:

Table 7: Furniture & Fixtures Requirement

Description	Qty.	Unit Cost (Rs.)	Total Cost (Rs.)
Deep Freezer	1	50,000	50,000
Air conditioner (1.5 tons Split)	1	55,000	55,000
Total			**105,000**

9.7 Raw Material Requirement

On time irrigation, use of prescribed pesticides; fertilizers and proper weeding are essential for required output and continuous supply in the market. Following table shows raw material requirement for 2,160,000 flowers on one-acre land:

Table 8: Raw Material Requirement

Description	Annual Cost (Rs.)
Pesticide Sprays	45,000
Fertilizers	35,000
Water	80,000
Weeding	40,000
Total	**200,000**

9.8 Human Resource Requirement

The table below provides details of human resource required to run the operations of proposed green / poly house farm smoothly:

Table 9: Human Resource Requirement

Description	No. of Employees	Monthly Salary per person (Rs.)	Total Salary per Month (Rs.)
Farm Manager	1	25,000	25,000
Workers	2	12,000	24,000
Total	**3**		**49,000**

Weeding will be done from outsourced laborers whose cost is already mentioned in Raw Material Calculation table.

9.9 Other Costs

An essential cost to be borne by the farmer is the packing (which is assumed as Rs. 0.15 per flower) and transportation cost (which is assumed as 2% on sales) from farm to Mandi.

9.10 Revenue Generation

Based on the capacity utilization of 40% for fresh cut roses and flower petals respectively, sales revenue during the first year of operations is estimated as under:

Table 10: Revenue Generation – Year 1

Description	Unit	Sale Price / Unit (Rs.)	First Year Production	First Year Sales Revenue (Rs)
Flowers with Stems	No of Flowers	2.70	691,200	1,866,240
Flowers as Petal	Kgs	20	432	8,640
Total				**1,874,880**

10 CONTACT DETAILS

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

10.1 Technical Experts / Consultants

Name of Expert / Organization	Address	Phone	Website
Dr. M. Aslam Parvez Director, Institute of Horticultural Sciences, Faculty of Agriculture	University of Agriculture, Faisalabad	Ph: +92-41-9201281, +92-41-9200161	www.uaf.edu.pk
Dr. Ghulam Jellani Programme on Vegetable Crop Horticulture Research Institute	National Agricultural Research Centre Park Road, Islamabad	Ph: +92-51 9255061, +92-51 9255012 Fax: +92-51 9255034	www.narc.org.pk
Dr. Muhammad Anjum Ali	Agriculture Department, Govt. of Punjab 21-Davis Road, Lahore	Ph: 92-42-99200732 Fax No: 92-42-99200743	

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
Ministry of Education, Training & Standards in Higher Education	http://moptt.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 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 Small Industries Corporation	www.psic.gop.pk
Sindh Small Industries Corporation	www.ssic.gos.pk
Pakistan Horticulture Development and Export Company (PHDEC)	www.phdec.org.pk
Ministry of National Food Security and Research (MNFSR)	www.mnsfr.gov.pk
Pakistan Agriculture Research Council (PARC)	www.parc.gov.pk
National Agriculture Research Council (NARC)	www.narc.gov.pk
Agriculture University of Faisalabad (UAF)	www.uaf.edu.pk
Agriculture Department Government of Punjab	www.punjabagri.gov.pk

Agriculture Department Government of Sindh	www.sindhagri.gov.pk
Agriculture Department Government of KPK	www.khyberpakhtunkhwa.gov.pk

12 ANNEXURES

12.1 Income Statement

Income Statement										
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**	**Year 7**	**Year 8**	**Year 9**	**Year 10**
Revenue	1,874,880	3,093,552	4,537,210	4,990,931	5,490,024	6,039,026	6,642,929	7,307,221	8,037,944	8,841,738
Cost of sales										
Cost of goods sold 1	200,000	220,000	242,000	266,200	292,820	322,102	354,312	389,743	428,718	471,590
Packing Material	103,680	213,840	313,632	344,995	379,495	417,444	459,189	505,107	555,618	611,180
Operation costs 1 (direct labor)	588,000	646,800	711,480	782,628	860,891	946,980	1,041,678	1,145,846	1,260,430	1,386,473
Operating costs 3 (direct electricity)	96,000	105,600	116,160	127,776	140,554	154,609	170,070	187,077	205,785	226,363
Total cost of sales	987,680	1,186,240	1,383,272	1,521,599	1,673,759	1,841,135	2,025,249	2,227,773	2,450,551	2,695,606
Gross Profit	887,200	1,907,312	3,153,938	3,469,331	3,816,264	4,197,891	4,617,680	5,079,448	5,587,393	6,146,132
General administration & selling expenses										
Travelling expense	37,498	61,871	90,744	99,819	109,800	120,781	132,859	146,144	160,759	176,835
Depreciation expense	496,348	501,348	506,848	512,898	519,553	577,122	585,174	594,032	603,776	614,494
Amortization of pre-operating costs	46,533	46,533	46,533	46,533	46,533	46,533	46,533	46,533	46,533	46,533
Subtotal	580,379	609,753	644,126	659,250	675,887	744,436	764,566	786,710	811,068	837,862
Operating Income	306,821	1,297,559	2,509,812	2,810,081	3,140,377	3,453,455	3,853,114	4,292,738	4,776,325	5,308,270
Gain / (loss) on sale of Polythene Sheet	20,000	42,000	66,200	92,820	122,102	154,312	189,743	228,718	271,590	
Earnings Before Interest & Taxes	326,821	1,339,559	2,576,012	2,902,901	3,262,479	3,607,768	4,042,857	4,521,456	5,047,915	5,308,270
Interest expense on long term debt (Debt facility : Bank 1)	535,021	535,021	426,302	302,363	161,072	-	-	-	-	-
Subtotal	535,021	535,021	426,302	302,363	161,072	-	-	-	-	-
Earnings Before Tax	(208,200)	804,538	2,149,710	2,600,539	3,101,408	3,607,768	4,042,857	4,521,456	5,047,915	5,308,270
Tax	-	98,180	299,956	367,580	442,711	518,665	583,928	655,718	734,687	773,740
NET PROFIT/(LOSS) AFTER TAX	**(208,200)**	**706,358**	**1,849,754**	**2,232,958**	**2,658,697**	**3,089,103**	**3,458,929**	**3,865,738**	**4,313,228**	**4,534,530**

12.2 Balance Sheet

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											
Current assets											
Cash & Bank	175,000	364,512	783,335	2,453,672	4,438,597	6,269,452	10,287,960	14,715,128	19,589,052	24,951,054	31,328,734
Accounts receivable		25,683	34,030	52,265	65,261	71,787	78,966	86,863	95,549	105,104	115,614
Raw material inventory	151,840	238,612	336,157	406,750	492,168	595,523	720,583	871,906	1,055,006	1,276,557	-
Total Current Assets	326,840	628,807	1,153,522	2,912,688	4,996,026	6,936,763	11,087,510	15,673,897	20,739,606	26,332,715	31,444,348
Fixed assets											
Land	2,200,000	2,200,000	2,200,000	2,200,000	2,200,000	2,200,000	2,200,000	2,200,000	2,200,000	2,200,000	2,200,000
Building/Infrastructure	275,000	261,250	247,500	233,750	220,000	206,250	192,500	178,750	165,000	151,250	137,500
Farm Structure	3,908,983	3,518,085	3,127,186	2,736,288	2,345,390	1,954,491	1,563,593	1,172,695	781,797	390,898	-
Green Shade Net	312,000	280,800	249,600	218,400	187,200	658,479	577,031	495,583	414,135	332,687	1,060,487
Furniture & fixtures	105,000	94,500	84,000	73,500	63,000	52,500	42,000	31,500	21,000	10,500	-
Office equipment	50,000	55,000	60,500	66,550	73,205	80,526	88,578	97,436	107,179	117,897	-
Total Fixed Assets	6,850,983	6,409,635	5,968,786	5,528,488	5,088,795	5,152,246	4,663,702	4,175,964	3,689,111	3,203,233	3,397,987
Intangible assets											
Pre-operation costs	465,333	418,800	372,266	325,733	279,200	232,667	186,133	139,600	93,067	46,533	0
Total Intangible Assets	465,333	418,800	372,266	325,733	279,200	232,667	186,133	139,600	93,067	46,533	0
TOTAL ASSETS	**7,643,156**	**7,457,242**	**7,494,575**	**8,766,909**	**10,364,020**	**12,321,675**	**15,937,345**	**19,989,461**	**24,521,784**	**29,582,481**	**34,842,336**
Liabilities & Shareholders' Equity											
Current liabilities											
Accounts payable		22,286	31,644	39,550	45,344	52,103	60,005	69,263	80,131	92,913	44,497
Total Current Liabilities	-	22,286	31,644	39,550	45,344	52,103	60,005	69,263	80,131	92,913	44,497
Other liabilities											
Deferred tax		-	98,180	398,137	765,717	1,208,428	1,727,093	2,311,021	2,966,739	3,701,426	4,475,166
Long term debt (Debt facility : Bank 1)	3,821,578	3,821,578	3,045,015	2,159,733	1,150,512	-	-	-	-	-	-
Total Long Term Liabilities	3,821,578	3,821,578	3,143,195	2,557,870	1,916,229	1,208,428	1,727,093	2,311,021	2,966,739	3,701,426	4,475,166
Shareholders' equity											
Paid-up capital	3,821,578	3,821,578	3,821,578	3,821,578	3,821,578	3,821,578	3,821,578	3,821,578	3,821,578	3,821,578	3,821,578
Retained earnings		(208,200)	498,158	2,347,911	4,580,869	7,239,566	10,328,669	13,787,598	17,653,336	21,966,564	26,501,094
Total Equity	3,821,578	3,613,378	4,319,736	6,169,489	8,402,447	11,061,144	14,150,247	17,609,176	21,474,914	25,788,142	30,322,672
TOTAL CAPITAL AND LIABILITIES	**7,643,156**	**7,457,242**	**7,494,575**	**8,766,909**	**10,364,020**	**12,321,675**	**15,937,345**	**19,989,461**	**24,521,784**	**29,582,481**	**34,842,336**

12.3 Cash Flow Statement

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
Operating activities											
Net profit		(208,200)	706,358	1,849,754	2,232,958	2,658,697	3,089,103	3,458,929	3,865,738	4,313,228	4,534,530
Add: depreciation expense		496,348	501,348	506,848	512,898	519,553	577,122	585,174	594,032	603,776	614,494
amortization of pre-operating costs		46,533	46,533	46,533	46,533	46,533	46,533	46,533	46,533	46,533	46,533
Deferred income tax		-	98,180	299,956	367,580	442,711	518,665	583,928	655,718	734,687	773,740
Accounts receivable		(25,683)	(8,347)	(18,235)	(12,996)	(6,526)	(7,179)	(7,897)	(8,686)	(9,555)	(10,510)
Raw material inventory	(151,840)	(86,772)	(97,545)	(70,593)	(85,418)	(103,355)	(125,060)	(151,322)	(183,100)	(221,551)	1,276,557
Accounts payable		22,286	9,358	7,906	5,794	6,759	7,902	9,258	10,868	12,782	(48,416)
Cash provided by operations	(151,840)	244,512	1,255,885	2,622,169	3,067,350	3,564,372	4,107,086	4,524,604	4,981,103	5,479,900	7,186,928
Financing activities											
Debt facility : Bank 1 - principal repayment		-	(776,563)	(885,282)	(1,009,221)	(1,150,512)	-	-	-	-	-
Additions to Debt facility : Bank 1	3,821,578	-	-	-	-	-	-	-	-	-	-
Issuance of shares	3,821,578	-	-	-	-	-	-	-	-	-	-
Cash provided by / (used for) financing activities	7,643,156	-	(776,563)	(885,282)	(1,009,221)	(1,150,512)	-	-	-	-	-
Investing activities											
Capital expenditure	(7,316,316)	(55,000)	(60,500)	(66,550)	(73,205)	(583,005)	(88,578)	(97,436)	(107,179)	(117,897)	(809,248)
Acquisitions											
Cash (used for) / provided by investing activities	(7,316,316)	(55,000)	(60,500)	(66,550)	(73,205)	(583,005)	(88,578)	(97,436)	(107,179)	(117,897)	(809,248)
NET CASH	**175,000**	**189,512**	**418,822**	**1,670,338**	**1,984,924**	**1,830,855**	**4,018,508**	**4,427,168**	**4,873,923**	**5,362,002**	**6,377,680**

13 KEY ASSUMPTIONS

13.1 Operating Cost Assumptions

Description	Details
Transportation Expenses	2% of Sales
Depreciation Method	Straight Line
Depreciation Rate	10% on Furniture & Fixtures 100% on Office Equipment
Operating Cost Growth Rate	10%

13.2 Production Cost Assumptions

Description	Details
Cost of Goods Sold Growth Rate	10%
Electricity Cost	Rs. 8,000 per month

13.3 Revenue Assumptions

Description	Details
Growth in Sale Price	10%
Production Capacity in First Year	40%
Percentage Increase in Production Capacity every Year	20%
Maximum Production Capacity	80%
Production Loss (Petals)	20% of Production

13.4 Financial Assumptions

Description	Details
Debt	50%
Equity	50%
Interest Rate on Debt	14%
Debt Tenure	5 Years
Debt Payment / Year	1