Pre-Feasibility Study

STRAWBERRY CULTIVATION

Small and Medium Enterprises Development Authority

Ministry of Industries & Production

Government of Pakistan

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2 EXECUTIVE SUMMARY

Strawberry is the most widely adapted of the small fruits. According to agricultural experts it has huge dietetic value and one of the potential sources of protein, carbohydrates, fats and vitamins. In Pakistan it is consumed in fresh form as well as in processed form for making jams, jellies, squashes and it is also exported to different countries in frozen condition.

In Pakistan strawberry is being cultivated successfully in plains of Ghotki, Panu Akil, Ranipur, Shaheed Benazirabad, Gilgit Chitral, Kaghan Kohistan, Swat, Mingora, Multan, Narowal, Bhawalpur, Chistian, Sialkot, Faisalabad and many other areas of Pakistan.

Capacity; Production capacity **18 tons** per **05 Acres** with **100%** capacity utilization.

Total Cost Estimates is **Rs. 838,500** with fixed investment **Rs. 189,000** and working capital **Rs. 649,500.**

Given the cost assumptions IRR and payback are **65%** and **2.0 years** respectively

The most critical considerations or factors for success of the project are:

- Most significant consideration(s)
    - Fertile land and its maintenance during the period of cultivation.
    - Special attention towards healthy and certified seeds, land preparation, sowing pattern, water management, fertilizer application and marketing is required.
    - Timely control of pests, diseases and implementation of all recommended agronomics measures.
    - Appropriate post-harvest arrangement for washing, grading, packing and transportation of product to the market.

- Equally important factor(s)
    - Proper soil analysis for determining soil nutritional level.
    - Farming should be done scientific grounds, taking care of input requirements and pest management techniques.

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 **Strawberry Cultivation** 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

The proposed project is a medium size strawberry farming unit, over a land area of five acres. The approximate total time from land preparation to harvesting is around 06 months.

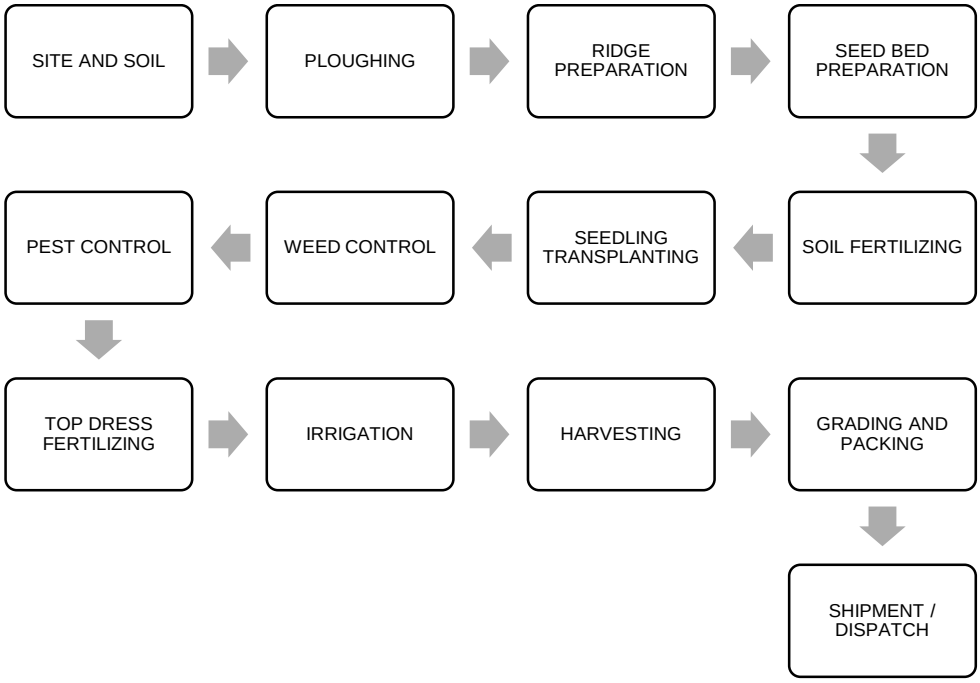
Main varieties of strawberries cultivated in Pakistan are: Chandelier, Corona, Douglas, Tufts, Gorella and Toro. Strawberry requires a well-drained medium loam soil, rich in organic matter. The soil should be slightly acidic with pH from 5.8-6.5. At higher pH root formation is poor. The presence of excessive calcium in the soil causes yellowing of the leaves. Strawberry should not be cultivated in the same land for a number of years. It is preferable to plant it in green manure field. Alkaline soils and soils infected with nematodes should be avoided.

Initial cost for growing strawberry is estimated at Rs. 0.8 million. It is generally cultivated on ridges where 30,000 – 40,000 seedlings are transplanted. Seeds are mainly procured from Swat, Pashin and Mingora and are available at Rs 1.0-1.5 per plant. The estimated yield potential of the farm varies from 3-4 tons per acre.

Following key parameters must be addressed as per pre-feasibility study under preparation

- **Technology:** Generally, strawberry is cultivated on ridges at fertile soil with suitable drainage quality. For this purpose farm land of Indus basin is yielding fruitful results. Seedlings are transplanted on ridges and crop is irrigated on weekly or on need bases.
- **Location:** In Pakistan strawberry is being cultivated successfully in plains of Ghotki, Panu Akil, Ranipur, Shaheed Benazirabad, Gilgit Chitral, Kaghan Kohistan, Swat, Mingora, Multan, Narowal, Bhawalpur, Chishtian, Sialkot, Faisalabad and many other areas of Pakistan.
- **Product:** The proposed project would initially produce 18 tons of strawberry and will be sold to retailer and wholesellers in packed form.
- **Target Market:** The target customers will be wholesellers and retailers catering for household markets in Pakistan including local markets in Sukkur, Karachi, Hyderabad, and other districts of Sindh and Rahim Yar Khan in Punjab, different areas of Baluchistan and Khyber Pakhtunkhwa.
- **Employment Generation:** The proposed project will provide direct employment to 07 people (contractual + salaried). Financial analysis shows the unit shall be profitable from the very first year of operation

5.1 Production Process Flow



- **Site and Soil:** Strawberries will grow on all kinds of soils, ranging from light sands and gravels to clay, however they do benefit from being grown in raised beds on poor or heavy soils where the addition of organic matter will not only improve the soil but aid drainage.
- **Ploughing:** The first step for Strawberry cultivation is Ploughing. The primary purpose of ploughing is to turn over the upper layer of the soil, bringing fresh nutrients to the surface, while burying weeds and the remains of previous crops and allowing them to break down.
- **Ridge Preparation:** Strawberries can be cultivated on raised beds of 04-05 inch high in the center after firming down and 24 inch wide should be constructed. The ridge should have an even curve and the soil broken down to a fine tilth which have the following advantages over conventional growing:
    1) They reduce the risk of waterlogging and soil-borne diseases.
    2) They increase the available rooting depth on shallow soils.
    3) They warm up quickly and so produce early crops.
    - These advantages in turn lead to higher yields.
- **Seed Bed Preparation:** In next step Seed Bed is prepared. The soil of a seed bed needs to be loose and smoothed, without large lumps and are needed so that seeds can be planted easily, large lumps and uneven surface would tend to make the planting depth random.

- **Soil Fertilizing:** Fertilizers are sprinkled in next step. Plants need to be fertilized because most soil does not provide the essential nutrients required for optimum growth.
- **Seedling Transplanting:** Seeds are grown separately in pots into young plants, so they can then transplant into the cultivation land. The distance between the rows should be 30-36 inches and the distance between the plants should be 12-16 inches.
- **Weed Control:** Weeds are plants that grow where they are not wanted. Weeding keeps weeds from robbing valuable nutrients from the soil and competing with desired flowers, vegetables, herbs and shrubs. Weeds can also shelter harmful insects and diseases.
- **Pest Control:** Insects can be controlled by preventive measures more easily than the use of chemicals, rotation of strawberry with other crops is useful in controlling insects.
- **Top Dress Fertilizing:** In order to get maximum benefit from manures and fertilizers, they should not only be applied in proper time and in right manner but any other aspects should also be given careful consideration. Different soils react differently with fertilizer application, the nutrient requirements are not the same at different stages of growth.
- **Irrigation:** Since strawberry is relatively shallow-rooted, it is susceptible to conditions of drought. It is necessary to ensure that newly planted runners are irrigated frequently after planting, otherwise the mortality of the plants become high.
- **Harvesting:** Strawberries are ready for picking when the fruits develops color to that shade of red which is characteristic of that particular variety. They are best picked at this stage for eating fresh, freezing and making into jam; they will keep very satisfactorily for forty-eight hours in a domestic refrigerator at a temperature of 2°C (35°F).
- **Grading and Packing:** Strawberries are then sorted into grades according to their quality and packed accordingly. They should only be picked into shallow containers, because by using deeper ones, the lower fruits will be bruised by the weight of fruit above pressing down on them.
- **Shipment / Dispatch:** Strawberries are highly perishable and hence a great deal of care in handling and marketing also requires to be organized carefully. Usually the fruit is packed in the early morning and sent to the market in the afternoon of the same day or is picked in the late afternoon, stored overnight in a cool place, and sent to the market the following morning.

5.2 Installed and Operational Capacities

The operational capacity of this farm of 05 acres is 18 tons per year including 10% wastage. The assumed operational capacity during the first year of operations is 100%.

6 CRITICAL FACTORS

The main critical success factors that affect the decision to invest in the proposed business setup are:

- Fertile land and its maintenance during the period of cultivation.
- Special attention towards healthy and certified seeds, land preparation, sowing pattern, water management, fertilizer application and marketing is required.
- Timely control of pests, diseases and implementation of all recommended agronomics measures.
- Appropriate post-harvest arrangement for washing, grading, packing and transportation of product to the market.
- Use of high quality hybrid seeds.
- Proper soil analysis for determining soil nutritional level.
- Farming should be done scientific grounds, taking care of input requirements and pest management techniques.

7 GEOGRAPHICAL POTENTIAL FOR INVESTMENT

In Pakistan strawberry is being cultivated successfully in plains of Ghotki, Panu Akil, Ranipur, Shaheed Benazirabad, Gilgit Chitral, Kaghan Kohistan, Swat, Mingora, Multan, Narowal, Bhawalpur, Chistian, Sialkot, Faisalabad and many other areas of Pakistan.

8 POTENTIAL TARGET CUSTOMERS / MARKETS

Strawberry is high nutritious fruit and is used in medicines, juices, and various food items. In addition to local markets in Sukkur, Karachi, Hyderabad, and other districts of Sindh and Rahim Yar Khan in Punjab etc.

9 PROJECT COST SUMMARY

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

9.1 Project Economics

All the figures in this financial model have been calculated for estimated sales of Rs. 2.4 million in the year one. The capacity utilization during year one is worked out at 100 %.

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

Table 9.1: Project Economics

Description	Details
Internal Rate of Return (IRR)	65%
Payback Period (yrs.)	2.0
Net Present Value (Rs.)	1,673,508

9.2 Project Financing

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

Table 9.2: Project Financing

Description	Details
Total Equity (50%)	Rs.419,250
Bank Loan (50%)	Rs.419,250
Markup to the Borrower (%age / annum)	18 %
Tenure of the Loan (Years)	5

9.3 Project Cost

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

Table 9.3: Project Cost

Description	Amount Rs.
Capital Cost	
Farm Utensils	20,000
Furniture & Fixture	34,000
Office Equipment	35,000
Office Renovation	50,000

Pre-operating Cost	50,000
Total Capital Cost	**189,000**
Working Capital (3 Months)	
Raw Material Inventory	288,250
Land Lease	31,250
Office Rent	30,000
Utilities	96,000
Salaries	114,000
Misc. Expenses	90,000
Total Working Capital	**649,500**
Total Project Cost	**838,500**

9.4 Space Requirement

The space requirement for the proposed Strawberry Cultivation is estimated considering office are and land for cultivation. Details of space requirement and cost related to land & building is given below:

Table 9.4: Space Requirement

Description	Size/Area	Rent Charges	Season Rent
Office & Godown Area (at Farm)	500 sq.ft.	10,000	60,000
Land for Cultivation (Leased for season)	5 acre	25,000	125,000
Total			**185,000**

9.5 Machinery & Equipment Requirement

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

Table 9.5: Machinery & Equipment

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Farm Utensils	01	20,000	20,000
Total			**20,000**

9.6 Furniture & Fixtures Requirement

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

Table 9.6: Furniture & Fixture

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Tables & Chairs for Owner	1	10,000	10,000
Tables & Chairs for Staff	1	8,000	8,000
Waiting Chairs	4	8,000	7,000
Chairs for Worker / Labor	4	8,000	3,000
Total			**34,000**

9.7 Office Equipment Requirement

Following office equipment will be required for Strawberry Cultivation:

Table 9.7: Office Equipment

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Telephone sets	02	2,500	5,000
UPS & Battery	1	30,000	30,000
Total			**35,000**

9.8 Raw Material Requirement

Following raw material will be required for Strawberry Cultivation for one acre:

Table 9.8: Raw Material Requirement

Description (Requirement / Acre)	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Seed	40,000	1.25	50,000
Fertilizer (1 Bag per Acre) 50 Kg bag	6	1,900	11,400
DAP	6	3,800	22,800
Packing Cost (Half Kg Box)	8,000	7.5	60,000

Pesticide (Spray)	4	600	2,400
Labor Cost / Season (Daily Wages basis)	5	12,000	60,000
Diesel for Tractor (Hours)	16	1,200	19,200
Total			**230,600**

For this project raw material cost for 05 acres will be Rs. 1,153,000 to produce 18 tons of strawberry.

9.9 Human Resource Requirement

In order to run operations of Strawberry Cultivation smoothly, details of human resources required along with number of employees and monthly salary are recommended as under:

Table 9.9: Human Resource Requirement

Description	No. of Employees	Monthly Salary per person (Rs)	Monthly Salary (Rs)
Owner / Manager	01	25,000	25,000
Helper	01	13,000	13,000
Total	**02**		**38,000**

9.10 Revenue Generation

Based on the capacity utilization of 100 % for cultivation of Strawberry at 05 acres, average sales revenue during the first year of operations is estimated as under:

Table 9.10: Revenue Generation – Year 1

Description	No. of Units Produced (Tons.)	Sale Price / Ton (Rs.)	Sale Revenue (Rs.)
Strawberry	18	135,000	2,430,000
Total	**18**	**135,000**	**2,430,000**

9.11 Utilities and other costs

An essential cost to be borne by the project is the cost of electricity and water. The electricity expenses are estimated to be around Rs. 10,000 per month, whereas, water expenses are estimated to be Rs. 15,000 per month. Furthermore, selling and distribution expense being essential for Strawberry Cultivation is estimated as 3% of Net Sales.

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 Machinery Suppliers

Machinery Supplier - 1

Name of Supplier	New Chaudhary Agricultural Mechanical Engineers		
Address	Chowk A.T.M. Vehari Road, Multan		
Phone	+92-61-36527607		

Machinery Supplier - 2

Name of Supplier	Agrotractors (PVT) LTD		
Address	38-A, MAIN GULBERG, Lahore		
Phone	+92-42-35871746		

10.2 Raw Material Suppliers

Raw Material Supplier - 1

Name of Supplier	Mr Sidique		
Address	Akber Village Chikri, Tehsil Khuwaza Khela, Swaat		
Phone	03464606053		

Raw Material Supplier - 2

Name of Supplier	Mr Farman Ali		
Address	Fatehpur Choki, Tehsil Khuwaza, Swat		
Phone	03459534261		

10.3 Technical Experts / Consultants

Technical Experts / Consultants - 1

Name of Expert /Organization	Altaf Ahmed / Strawberry Farmer		
Address	Village Raza Ghoth, Taluka Pano Akil, District Sukkur		
Phone	0300-3261039		

Technical Experts / Consultants - 2

Name of Expert /Organization	Saeed Ahmed		
Address	Agriculture Officer, Sukkur		
Phone	0300-3150358		

Technical Experts / Consultants - 3

Name of Expert /Organization	Dr. M. Aslam Parvez		
Address	Institute of Horticultural Sciences, Faculty of Agriculture, University of Agriculture, Faisalabad.		
Phone	+92-41-9201281		

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
Punjab Vocational Training Council (PVTC)	www.pvtc.gop.pk
Technical Education and Vocational Training Authority (TEVTA)	www.tevta.org
Pakistan Readymade Garment Technical Training Institute	www.prgmea.org/prgtti/
Livestock & Dairy Development Department, Government of Punjab.	www.livestockpunjab.gov.pk
Punjab Industrial Estates (PIE)	www.pie.com.pk
Faisalabad Industrial Estate Development and Management Company (FIEDMC)	www.fiedmc.com.pk

12 ANNEXURES

12.1 Income Statement

FODDER Production & Trading Business

Projected Income Statement (Rs.)	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Net (Adjusted Sales)	**2,430,000**	**2,624,400**	**2,834,352**	**3,061,100**	**3,305,988**	**3,570,467**	**3,856,105**	**4,164,593**	**4,497,760**	**4,857,581**
Cost of Sales	**1,560,000**	**1,667,310**	**1,782,225**	**1,905,300**	**2,037,133**	**2,178,367**	**2,329,694**	**2,491,858**	**2,665,660**	**2,851,961**
Cultivation Cost	1,153,000	1,233,710	1,320,070	1,412,475	1,511,348	1,617,142	1,730,342	1,851,466	1,981,069	2,119,743
Cultivation Land Rent	125,000	137,500	151,250	166,375	183,013	201,314	221,445	243,590	267,949	294,743
Direct Utility Expense	282,000	296,100	310,905	326,450	342,773	359,911	377,907	396,802	416,642	437,475
Gross Profit	**870,000**	**957,090**	**1,052,127**	**1,155,800**	**1,268,855**	**1,392,100**	**1,526,410**	**1,672,735**	**1,832,101**	**2,005,620**
Gross Profit Margin	**36%**	**36%**	**37%**	**38%**	**38%**	**39%**	**40%**	**40%**	**41%**	**41%**
General Administrative & Selling Expenses										
Salaries	228,000	250,800	275,880	303,468	333,815	367,196	403,916	444,307	488,738	537,612
Office Rent	60,000	66,000	72,600	79,860	87,846	96,631	106,294	116,923	128,615	141,477
Amortization of Preliminary Expenses	10,000	10,000	10,000	10,000	10,000	-	-	-	-	-
Depreciation Expense	13,900	12,510	11,259	10,133	9,120	8,208	7,387	6,648	5,983	5,385
Maintenance Expense	200	220	242	266	293	322	354	390	429	472
Selling & Distribution	72,900	78,732	85,031	91,833	99,180	107,114	115,683	124,938	134,933	145,727
Subtotal	***385,000***	***418,262***	***455,012***	***495,560***	***540,253***	***579,471***	***633,634***	***693,206***	***758,699***	***830,673***
Operating Income	**485,000**	**538,828**	**597,116**	**660,240**	**728,602**	**812,629**	**892,776**	**979,529**	**1,073,402**	**1,174,947**
Financial Charges	70,928	59,812	46,521	30,630	11,631					-
Earnings Before Taxes	**414,072**	**479,016**	**550,595**	**629,610**	**716,971**	**812,629**	**892,776**	**979,529**	**1,073,402**	**1,174,947**
Tax	41,407	47,902	55,059	62,961	71,697	44,394	56,416	69,429	83,510	98,742
Net Profit	**372,665**	**431,115**	**495,535**	**566,649**	**645,274**	**768,235**	**836,360**	**910,099**	**989,892**	**1,076,205**
Monthly Profit After Tax	**31,055**	**35,926**	**41,295**	**47,221**	**53,773**	**64,020**	**69,697**	**75,842**	**82,491**	**89,684**

12.2 Balance Sheet

FODDER Production & Trading Business

Projected Balance Sheet (Rs.)	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 Balance	361,250	893,155	1,272,111	1,700,476	2,182,433	2,722,464	3,490,090	4,324,404	5,231,058	6,216,133	7,286,167
Raw Material Inventory	288,250	96,083	102,809	110,006	117,706	125,946	134,762	144,195	154,289	165,089	176,645
Finished Goods		0	0	0	0	0	0	0	0	0	0
Accounts Receivable	0	0	0	0	0	0	0	0	0	0	0
Total Current Assets	**649,500**	**989,238**	**1,374,921**	**1,810,481**	**2,300,139**	**2,848,410**	**3,624,852**	**4,468,599**	**5,385,347**	**6,381,222**	**7,462,812**
Fixed Assets											
Plant Machinery & Facility	20,000	18,000	16,200	14,580	13,122	11,810	10,629	9,566	8,609	7,748	6,974
Factory Construction	50,000	45,000	40,500	36,450	32,805	29,525	26,572	23,915	21,523	19,371	17,434
Furniture & Fixtures	69,000	62,100	55,890	50,301	45,271	40,744	36,669	33,002	29,702	26,732	24,059
Total Fixed Assets	**139,000**	**125,100**	**112,590**	**101,331**	**91,198**	**82,078**	**73,870**	**66,483**	**59,835**	**53,851**	**48,466**
Intangible Assets											
Preliminary Expenses	**50,000**	**40,000**	**30,000**	**20,000**	**10,000**	-	-	-	-	-	-
Total Assets	**838,500**	**1,154,338**	**1,517,511**	**1,931,812**	**2,401,337**	**2,930,488**	**3,698,722**	**4,535,082**	**5,445,182**	**6,435,073**	**7,511,278**
Owner's Equity	419,250	791,915	1,223,029	1,718,565	2,285,214	2,930,488	3,698,722	4,535,082	5,445,182	6,435,073	7,511,278
Long Term Liability	419,250	362,424	294,481	213,248	116,123	0	0	0	0	0	0
Total Equity & Liabilities	**838,500**	**1,154,338**	**1,517,511**	**1,931,812**	**2,401,337**	**2,930,488**	**3,698,722**	**4,535,082**	**5,445,182**	**6,435,073**	**7,511,278**

12.3 Cash Flow Statement

FODDER Production & Trading Business

Projected Statement of Cash Flows (Rs.)	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Cash Flow From Operating Activities											
Net Profit	0	372,665	431,115	495,535	566,649	645,274	768,235	836,360	910,099	989,892	1,076,205
Add: Depreciation Expense	0	13,900	12,510	11,259	10,133	9,120	8,208	7,387	6,648	5,983	5,385
Amortization Expense	0	10,000	10,000	10,000	10,000	10,000	-	-	-	-	-
(Increase) / decrease in RM		192,167	-6,726	-7,197	-7,700	-8,239	-8,816	-9,433	-10,094	-10,800	-11,556
(Increase) / decrease in FG Inventory		0	0	0	0	0	0	0	0	0	0
(Increase) / decrease in Receivables	-	0	0	0	0	0	0	0	0	0	0
Net Cash Flow From Operations	**0**	**588,731**	**446,899**	**509,598**	**579,082**	**656,154**	**767,626**	**834,314**	**906,654**	**985,075**	**1,070,034**
Cash Flow From Financing Activities											
Receipt of Long Term Debt	419,250										
Repayment of Long Term Debt		(56,826)	(67,943)	(81,233)	(97,124)	(116,123)	0	0		-	-
Owner's Equity	419,250										
Net Cash Flow From Financing Activities	**838,500**	**(56,826)**	**(67,943)**	**(81,233)**	**(97,124)**	**(116,123)**	**0**	**0**	**0**	**0**	**0**
Cash Flow From Investing Activities											
Capital Expenditure	(20,000)					0					0
Factory/Office Furniture	(69,000)										
Preliminary Operating Expenses	(50,000)										
Office Renovation Cost	(50,000)										
Purchase of RM	(288,250)										
Net Cash Flow From Investing Activities	**(477,250)**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
NET CASH FLOW	**361,250**	**531,905**	**378,956**	**428,364**	**481,957**	**540,031**	**767,626**	**834,314**	**906,654**	**985,075**	**1,070,034**
Cash at the Beginning of the Period	**0**	**361,250**	**893,155**	**1,272,111**	**1,700,476**	**2,182,433**	**2,722,464**	**3,490,090**	**4,324,404**	**5,231,058**	**6,216,133**
Cash at the End of the Period	**361,250**	**893,155**	**1,272,111**	**1,700,476**	**2,182,433**	**2,722,464**	**3,490,090**	**4,324,404**	**5,231,058**	**6,216,133**	**7,286,167**

13 KEY ASSUMPTIONS

13.1 Factory Operations and Capacity Utilization Assumptions

Description	Details
Increase in Production (Annual)	0%
Annual sales price increase	8%
Operational Hrs./day	12 Hrs
Operational Days / Month	26 Days
Operational Months	6 Months
Annual Operational Days	156 Days

13.2 Economy Related Assumptions

Description	Details
Utilities growth rate Charges	10%
Increase in Salaries	10%
Increase in Office Rent	10%
Income Tax Rate	10%

13.3 Cash Flow Assumptions

Description	Details
Sales on Credit - as %age of total	0%
Sales on Cash - as %age of total	100%

13.4 Production Assumptions

Description	Details
Ready Crop	04 Ton / Acre
Wastage	10%

Cultivation Land	5 Acre
Sale	100%
Crop in a Year	1 Crop

13.5 Other Assumptions

Description	Details
Depreciation	10%
Machinery Annual Repair & Maintenance (as percentage of total cost of Machinery)	01%
Selling & Distribution Expenses	03%
Increase in Cost Price	07%