

# KamyabJawan Youth Entrepreneurship Scheme

## Pre-Feasibility Study

### Semi Intensive Tilapia Aquaculture



**Small and Medium Enterprises Development Authority**  
**Ministry of Industries & 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 subject. 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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S M E D A

## **2. 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, production, marketing, finance and business management.

The purpose of this document is to facilitate potential investors in Florist Shop business by providing them 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 on, which form basis of any Investment Decision.

## **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 pre-feasibility studies in key areas of investment has been a successful hallmark of SME facilitation by SMEDA.

Concurrent to the pre-feasibility 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. INTRODUCTION TO SCHEME**

Prime Minister's 'KamyabJawan – Youth Entrepreneurship Scheme', for young entrepreneurs between the age group of 21 - 45 years, is designed to provide subsidized financing through the National Bank of Pakistan, Bank of Punjab and

Bank of Khyber under the guidance and supervision of the State Bank of Pakistan.

The loans will be disbursed to SME beneficiaries across Pakistan, covering; Punjab, Sindh, Khyber Pakhtunkhwa, Balochistan, Gilgit Baltistan and Azad Jammu & Kashmir. The Program aims to provide 25% of the loans to women entrepreneurs.

Loans provided through KamyabJawan Program are segregated in two tiers: Tier 1 loans fall in the range of Rs. 100,000 to Rs. 500,000, with Debt: Equity 90:10 and 6% markup to borrower, and, Tier 2 loans are from Rs. 500,000 to Rs. 5 Million, with Debt: Equity 80:20 and 8% markup to borrower. Both loans are for a period of upto 8 years with a grace period of 1 year.

Application forms are available both in branches and dedicated websites of National Bank of Pakistan, Bank of Punjab and Bank of Khyber.

## 5. BRIEF DESCRIPTION OF PROJECT AND PRODUCT

The project is related to setting up Tilapia Aquaculture with following detail:

- **Technology:** This proposed farm will start with the semi intensive fish farming techniques, requiring water bore, and locally available equipment essential for inland fish farming. The option of Solar driven tube well and aerators (For intensive farming) may be considered by the entrepreneur as per his discretion, the cost of which varies with the choice about system's country of origin, area of coverage, and the water table.
- **Location:** The farm will be located at water sufficient areas with suitable land, water, and climatic conditions. These areas include, Awaran, Khuzdar, Lasbela, Sibbi (Baluchistan), Bannu, Charsada, D.I. Khan, Kohat, Mardan, Nowshehra, Swabi (Khyber Pakhtunkhwa), Hyderabad, Nawabshah, Sukkur, Shikarpur, Thatta, (Sind), D.G. Khan, Faisalabad, Gujranwala, Gujrat, Multan, Muzaffargarh, Okara, Sahiwal, Vehari (Punjab). Other areas qualifying on climatic and water conditions may equally be suitable for the purpose.
- **Product:** The farm will produce the Mono-sex GIFT Tilapia (Genetically Improved Farmed Tilapia), which is one of the Nile Tilapia's strains and successfully introduced in Pakistan. It is a hardy fish and the stocking density of this specie is several times higher than the conventional carps, that is, without aeration 6,000 of Tilapia can be stocked per acre as compared to the Conventional Carps having density of 600-1,200 per acre<sup>1</sup>. It has the ability to gain the weight of 600-900 grams within 08 month. This project will produce an average weight of 800 grams per fish

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<sup>1</sup> SMEDA's sector survey

in 08 months. The optimum temperature for tilapia culture is reported to be 20- 30 C° or above. The ideal DO<sub>2</sub> level for tilapia culture is 4-5 mg/l. Free CO<sub>2</sub> is another factor that negatively affects feed intake and therefore fish growth. But, Nile tilapia can tolerate CO<sub>2</sub> concentration above 20 mg/l and is unlikely to have an adverse effect on fish in intensive culture systems unless free CO<sub>2</sub> concentration reaches 100 mg/l.<sup>2</sup>

- **Target Market:** The nearest areas of farm's location, and the large stores like, Metro, and Hyper Star etc of the Karachi, Lahore, Rawalpindi/Islamabad, and Quetta.
- **Employment Generation:** The proposed project will initially provide direct employment to 02 persons. The indirect employment is at the time of fish harvest as per the wages against 40 Kg unit (Maund), means Rs. per 40 Kg.
- **Profitability:** The Financial Analysis shows the farm will be profitable from the very first year of the operation.

## 6. CRITICAL FACTORS

The following factors should be considered thoroughly:

- Location must have suitable climate, soil, and sufficient water of the required quality and quantity.
- Right timing of finished product sales, i.e., either by the end of December or the start of January.
- Proper match of fingerlings' stocking density to feed.
- Pond development and maintenance to ensure efficient inflow, retention and drainage of water.
- Optimum protection against fish theft and fingerlings/fish escape.
- Growing the fry in nursery and then shifting it to main ponds
- Procurement of healthy, certified, mono-sex seed from reliable sources recommended by the Fisheries Development Board

## 7. INSTALLED AND OPERATIONAL CAPACITIES

The farm will have installed capacity of 27 Tons/Year with initial capacity utilization at 24Tons/Year reaching a maximum of 26 Tons in the second year.

## 8. GEOGRAPHICAL POTENTIAL FOR INVESTMENT

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<sup>2</sup> Suman B. Chakraborty, Sameer Banerjee (Effects of Stocking Density on Mono Sex Nile Tilapia Growth During Pond Culture in India)

Majority of areas throughout Pakistan carry potential for Tilapia Aquaculture. These areas include, Awaran, Khuzdar, Lasbela, Sibbi (Baluchistan), Bannu, Charsada, D.I. Khan, Karak, Kohat, Mardan, Nowshehra, Swabi (Khyber Pakhtunkhwa), Hyderabad, Nawabshah, Sukkur, Shikarpur, Thatta, (Sind), D.G. Khan, Faisalabad, Gujranwala, Gujrat, Multan, Muzaffargarh, Okara, Sahiwal, Vehari (Punjab), and other areas having suitable climate, soil, and water conditions. The Fisheries Development Board should be contacted before the commencement of the project, so that to have a very clear understanding of the geographical and technical aspects.

## 9. POTENTIAL TARGET CUSTOMER/MARKETS

The product can be sold throughout the country, especially within the areas having taste for fresh water fish. These include the Non coastal areas of Balochistan, interior Sind, Punjab, and KP. The market of Punjab is well established for Tilapia (Gujranwala and Rawalpindi offering higher prices). The large stores of major cities like, Al Fatah, Hyper Star, and Metro etc. can be the big customers provided their quantity and quality requirements are satisfied.

## 10. PRODUCTION PROCESS FLOW

The total production time will be 08 months with the following stages:

### Procurement of Fingerlings

The project will procure Mono-sex GIFT Tilapia (Genetically Improved Farmed Tilapia), weighing fingerlings of 0.2 grams. This particular world famous specie has also been successfully introduced in Pakistan. This hardy fish has high stocking density and even without aeration 6,000- 7,000 of Tilapia can be stocked per acre as compared to the Conventional Carps having density of 600-1,200 per acre. Though the fingerlings can be imported but the local hatchery is now also available.

### Nursery

Immediately after procurement, the fish will be stocked in the nursery pond. One-acre pond of the farm will initially be used as a nursery pond and after the fingerlings gain weight of 50 grams, these will be shifted to grow out ponds and the nursery pond will then work as one of the grow out ponds.

This is the stage where the mortality is highest. In case of Tilapia, the best practices are even reported with a mortality of 11-16% but on average the total mortality is 20-25%. The major reasons for mortality are the stress due to

transportation, and diseases. Apart from these, the mortality may also be due to the stocking density above the maximum level as per the type of the farm. 1% of the fish loss is also reported due to the fish predators.

### Growing In Ponds or (Semi- Intensive Mono-culture Pond)

The fingerlings will be kept in the grow out ponds until they gain the weight above 600 grams. With the Soya based pallet feed, the average weight is 800 grams and in terms of total weight/bio mass of the fish sold will be 18 Tons in the first year.

### Fish Harvesting

The fish will be harvested through nets on the basis of Rupees per 40 Kg paid to the harvesting labour. The rate varies as per the region practices.

### Fish Packing

The packing of the fish is conventionally done in the polypropylene bags but now the progressive farmers and traders are packing it in the polystyrene boxes for the improved quality during the transportation and handling.





## 11. PROJECT COST SUMMARY

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

### 11.1 Project Economics

All the figures in this financial model have been calculated for installed capacity of 27 Tons/Year with initial capacity utilization at 24Tons/Year reaching a maximum of 26Tons in the second year.

The following table shows internal rates of return and payback period.

**Table 1 - Project Economics**

Description	Details
Internal Rate of Return (IRR)	41%
Payback Period	2.84Years
Net Present Value (NPV)	Rs.6,737,051

### 11.2 Project Financing

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

**Table 2 - Project Financing**

Description	Details
Total Equity (20%)	693,827
Bank Loan (80%)	2,702,262

### 11.3 Project Cost

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

**Table 3: Project Cost**

Description	Amount Rs.
<b>Capital Cost</b>	
Infrastructure Development	1,535,147
Machinery and Equipment	795,500
Furniture and Fixtures	66,000
Office Equipment	20,500

Pre-operating Cost	202,629
<b>Total Capital Cost</b>	<b>2,619,776</b>
<b>Working Capital</b>	
Raw Material Inventory	406,392
Upfront Land Lease Rental	249,792
Cash	<b>120,129</b>
<b>Total Working Capital</b>	<b>776,313</b>
<b>Total Project Cost</b>	<b>3,396,089</b>

#### 11.4 Space Requirement

This proposed project will be established on 5 Acres of land acquired on lease of 5 years. Ponds would be developed on 4.5 acres and rest would be utilized for management building, store etc.

**Table 4: Space Requirement**

Space Requirement (in ft.)	Rs/Unit	Units	Amount (Rs.)
Management Building (Sq. Ft)	1,800	400	720,000
Store for Raw Material (Sq. Ft)	550	200	110,000
Grow out Pond (Sq. Ft)	2.53	196,020	495,931
Grounds (Sq. Ft)	10	21,000	210,000
<b>Total</b>			<b>1,535,931</b>

The decision about the opportunity cost of land is at the discretion of the owner of the project and the prevailing rates of land varying from area to area. However for the financial model the land lease cost is assumed to be **Rs. 50,000/acre**.

#### 11.5 Machinery and Equipment

Following table provides list of machinery and equipment. Costs may vary from area to area and underground water table.

**Table 5: List of Machinery and Equipment**

Description	Units	Cost Rs/unit	Total Rs.
Water Bore (4" Outlet with Initial Water Table 150, and submersible of 20 hp)	01	795,500	795,500
		<b>Total Cost</b>	<b>795,500</b>

## 11.6 Furniture and Fixtures

**Table 6: List of Furniture and Fixtures**

Description	Units	Cost Rs/unit	Total Rs.
Furniture	1	45,000	45,000
Fans	2	4,500	9,000
Electric Wiring and Lighting	200	60	12,000
<b>Total</b>			<b>66,000</b>

## 11.7 Office Equipment

Such type of project only requires a cell phone for communication. A smart cell capable of hosting social media apps worth **Rs. 20,500/** will be purchased.

## 11.8 Human Resource Requirement

**Table 8: Payroll For Financial Analysis(Human Resource Requirements)**

Description	No.	Monthly Salary/ Person (Rs.)	Months (No.)	First Year Salaries (Rs)
Farm Manager/ CEO	01	40,000	12	480,000
Watchman/Labor for Feeding	01	18,000	12	216,000
<b>Total Cost</b>				<b>696,000</b>

## 11.9 Utilities and Other Costs (Raw Material and Other Expenses)

It should be maintained that the mortality 25% is observed during nursery stage, so the quantity of feed is assumed on the same basis. Following table shows raw material requirement.

**Table 6: Cost of Material**

Description	Unit	Rate(Rs./ Unit)	Qty	Rs./Cycle
Fingerlings	Number	10	27,788	277,875
Feed	Kg	75	21,676	1,625,569
Fertilizer	Bags	2,000	4.5	9,000
<b>Total Cost</b>				<b>1,912,444</b>

The electricity charges are based on the assumption of operating tube well with the water table beginning at 150 ft. In case of the areas with the lowest water tables; this cost may be low.

**Table 7: Miscellaneous**

Description	Rs./Production Cycle
Direct Electricity for Water	342,952
Cost of Fish Harvest	69,841
Machinery Maintenance	60,000
Electricity (Admin)	24,000
Travelling Expenses	36,000
Communication Expenses	6,000
Cost of Draining Water	36,300
<b>Total Cost</b>	<b>575,093</b>

#### 11.10 Revenue Generation

The selling price depends upon the season, size of the product, and quantity sold. It may range between Rs. 200/kg to Rs. 350/ kg. Keeping in view the size and better quality of the fish due to efficient farm management and transportation of production insulated boxes, the average price for the project will be Rs. 250/Kg. The Ton to Kg conversion is based upon the 1: 907.19, which means 18.38 Tons fish sold for the first year at Rs. 190,509 per Ton. With a total mortality of 6 Tons for the first year the revenues are as under:

**Table 8: Revenue Generation**

Product	Unit	Sales Price (Rs./Unit)	First Year Production	First Year Sales Revenue (Rs)
Tilapia Fish (Average Weight Per Fish 800 gm)	Ton	250,000	18.38	4,595,000
<b>Total Revenue</b>				<b>4,595,000</b>

## 12 CONTACTS

A great deal of information for this prefeasibility has been obtained through a visit to the Ayfa Fish Farm, and a working by Mr. Nabeel Chaudhry, FDB, and Mr. AbidRafique.

### **Fisheries Development Board (FDB)**

Business: The FDB's efforts for successful introduction of Tilapia in Pakistan are worth to be mentioned. The organization has sufficient expertise and the committed team to cater to enquiries regarding Tilapia on Farm establishment, Fingerlings/Fry Procurement, Feed, and Farm Management.

Contact Person: Mr. Faisal Iftikhar/Mr. Junaid Watoo

Contact Detail: Plot #12, Orchard Scheme, Murree Road Islamabad, Phone: +92 51 923 0348-9 Fax: +92 51 8365937

### **M/s. AbidRafique and Co.**

Business: Aquaculture Fingerlings and Equipment Suppliers, Consultancy

Contact Person: Mr. Abid Hussain

Contact Detail: +923005260128

[www.abidrafique.com](http://www.abidrafique.com)

### **M/s. Ayefa Protein Farms (Pvt) Ltd.**

Business: Tilapia Farm.

Contact Person: Mr. Nabeel Chaudhry

Contact Detail: 42 Westwood Colony, ThokarNiazBaig, Lahore.

Cell No: +9249-400 1072

### **M/s. Tawakkal Tilpia Hatcheries**

Muzaffargarh, Punjab

Email: [tawakkalfishhatchery@yahoo.com](mailto:tawakkalfishhatchery@yahoo.com)

0345-8407083

## 13 ANNEXURES

### 13.1 Income Statement

Rs. in actuals

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Revenue	4,595,108	5,161,032	5,794,189	6,437,988	7,081,787	7,789,965	8,568,962	9,425,858	10,368,444	11,405,288
Cost of goods sold	2,601,420	2,906,694	3,283,309	3,598,673	3,957,787	4,401,055	4,787,107	5,264,822	5,854,520	6,368,035
Gross Profit	1,993,687	2,254,338	2,510,880	2,839,315	3,123,999	3,388,910	3,781,855	4,161,036	4,513,924	5,037,253
<i>General administration &amp; selling expenses</i>										
Administration expense	480,000	526,733	578,017	634,294	696,049	763,818	838,184	919,791	1,009,343	1,107,614
Rental expense	249,792	249,792	249,792	249,792	249,792	249,792	249,792	249,792	249,792	249,792
Utilities expense	24,000	26,400	29,040	31,944	35,138	38,652	42,517	46,769	51,446	56,591
Travelling & Comm. expense (phone, fax, etc.)	42,000	46,200	50,820	55,902	61,492	67,641	74,406	81,846	90,031	99,034
Office vehicles running expense	-	-	-	-	-	-	-	-	-	-
Office expenses (stationary, etc.)	-	-	-	-	-	-	-	-	-	-
Promotional expense	-	-	-	-	-	-	-	-	-	-
Insurance expense	-	-	-	-	-	-	-	-	-	-
Professional fees (legal, audit, etc.)	-	-	-	-	-	-	-	-	-	-
Depreciation expense	164,957	164,957	164,957	164,957	164,957	164,957	164,957	164,957	164,957	164,957
Amortization expense	40,526	40,526	40,526	40,526	40,526	-	-	-	0	0
Property tax expense	-	-	-	-	-	-	-	-	-	-
Miscellaneous expense	-	-	-	-	-	-	-	-	-	-
Subtotal	1,001,275	1,054,609	1,113,152	1,177,415	1,247,955	1,284,861	1,369,856	1,463,155	1,565,569	1,677,988
Operating Income	992,412	1,199,729	1,397,728	1,661,900	1,876,044	2,104,050	2,411,999	2,697,880	2,948,355	3,359,265
Other income	-	-	-	-	-	-	-	-	-	-
Gain / (loss) on sale of assets	-	-	-	-	-	-	-	-	-	-
Earnings Before Interest & Taxes	992,412	1,199,729	1,397,728	1,661,900	1,876,044	2,104,050	2,411,999	2,697,880	2,948,355	3,359,265
Interest expense	206,574	178,749	157,068	133,587	108,157	80,616	50,789	18,487	-	-
Earnings Before Tax	785,839	1,020,980	1,240,660	1,528,313	1,767,888	2,023,434	2,361,210	2,679,393	2,948,355	3,359,265
Tax	37,376	72,647	105,599	150,162	198,077	249,187	316,742	389,348	456,588	559,316
<b>NET PROFIT/(LOSS) AFTER TAX</b>	<b>748,463</b>	<b>948,333</b>	<b>1,135,061</b>	<b>1,378,151</b>	<b>1,569,810</b>	<b>1,774,247</b>	<b>2,044,468</b>	<b>2,290,045</b>	<b>2,491,766</b>	<b>2,799,949</b>

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**13.2 Balance Sheet**

	Rs. in actuals										
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
<b>Assets</b>											
<i>Current assets</i>											
Cash & Bank	120,129	628,491	1,403,117	2,322,965	3,441,064	4,691,972	6,038,811	7,577,112	9,269,482	11,513,421	17,106,548
Accounts receivable	-	-	-	-	-	-	-	-	-	-	-
Finished goods inventory	-	-	-	-	-	-	-	-	-	-	-
Equipment spare part inventory	-	-	-	-	-	-	-	-	-	-	-
Raw material inventory	406,392	502,087	620,051	757,841	916,987	1,109,554	1,342,561	1,624,499	1,965,643	2,378,428	-
Pre-paid annual land lease	249,792	249,792	249,792	249,792	249,792	249,792	249,792	249,792	249,792	249,792	-
Pre-paid building rent	-	-	-	-	-	-	-	-	-	-	-
Pre-paid lease interest	-	-	-	-	-	-	-	-	-	-	-
Pre-paid insurance	-	-	-	-	-	-	-	-	-	-	-
<b>Total Current Assets</b>	<b>776,313</b>	<b>1,380,370</b>	<b>2,272,960</b>	<b>3,330,597</b>	<b>4,607,843</b>	<b>6,051,318</b>	<b>7,631,164</b>	<b>9,451,403</b>	<b>11,484,918</b>	<b>14,141,641</b>	<b>17,106,548</b>
<i>Fixed assets</i>											
Land	-	-	-	-	-	-	-	-	-	-	-
Building/Infrastructure	1,535,147	1,458,389	1,381,632	1,304,875	1,228,117	1,151,360	1,074,603	997,845	921,088	844,331	767,573
Machinery & equipment	795,500	715,950	636,400	556,850	477,300	397,750	318,200	238,650	159,100	79,550	-
Furniture & fixtures	66,000	59,400	52,800	46,200	39,600	33,000	26,400	19,800	13,200	6,600	-
Office vehicles	-	-	-	-	-	-	-	-	-	-	-
Office equipment	20,500	18,450	16,400	14,350	12,300	10,250	8,200	6,150	4,100	2,050	-
<b>Total Fixed Assets</b>	<b>2,417,147</b>	<b>2,252,189</b>	<b>2,087,232</b>	<b>1,922,275</b>	<b>1,757,317</b>	<b>1,592,360</b>	<b>1,427,403</b>	<b>1,262,445</b>	<b>1,097,488</b>	<b>932,531</b>	<b>767,573</b>
<i>Intangible assets</i>											
Pre-operation costs	202,629	162,104	121,578	81,052	40,526	-	-	-	-	-	-
Legal, licensing, & training costs	-	-	-	-	-	-	-	-	-	-	-
<b>Total Intangible Assets</b>	<b>202,629</b>	<b>162,104</b>	<b>121,578</b>	<b>81,052</b>	<b>40,526</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>TOTAL ASSETS</b>	<b>3,396,089</b>	<b>3,794,663</b>	<b>4,481,770</b>	<b>5,333,924</b>	<b>6,405,686</b>	<b>7,643,678</b>	<b>9,058,566</b>	<b>10,713,848</b>	<b>12,582,405</b>	<b>15,074,172</b>	<b>17,874,121</b>
<b>Liabilities &amp; Shareholders' Equity</b>											
<i>Current liabilities</i>											
Accounts payable	-	-	-	-	-	-	-	-	-	-	-
Export re-finance facility	-	-	-	-	-	-	-	-	-	-	-
Short term debt	-	-	-	-	-	-	-	-	-	-	-
Other liabilities	-	-	-	-	-	-	-	-	-	-	-
<b>Total Current Liabilities</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<i>Other liabilities</i>											
Lease payable	-	-	-	-	-	-	-	-	-	-	-
Deferred tax	-	-	-	-	-	-	-	-	-	-	-
Long term debt	2,702,262	2,352,373	2,091,147	1,808,240	1,501,851	1,170,033	810,674	421,488	-	-	-
<b>Total Long Term Liabilities</b>	<b>2,702,262</b>	<b>2,352,373</b>	<b>2,091,147</b>	<b>1,808,240</b>	<b>1,501,851</b>	<b>1,170,033</b>	<b>810,674</b>	<b>421,488</b>	<b>-</b>	<b>-</b>	<b>-</b>
<i>Shareholders' equity</i>											
Paid-up capital	693,827	693,827	693,827	693,827	693,827	693,827	693,827	693,827	693,827	693,827	693,827
Retained earnings	-	748,463	1,696,796	2,831,857	4,210,007	5,779,818	7,554,065	9,598,533	11,888,578	14,380,345	17,180,294
<b>Total Equity</b>	<b>693,827</b>	<b>1,442,290</b>	<b>2,390,623</b>	<b>3,525,684</b>	<b>4,903,835</b>	<b>6,473,645</b>	<b>8,247,892</b>	<b>10,292,360</b>	<b>12,582,405</b>	<b>15,074,172</b>	<b>17,874,121</b>
<b>TOTAL CAPITAL AND LIABILITIES</b>	<b>3,396,089</b>	<b>3,794,663</b>	<b>4,481,770</b>	<b>5,333,924</b>	<b>6,405,686</b>	<b>7,643,678</b>	<b>9,058,566</b>	<b>10,713,848</b>	<b>12,582,405</b>	<b>15,074,172</b>	<b>17,874,121</b>

### 13.3 Cash Flow Statement

	Rs. in actuals										
	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	-	748,463	948,333	1,135,061	1,378,151	1,569,810	1,774,247	2,044,468	2,290,045	2,491,766	2,799,949
Add: depreciation expense	-	164,957	164,957	164,957	164,957	164,957	164,957	164,957	164,957	164,957	164,957
amortization expense	-	40,526	40,526	40,526	40,526	40,526	-	-	-	-	-
Deferred income tax	-	-	-	-	-	-	-	-	-	-	-
Accounts receivable	-	-	-	-	-	-	-	-	-	-	-
Finished good inventory	-	-	-	-	-	-	-	-	-	-	-
Equipment inventory	-	-	-	-	-	-	-	-	-	-	-
Raw material inventory	(406,392)	(95,695)	(117,965)	(137,789)	(159,147)	(192,567)	(233,006)	(281,938)	(341,145)	(412,785)	2,378,428
Pre-paid building rent	-	-	-	-	-	-	-	-	-	-	-
Pre-paid lease interest	-	-	-	-	-	-	-	-	-	-	-
Advance insurance premium	-	-	-	-	-	-	-	-	-	-	-
Accounts payable	-	-	-	-	-	-	-	-	-	-	-
Other liabilities	-	-	-	-	-	-	-	-	-	-	-
Cash provided by operations	(406,392)	858,251	1,035,852	1,202,755	1,424,487	1,582,726	1,706,198	1,927,487	2,113,858	2,243,939	5,343,335
<i>Financing activities</i>											
Change in long term debt	2,702,262	(349,890)	(261,226)	(282,907)	(306,388)	(331,818)	(359,359)	(389,186)	(421,488)	-	-
Change in short term debt	-	-	-	-	-	-	-	-	-	-	-
Change in export re-finance facility	-	-	-	-	-	-	-	-	-	-	-
Add: land lease expense	-	249,792	249,792	249,792	249,792	249,792	249,792	249,792	249,792	249,792	249,792
Land lease payment	(249,792)	(249,792)	(249,792)	(249,792)	(249,792)	(249,792)	(249,792)	(249,792)	(249,792)	(249,792)	-
Change in lease financing	-	-	-	-	-	-	-	-	-	-	-
Issuance of shares	693,827	-	-	-	-	-	-	-	-	-	-
Purchase of (treasury) shares	-	-	-	-	-	-	-	-	-	-	-
Cash provided by / (used for) financing activities	3,146,297	(349,890)	(261,226)	(282,907)	(306,388)	(331,818)	(359,359)	(389,186)	(421,488)	-	249,792
<i>Investing activities</i>											
Capital expenditure	(2,619,776)	-	-	-	-	-	-	-	-	-	-
Acquisitions	-	-	-	-	-	-	-	-	-	-	-
Cash (used for) / provided by investing activities	(2,619,776)	-	-	-	-	-	-	-	-	-	-
<b>NET CASH</b>	<b>120,129</b>	<b>508,362</b>	<b>774,626</b>	<b>919,848</b>	<b>1,118,099</b>	<b>1,250,908</b>	<b>1,346,839</b>	<b>1,538,302</b>	<b>1,692,370</b>	<b>2,243,939</b>	<b>5,593,127</b>
Cash balance brought forward		120,129	628,491	1,403,117	2,322,965	3,441,064	4,691,972	6,038,811	7,577,112	9,269,482	11,513,421
Cash available for appropriation	120,129	628,491	1,403,117	2,322,965	3,441,064	4,691,972	6,038,811	7,577,112	9,269,482	11,513,421	17,106,548
Dividend	-	-	-	-	-	-	-	-	-	-	-
Cash carried forward	120,129	628,491	1,403,117	2,322,965	3,441,064	4,691,972	6,038,811	7,577,112	9,269,482	11,513,421	17,106,548



## 14 USEFUL WEB LINKS

- Prime Minister's Office, [www.pmo.gov.pk](http://www.pmo.gov.pk)
- Prime Minister's KamyabJawan Program, [www.kamyabjawan.gov.pk](http://www.kamyabjawan.gov.pk)
- Small and Medium Enterprise Development Authority, [www.smeda.org.pk](http://www.smeda.org.pk)
- National Bank of Pakistan (NBP), [www.nbp.com.pk](http://www.nbp.com.pk)
- State Bank of Pakistan (SBP), [www.sbp.gov.pk](http://www.sbp.gov.pk)
- Bank of Khyber (BOK), [www.bok.com.pk](http://www.bok.com.pk)
- Bank of Punjab (BOP), [www.bop.com.pk](http://www.bop.com.pk)
- Government of Pakistan, [www.pakistan.gov.pk](http://www.pakistan.gov.pk)
- Ministry of Industries & Production, [www.moip.gov.pk](http://www.moip.gov.pk)
- Government of Punjab, [www.punjab.gov.pk](http://www.punjab.gov.pk)
- Government of Sindh, [www.sindh.gov.pk](http://www.sindh.gov.pk)
- Government of Khyber Pakhtunkhwa, [www.khyberpakhtunkhwa.gov.pk](http://www.khyberpakhtunkhwa.gov.pk)
- Government of Balochistan, [www.balochistan.gov.pk](http://www.balochistan.gov.pk)
- Government of Gilgit Baltistan, [www.gilgitbaltistan.gov.pk](http://www.gilgitbaltistan.gov.pk)
- Government of Azad Jamu Kashmir, [www.ajk.gov.pk](http://www.ajk.gov.pk)
- Trade Development Authority of Pakistan (TDAP), [www.tdap.gov.pk](http://www.tdap.gov.pk)
- Securities and Exchange Commission of Pakistan (SECP), [www.secp.gov.pk](http://www.secp.gov.pk)
- Federation of Pakistan Chambers of Commerce and Industry (FPCCI), [www.fpcci.org.pk](http://www.fpcci.org.pk)
- Pakistan Horticulture Development & Export Company, [www.phdeb.org](http://www.phdeb.org)
- Parks and Horticulture Authority, [www.pha.gov.pk](http://www.pha.gov.pk)



## 15 KEY ASSUMPTIONS

### 15.1 Operating Cost Assumptions

Description	Details
Hours Operational Per Day	8
Days Operational Per Month	30
Days Operational Per Year	244
Operating Cost Growth Rate(per annum)	10%

### 15.2 Production Cost Assumptions

Description	Details
COGS Annual Growth Rate	10%

### 15.3 Revenue Assumptions

Description	Details
Sales Price Growth Rate	10%
Maximum Capacity Utilization	100%
Initial Capacity Utilization	95%

### 15.4 Economy Related Assumptions

Description	Details
Inflation Rate	10%
Electricity Price Growth Rate	10%
Wage Growth Rate	10%

