



Pre-feasibility Study

LAYER AND BREEDING FARM

September 2022

“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

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Document Control

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2. EXECUTIVE SUMMARY

Layer and Breeding Firm is proposed to be located in sub-urban and rural areas around the major cities of Pakistan. Nearness of the farm to the city make easy access to market for the purchase of chicks, farm inputs (feed, etc.), and selling of eggs.

The project is aimed to provide high quality animal protein in the form of hen eggs, which is a daily requirement of human body. Egg is one of the richest sources of proteins. It is also rich in calcium and is good for bone health. The farm will also hatch eggs for the production of chicks. These chicks will be grown for layering purpose to increase the production capacity and to replace the old/unproductive hens.

The Layer and Breeding Farm project has the capacity of Producing **540,000 eggs** annually and will be operational for 360 days a year. 20% of eggs will be used for hatching. For selling eggs, Initial utilization will be **60%** and it will be increased by **5%** annually. The Maximum capacity utilization will be **95%**.

The total project investment is **Rs. 7,794,034/-** with an Internal Rate of Return (IRR) of **41%** and Net Present Value (NPV) of **10,890,941/-**. The total project investment would be paid back in **2.74** years.

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 **Layer and Breeding Farm** 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 on, which form basis of any Investment Decision.

5. BRIEF DESCRIPTION OF PROJECT & PRODUCT

The project aims to develop an egg and chicks' poultry farm for industrial purpose. Eggs are vital source of providing high quality of animal proteins, having excellent source of iron, phosphorus, selenium and other minerals which are daily requirement of the human body. Animal Protein is more valuable than that of plant protein.

Generally, poultry keeping is not only the hobby but also a source of income generation in rural areas anywhere in the world and particularly in Pakistani villages. Among other benefits, it provides food, entertainment and part time business in some cases. Because local poultry is very closely related to organic production and many mythological superstitions involved, it fetches high priority and likeness along with higher prices. Local birds are always a higher income getting greater attraction as they have been considered a medicinal feast.

For the high protein eggs and chicks, the project is aimed to choose Australorp hen category for the poultry farming. The Australorp is a chicken breed of Australian origin, developed as a utility breed with a focus on egg laying and is famous for laying more than 300 eggs. It achieved world-wide popularity in the 1920s after the breed broke numerous world records for number of eggs laid and has been a popular breed in the western world since. They are excellent at handling cold weather, and they are known as egg laying machines and at their peak they have been recorded to lay 364 eggs in 365

days. Their eggs are light brown and medium sized. Brown eggs contains number of benefits. These are seven times more nutrients, proteins, biotin, vitamins and minerals as compared to white eggs. The vitamins and minerals and especially vitamin A derived from eggs are useful for immune, healthy skin, hair and eyes. Omega 3 fatty acid is available in these brown eggs. This fatty acid improves mental growth and caring. The presence of fatty acid protects from diseases such as cancer, heart diseases, and arthritis. Brown eggs also contains phosphorus that strengthens bones and teeth while selenium works together with vitamin E.

Due to a number of health benefits, there is huge demand for brown eggs and these eggs are sold at high price as compared to other eggs. The proposed project for egg poultry farm will provide high protein eggs. The facility will contribute allot towards generation of economic activities in the rural and semi-urban areas.

For the project at least (04) skilled persons would be required to manage the poultry farm and to supply the eggs in protected packaging. The poultry farm will be operated 12 months and will produce around 54,000 eggs.

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

- **Technology:** This proposed unit with local processing machines including Hatching and incubation machine, Poultry equipment, water supply system, and cage structure will produce eggs and chicks for the replacement unproductive/sick hens.
- **Location:** The farm should be located far from any other commercial poultry operations to prevent contamination of environment and diseases, otherwise, it will cause economic loss to the farm. The farm should be located in an elevated area with good air current and the location should be will connected by road for easy accessibility.
- **Product:** Keeping in view the market demand “high protein and nutritional eggs and well protected systems” is recommended to be the final product of the proposed prefeasibility.
- **Target Market:** The Target market for the proposed project is the major cities of Pakistan near to any sub-urban and rural areas. These major cities includes Quetta, Karachi, Faisalabad, Hyderabad, Lahore, Peshawar, Swat, etc., Nearness of farm to these major cities would make accessibility to market for selling the eggs timely.
- **Employment Generation:** The proposed project will provide direct employment to 4 people. Financial analysis shows the unit shall be profitable from the very first year of operation

5.1 PRODUCTION PROCESS

- **Small Chicks**

The small chicks of Australorp hen breed with uniform size, active, alert with bright eyed will be purchased for initiating the poultry farm. Australorp breed is more suitable for proposed egg poultry farming, as this breed produce more eggs than other breeds.

- **Brooding**

Brooding Proper brooding temperature is required to keep the chicks in comfort during rearing period when they are sensitive to cold and need some artificial heat source to maintain their normal temperature. Coal or sawdust is burnt for supplying heat at the stage of brooding in the poultry farm.

- **Vaccination**

Poultry are quite susceptible to a number of diseases. Some of the more common are fowl typhoid, pullorum, fowl cholera, chronic respiratory disease, infectious sinusitis, infectious coryza, avian infectious hepatitis, infectious synovitis, bluecomb, Newcastle disease, fowl pox, avian leukosis complex, coccidiosis, blackhead, infectious laryngotracheitis, infectious bronchitis, and erysipelas. Strict sanitary precautions, the intelligent use of antibiotics and vaccines, and the widespread use of cages for layers have made it possible to effect satisfactory disease control

Vaccination program is a must for chicks for keeping them free from all types of diseases. The main advantage of poultry vaccination are listed below.

- Timely vaccination makes disease resistance power in the body of chick.
- Help to keep the hen free from infective poultry diseases.
- Disease prevalence will be less.
- Mortality rate will reduce.
- And low mortality rate = more production = more profit.

- **Feed**

Feed is one of the major expense items in poultry farming which constitutes about 60 to 70 percent of the total cost. In egg poultry farming quality of feed is very important. The birds need a balanced diet in right quantity for a disease free growth. In order to make balanced and disease free feed more than 100 ingredients are used. This feed is made in the feed mills. The good quality of feed will be purchased.

- **Cage System**

The cage system will be used, as it has become the predominant method for maintaining hens. Cages provide the egg producer with an efficient and cost effective means of collecting eggs, disposing of wastes, reducing feed wastage,

maintaining an adequate environmental temperature, and inspecting the condition of individual birds. In the cage system, birds are confined in individual wire mesh cages arranged in rows in a stair step alignment with service aisles between rows. Feed and water troughs are attached to the front of the cages; eggs roll down the sloping cage floors into a collection area.



- **Egg Production Cycle**

Birds usually start to lay at around five months (20-21 weeks) of age and continue to lay for 12 months (52 weeks) on average, laying fewer eggs as they near the moulting period.

The typical production cycle lasts about 17 months (72 weeks) and involves three distinct phases, as follows.

- **Phase 1: Small Chicks or Brooders.** This phase lasts from 0 to 2 months (0-8 weeks) during which time small chicks are kept in facilities (brooder houses) separate from laying birds.
- **Phase 2: Growers.** This phase lasts about 3 months, from the ninth to the twentieth week of age. Growers may be either housed separately from small chicks or continue to be reared in brooder-cum-grower houses. It is important to provide appropriate care to the growers particularly between their seventeenth and twentieth week of age as their reproductive organs develop during this period.
- **Phase 3: Layers.** Growers are transferred from the grower house to the layer house when they are 18 weeks old to prepare for the laying cycle. Birds typically lay for a twelve-month period starting when they are about 21 weeks old and lasting until they are about 72 weeks old.

- **Culling**

Culling is the removal of undesirable (sick and/or unproductive) birds, from the flock. The proposed project will use selective culling, where the individual unproductive or sick Hen will be removed.

Culling enables a high level of egg production to be maintained, prevents feed waste on unproductive birds and may avert the spreading of diseases.

- **Collection of Eggs**

Frequent egg collection will prevent hens from brooding eggs or trying to eat them and will also prevent the eggs from becoming damaged or dirty. Eggs will be packed in trays and can be sold in bulk to the wholesale markets in the urban cities. The eggs are more liable to be damaged during transportation. The profits and losses in marketing of eggs depend on the proper transportation methods. Eggs should be transported in proper containers. Bamboo baskets, wooden boxes, and pitch board trays, collapsible cardboard boxes and in plastic trays are the containers used for transporting eggs.

5.2 POSSIBLE PRODUCT CATEGORIES AFTER PROCESSING

- **Eggs**

The farm will produce eggs having high quality of protein and nutrition. Eggs provide a valuable source of quality protein, while also containing 13 essential vitamins and minerals, alongside necessary omega-3 fatty acids and antioxidants.

60% of the high-quality protein in eggs can be found in the egg white, while the yolk contains the rest, along with vital healthy fats, vitamins, minerals and antioxidants, all compounding for a valuable contribution to your daily nutritional needs.

Furthermore, Eggs are used in FMCG's Company to prepare many products including cookies, Biscuits etc. Moreover, eggs are also used in many food and bakery items.

- **Chicks**

For continuous production and to extend the production capacity, 20 % of Laid eggs will be transferred to a hatchery, where they will be artificially incubated. After that, the Day Old Chick will be transferred in brooding to grow them and turn them into layers.

5.3. INSTALLED AND OPERATIONAL CAPACITIES

The Egg poultry farm has the capacity of producing approximately 540,000 eggs annually and will be operational for 360 days a year. Initially the unit will

be operated at 60% of capital utilization and will increase it by 5% annually. The Maximum capacity utilization will be 95%.

6. CRITICAL FACTORS

Before making the decision to invest Egg poultry farm, one should carefully analyze the associated risk factors. The important considerations in this regard include:

- Appointment of skilled staff
- Use of good quality of Hen.
- High-quality of feeds is critical for the expansion of the poultry industry.
- Maintain clean sheds, surroundings and equipment.
- Light is critical for the onset and maintenance of egg production. Lighting can influence the onset of lay, early egg size and the total number of eggs produced.
- Farm should be located far from commercial area to prevent from environmental disease.
- Factory location must take into account the availability of electric power and water supply, proximity to supply sources and markets, and optimum visibility and ease of access by customers.
- Proper Vaccination and medication is necessary

7. GEOGRAPHICAL POTENTIAL FOR INVESTMENT

The proposed manufacturing unit has potential to provide good entrepreneurship opportunity if the business is established in rural and sub-urban areas near to the large to medium cities of Pakistan like Karachi, Lahore, Islamabad, Peshawar, Quetta, Gujranwala, Sheikhpura, Faisalabad, Muzaffarabad, Murdan, Dir, Mansehra etc. The proposed locations are suitable where market can be easily accessible to purchase feed, and for selling of Eggs timely.

8. POTENTIAL TARGET CUSTOMERS / MARKETS

The market of the proposed unit is every individual, and every age group. The project is aimed to provide high quality animal protein in the form of hen eggs, which is a daily requirement of human body. Egg is one of the richest sources of proteins. It is also rich in calcium and is good for bone health, which is daily requirement of Human Body. They are a go-to food, easy to cook and can be eaten with almost anything but go especially well with toast.

9. PROJECT COST SUMMARY

9.1 PROJECT ECONOMICS

All the figures in this financial model have been calculated for estimated sales of **Rs. 6,426,000 /-** in the year one. The capacity utilization during year one is worked out at **60%** with **5%** increase in subsequent years up to the maximum capacity utilization of **95%**.

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

Table 1: Project Economics

Description	Details
Internal Rate of Return (IRR)	41%
Payback Period (yrs.)	2.74
Net Present Value (Rs.)	10,890,941

9.2 PROJECT FINANCING

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

Table 2: Project Financing

Description	Details
Total Equity (50%)	3,897,017
Bank Loan (50%)	3,897,017
Markup to the Borrower (%age / annum)	16%
Tenure of the Loan (Years)	5 Years

9.3 PROJECT COST

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

Table 3: Project Cost

Description	Amount Rs.
Capital Cost	
Land	2,500,000
Building	3,370,000

Machinery and Equipment	1,375,000
Furniture & Fixture	130,000
Office Equipment	100,000
Pre-operating costs	207,000
Total Capital Cost	7,682,000
Working Capital	
Equipment spare part inventory	134
Raw Material Inventory	11,900
Cash	100,000
Total Working Capital	112,034
Total Project Cost	7,794,034

9.4 SPACE REQUIREMENT

The space requirement for the proposed **Layer and Breeding Farm** is estimated considering various facilities including land purchasing, management Office, Shade, Labour room, etc. Details of space requirement and cost related to land & building is given below;

Table 4: Space Requirement

Description	Estimated Area (Sq.ft)	Unit Cost (Rs.)	Total Cost (Rs.)
Management Office	500	1100	550,000
Shade	3000	800	2,400,000
Labour Room	500	800	400,000
Pavement/Driveway	1000	20	20,000
Total	5,000		3,370,000

9.5 MACHINERY & EQUIPMENT REQUIREMENT

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

Table 5: Machinery & Equipment

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Hatching Machine		150,000	150,000
Cage Structure		300,000	300,000

Poultry Equipment		100,000	100,000
Temperature Control system		250,000	250,000
Water Supply Machine		100,000	100,000
Egg Container		100,000	100,000
Hen	1500	250	375,000
Total			1,375,000

9.6 FURNITURE & FIXTURES REQUIREMENT

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

Table 6: Furniture & Fixture

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Furniture		30,000	30,000
Carpeting		60,000	60,000
Electric Wiring and Lighting		40,000	40,000
Total			130,000

9.7 OFFICE EQUIPMENT REQUIREMENT

Following office equipment will be required for **Layer and Breeding Farm** project;

Table 7: Office Equipment

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Desktop Computers	1	47,000	47,000
Telephone Sets	1	3,000	3,000
Others	1	50,000	50,000
Total			100,000

9.8 HUMAN RESOURCE REQUIREMENT

In order to run operations of **Layer and Breeding Farm** project smoothly, at least one (01) manager/supervisor and (03) three skilled persons would be required to manage the poultry farm. Poultry farm will be operated for 12 months. Following human resources are required to run a Layer and Breeding Farm;

Table 8: Human Resource Requirement

Description	No. of Employees	Monthly Salary per person (Rs.)
Manager/Supervisor	1	35,000
Skilled Labour	3	23,000
Total	4	

9.9 UTILITIES AND OTHER COSTS

An essential cost to be borne by the project is the cost of utilities cash in hand for running expenses are Rs. 100,000 per month which includes the utilities. Furthermore, promotional expense being essential for the marketing of Project unit is estimated as 1% of Revenue that for year 1.

9.10 REVENUE GENERATION

Based on the capacity utilization of **60%**, sales revenue during the first year of operations is estimated as under;

Table 9: Revenue Generation – Year 1

Description	No. of Units Produced (No.)	Finished Goods Inventory (No.)	Units available for Sale (No.)	Sale Price / unit (Rs.)	Sales Revenue (Rs.)
All Purpose	324,000	2700	321,300	20	6,426,000
Total					6,426,000

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

Name of Supplier	Address	Phone	E-mail	Website
Nanchang Huibing Electronics Co., Ltd	No. 566 Dounan Road, Liantang, Nanchang, Jiangxi, China			https://eggincubator.en.made-in-china.com/
Poultry Equipment's & Accessories	Johar Town Lahore, Pakistan	0321 1110233	mukashif6@gmail.com	

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

Statement Summaries										SMEDA
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	6,426,000	7,366,275	8,329,939	9,371,553	10,496,504	11,710,521	13,019,699	14,430,518	15,158,693	15,916,627
Cost of goods sold	1,940,890	2,259,897	2,600,568	2,981,819	3,408,019	3,883,982	4,415,013	5,811,415	6,312,495	6,854,171
Gross Profit	4,485,110	5,106,378	5,729,371	6,389,734	7,088,485	7,826,539	8,604,686	8,619,103	8,846,197	9,062,457
<i>General administration & selling expenses</i>										
Administration expense	828,000	908,615	997,079	1,094,156	1,200,685	1,317,585	1,445,867	2,414,451	2,649,525	2,907,487
Travelling & Comm. expense (phone, fax, etc.)	82,800	90,862	99,708	109,416	120,068	131,759	144,587	241,445	264,953	290,749
Office expenses (stationary, etc.)	41,400	45,431	49,854	54,708	60,034	65,879	72,293	120,723	132,476	145,374
Professional fees (legal, audit, etc.)	16,065	18,416	20,825	23,429	26,241	29,276	32,549	36,076	37,897	39,792
Depreciation expense	329,000	329,000	329,000	329,000	329,000	329,000	329,000	329,000	329,000	329,000
Amortization expense	41,400	41,400	41,400	41,400	41,400	-	-	-	-	-
Subtotal	1,659,965	1,802,037	1,954,363	2,120,686	2,302,254	2,459,026	2,675,282	3,863,221	4,171,785	4,508,232
Operating Income	2,825,145	3,304,341	3,775,008	4,269,048	4,786,231	5,367,514	5,929,405	4,755,883	4,674,412	4,554,224
Other income	-	-	-	-	-	-	-	-	-	-
Gain / (loss) on sale of assets	-	-	-	-	-	-	-	-	-	-
Earnings Before Interest & Taxes	2,825,145	3,304,341	3,775,008	4,269,048	4,786,231	5,367,514	5,929,405	4,755,883	4,674,412	4,554,224
Interest expense	671,342	569,701	439,531	286,937	108,056	-	-	-	-	-
Earnings Before Tax	2,153,803	2,734,640	3,335,476	3,982,110	4,678,175	5,367,514	5,929,405	4,755,883	4,674,412	4,554,224
Tax	430,761	546,928	667,095	796,422	935,635	1,073,503	1,185,881	951,177	934,882	910,845
NET PROFIT/(LOSS) AFTER TAX	1,723,042	2,187,712	2,668,381	3,185,688	3,742,540	4,294,011	4,743,524	3,804,706	3,739,530	3,643,379
Balance brought forward		1,723,042	3,910,755	6,579,136	9,764,824	13,507,364	17,801,375	22,544,899	26,349,605	30,089,135
Total profit available for appropriation	1,723,042	3,910,755	6,579,136	9,764,824	13,507,364	17,801,375	22,544,899	26,349,605	30,089,135	33,732,514
Owner's Withdrawals	-	-	-	-	-	-	-	-	-	-
Balance carried forward	1,723,042	3,910,755	6,579,136	9,764,824	13,507,364	17,801,375	22,544,899	26,349,605	30,089,135	33,732,514

12.2 BALANCE SHEET

Statement Summaries											SMEDA
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
Assets											
<i>Current assets</i>											
Cash & Bank	100,000	1,903,002	3,681,802	5,771,875	8,223,823	11,048,459	15,567,172	20,529,125	24,542,066	28,505,741	32,489,532
Accounts receivable	-	528,164	566,806	645,050	727,459	816,496	912,617	1,016,310	1,128,091	1,215,995	1,277,068
Finished goods inventory	-	16,310	18,845	21,684	24,862	28,415	32,382	36,809	48,450	52,604	57,118
Raw material inventory	11,900	15,294	19,390	24,457	30,711	38,414	47,882	59,500	70,074	82,491	-
Total Current Assets	112,034	2,462,937	4,287,049	6,463,319	9,007,164	11,932,158	16,560,509	21,642,293	25,789,310	29,857,551	33,823,718
<i>Fixed assets</i>											
Land	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000	2,500,000
Building/Infrastructure	3,370,000	3,201,500	3,033,000	2,864,500	2,696,000	2,527,500	2,359,000	2,190,500	2,022,000	1,853,500	1,685,000
Machinery & equipment	1,375,000	1,237,500	1,100,000	962,500	825,000	687,500	550,000	412,500	275,000	137,500	-
Furniture & fixtures	130,000	117,000	104,000	91,000	78,000	65,000	52,000	39,000	26,000	13,000	-
Office equipment	100,000	90,000	80,000	70,000	60,000	50,000	40,000	30,000	20,000	10,000	-
Total Fixed Assets	7,475,000	7,146,000	6,817,000	6,488,000	6,159,000	5,830,000	5,501,000	5,172,000	4,843,000	4,514,000	4,185,000
<i>Intangible assets</i>											
Pre-operation costs	207,000	165,600	124,200	82,800	41,400	-	-	-	-	-	-
Total Intangible Assets	207,000	165,600	124,200	82,800	41,400	-	-	-	-	-	-
TOTAL ASSETS	7,794,034	9,774,537	11,228,249	13,034,119	15,207,564	17,762,158	22,061,509	26,814,293	30,632,310	34,371,551	38,008,718
Liabilities & Shareholders' Equity											
<i>Current liabilities</i>											
Accounts payable	-	119,961	141,570	164,839	190,969	220,277	253,117	289,878	330,689	357,899	379,187
Total Current Liabilities	-	119,961	141,570	164,839	190,969	220,277	253,117	289,878	330,689	357,899	379,187
<i>Other liabilities</i>											
Deferred tax	-	137,500	137,500	137,500	137,500	137,500	110,000	82,500	55,000	27,500	-
Long term debt	3,897,017	3,897,017	3,141,407	2,255,628	1,217,255	-	-	-	-	-	-
Total Long Term Liabilities	3,897,017	4,034,517	3,278,907	2,393,128	1,354,755	137,500	110,000	82,500	55,000	27,500	-
<i>Shareholders' equity</i>											
Paid-up capital	3,897,017	3,897,017	3,897,017	3,897,017	3,897,017	3,897,017	3,897,017	3,897,017	3,897,017	3,897,017	3,897,017
Retained earnings	-	1,723,042	3,910,755	6,579,136	9,764,824	13,507,364	17,801,375	22,544,899	26,349,605	30,089,135	33,732,514
Total Equity	3,897,017	5,620,059	7,807,772	10,476,153	13,661,841	17,404,381	21,698,392	26,441,916	30,246,622	33,986,152	37,629,531
TOTAL CAPITAL AND LIABILITIES	7,794,034	9,774,537	11,228,249	13,034,119	15,207,564	17,762,158	22,061,509	26,814,293	30,632,310	34,371,551	38,008,718
<i>Note: Total assets value will differ from project cost due to first installment of leases paid at the start of year 0</i>											

12.3 CASH FLOW STATEMENT

Statement Summaries											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
	Rs. in actuals										
<i>Operating activities</i>											
Net profit	-	1,723,042	2,187,712	2,668,381	3,185,688	3,742,540	4,294,011	4,743,524	3,804,706	3,739,530	3,643,379
Add: depreciation expense	-	329,000	329,000	329,000	329,000	329,000	329,000	329,000	329,000	329,000	329,000
amortization expense	-	41,400	41,400	41,400	41,400	41,400	-	-	-	-	-
Deferred income tax	-	137,500	-	-	-	-	(27,500)	(27,500)	(27,500)	(27,500)	(27,500)
Accounts receivable	-	(528,164)	(38,641)	(78,244)	(82,409)	(89,037)	(96,122)	(103,693)	(111,781)	(87,904)	(61,073)
Finished good inventory	-	(16,310)	(2,535)	(2,840)	(3,178)	(3,553)	(3,967)	(4,426)	(11,641)	(4,154)	(4,514)
Equipment inventory	(134)	(33)	(39)	(47)	(56)	(67)	(80)	(95)	(80)	(91)	720
Raw material inventory	(11,900)	(3,394)	(4,096)	(5,067)	(6,254)	(7,703)	(9,468)	(11,618)	(10,574)	(12,417)	82,491
Accounts payable	-	119,961	21,609	23,269	26,130	29,309	32,840	36,761	40,811	27,211	21,288
Other liabilities	-	-	-	-	-	-	-	-	-	-	-
Cash provided by operations	(12,034)	1,803,002	2,534,410	2,975,852	3,490,321	4,041,890	4,518,713	4,961,953	4,012,942	3,963,674	3,983,791
<i>Financing activities</i>											
Change in long term debt	3,897,017	-	(755,610)	(885,779)	(1,038,373)	(1,217,255)	-	-	-	-	-
Issuance of shares	3,897,017	-	-	-	-	-	-	-	-	-	-
Cash provided by / (used for) financing	7,794,034	-	(755,610)	(885,779)	(1,038,373)	(1,217,255)	-	-	-	-	-
<i>Investing activities</i>											
Capital expenditure	(7,682,000)	-	-	-	-	-	-	-	-	-	-
Cash (used for) / provided by investing	(7,682,000)	-	-	-	-	-	-	-	-	-	-
NET CASH	100,000	1,803,002	1,778,801	2,090,073	2,451,948	2,824,635	4,518,713	4,961,953	4,012,942	3,963,674	3,983,791
Cash balance brought forward		100,000	1,903,002	3,681,802	5,771,875	8,223,823	11,048,459	15,567,172	20,529,125	24,542,066	28,505,741
Cash available for appropriation	100,000	1,903,002	3,681,802	5,771,875	8,223,823	11,048,459	15,567,172	20,529,125	24,542,066	28,505,741	32,489,532
Cash carried forward	100,000	1,903,002	3,681,802	5,771,875	8,223,823	11,048,459	15,567,172	20,529,125	24,542,066	28,505,741	32,489,532

13 KEY ASSUMPTIONS**13.1 OPERATING COST ASSUMPTIONS**

Description	Details
Operational Days/ year	360
Hours operational/ days	24

13.2 PRODUCTION COST ASSUMPTIONS

Description	Details
Initial Capital utilization	60%
Annual Capital Utilization Growth	5%
Maximum Capital Utilization	95%

13.3 FINANCIAL ASSUMPTIONS

Description	Details
Interest Rate	16%
Debt: Equity Ratio	50:50
Debt Tenure	8 Years

6. 13.4 ECONOMY RELATED ASSUMPTIONS

Description	Details
Electricity Price Growth Rate	10%
Wage Growth Rate	10%
Sales Growth Rate	5%

13.5 CASH FLOW ASSUMPTIONS

Description	Details
Accounts Receivable Cycle (in days)	30
Accounts Payable Cycle (in days)	30

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