
Pre-Feasibility Study

CALF FATTENING FARM



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

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2 EXECUTIVE SUMMARY

In calf fattening business, calves are raised on nutritionally balanced feed to get targeted weight gain in a specified time. These calves are grown in groups and each batch stays on farm for a period of 90 days. The expected live body weight gain ranges between 700 - 850 grams / day. Higher yields are achievable with better farm management, and by selecting better quality breeds.

Calves are raised in rural and semi-urban areas and sold in urban markets normally in livestock markets (Mandies). A farm of 800 calves (200 Calves / batch) per annum is suggested in this pre-feasibility study; however, farm will start its production at its full capacity from day one.

An estimated investment of Rs 20.85 million is required, out of which capital investment is Rs. 6.10 million and working capital is Rs. 14.75 million. The Internal Rate of Return (IRR), Net Present Value (NPV) & Payback Period of the project are 28%, Rs. 11.83 million and 4.22 years respectively. The project is proposed to operate as a 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 **Calf Fattening 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

Calf fattening venture suggested in this study is based on raising 800 calves per year (200 calves / batch) at the farm premises. The calves, preferably males, between 12-18 months of age, are fed on nutritionally balanced concentrate ration or Total Mixed Ration (TMR) as major source of energy and protein for a period of 90 days to get higher body weight gain. Live weight of these calves is around 200 kg per calf. If these calves are fed properly on formulated fattening feed, an additional weight up to 70 - 90 kg can be achieved during 90 days.

The daily weight gain varies between 700 to 850 grams depending on the quality of feed given to them. However, in this pre-feasibility study it is assumed that each calf will gain 850 grams of weight per day. The subject business can be set-up at any appropriate location with easy availability of fodder and water. There is a year-round market, however, the demand increases before Eid-ul-Azha and one batch will be raised solely for this occasion, in which, well fed animals are sold at premium price higher than usual weight based price. The proposed legal structure of the business entity is sole proprietorship.

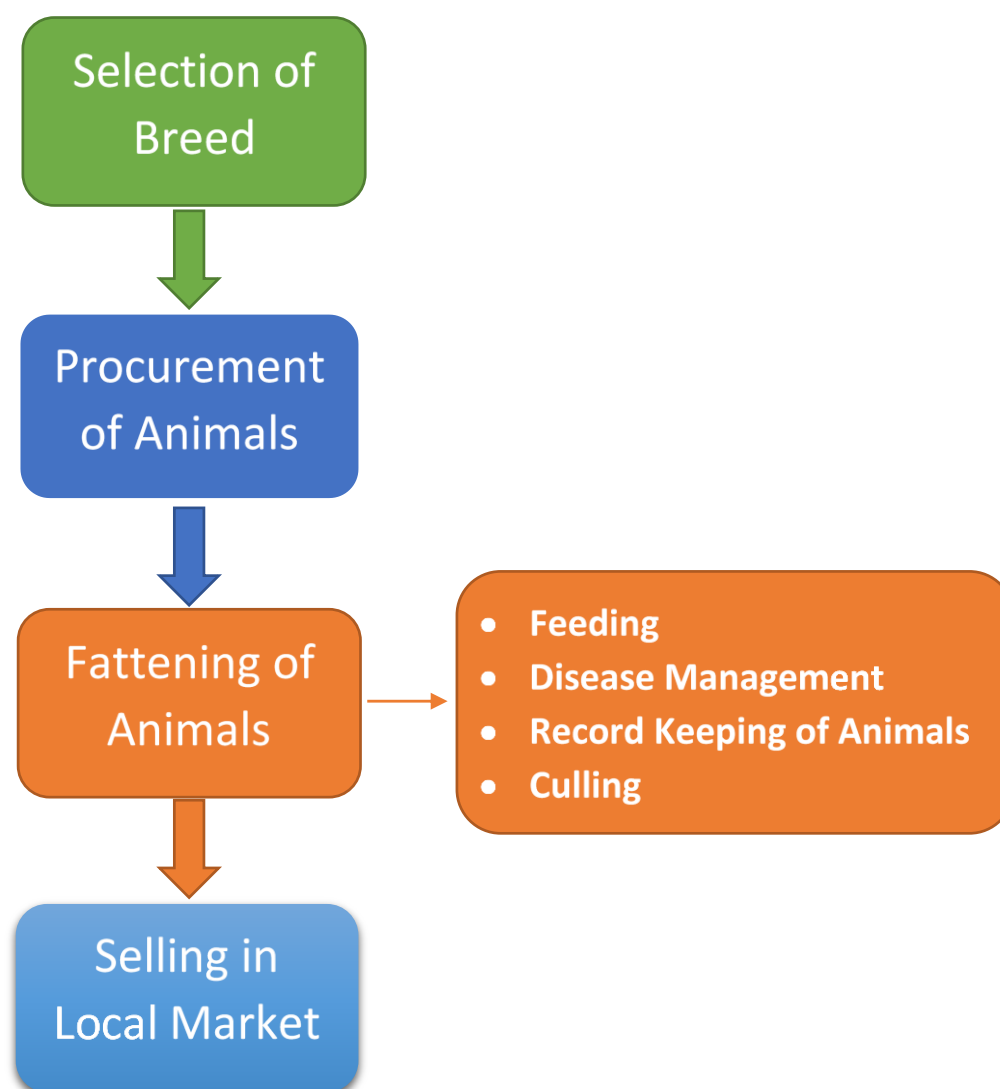
5.1 Installed and Operational Capacities

In this pre-feasibility study, 800 young calves of 12 to 18 months of age are raised per annum in 4 production batches (i.e 3 for routine and 1 for Eid-ul-Azha); each having 200 calves, raised for 90 days on 'Feed Lot Fattening' system. The mortality is assumed to be 1%. The detail is given in table below;

Table 1: Installed and Operational Capacity

Description	No. of Herd / Year	Calves / Herd	Total Calves	Total Calves after Mortality
Calves (Regular)	3	200	600	594
Calves (Eid-ul-Azha)	1	200	200	198
Total	4		800	792

5.2 Calf Fattening Process



a) Selection of Breed:

It is recommended that calves (preferably male) of local cattle breeds such as Sahiwal, Cholistani and Red Sindhi may be selected, however, calves of Tharparkar, Rojhan, Dhanni, Lohani, Bhagnari may also be considered for fattening purpose. For sacrificial purpose, the cross breed calves of Brahaman, Angus and Charolais etc. are also considered. The Sahiwal and Cholistani male calves are raised for good meat production and dressing percentage i.e. 55%. After fattening, the fat to muscle composition is also acceptable. The carcass weight is desirable by meat traders and exporters.

b) Procurement of Animals:

Initial live body weight should be around 200 kgs at 12-18 months of age. Little emaciated animals may also be accepted for fattening as research shows that these animals respond efficiently in terms of feed efficiency.

c) Fattening of Animals:**i. Housing:**

A good housing leads to good management practices and ultimately optimum production. Generally, housing should be:

- Less expensive
- Well ventilated, comfortable and dry with hygienic environment
- Easy drainage and removal of dung urine and waste material
- Protective from extreme environmental conditions
- Maximum sun exposure: axis of length to be east to west
- Availability of feed and water for 24 hours
- Planed so that future expansion may be possible when required

ii. Feeding:

Adequate weight gain through the use of balanced feed purchased from well reputed companies or formulated accordingly. Animal should be fed Total Mixed Ration (TMR) @ 3-3.5 % of live body weight. Additionally, urea molasses blocks and salt blocks can help in better daily weight gains. Green fodder is offered at 5% of body weight (wet basis) to every animal.

iii. Watering:

Daily supply of clean drinking water in clean troughs i.e. 15 to 20 liters of water consumption/animal/day maintains the production capacity of the animal. Due to TMR and salt offered, animal tends to consume more water.

iv. Disease management:

De-worming for endoparasitic infestations is necessary in each batch shortly after arrival at farm. Timely vaccination against infectious diseases should be done as a prophylactic measure. At a well managed farm, mortality should not exceed 2-3 % per annum in the fattened animals

v. Record keeping for each batch:

The animals should be ear-tagged on arrival at the farm. The information to be recorded includes breed of animal, initial live weight of animal, age of animals, date of purchase etc. The records for regular weight gain, medication and de-worming etc. are also important.

vi. Culling:

Selection of good productive animals and regular culling of uneconomical animal

d) Selling in Local Market:

After fattening the animals, these will be sold in local market.

6 CRITICAL FACTORS

Following are the factors critical for the success of this business venture:

- ⇒ Background knowledge and related experience of the entrepreneur in calf fattening farm operations.
- ⇒ Application of good husbandry practices such as timely feeding, watering and vaccination to ensure animal's health and disease-free environment.
- ⇒ Awareness about the supply and demand of calves in the market both for beef purpose and sacrificial purpose.
- ⇒ Selection of appropriate farm tools and equipment.
- ⇒ Sanitation and disinfection program should be strictly followed and regularly monitored.

- ⇒ Calves should be given enough space according to their age as less space could arise different complexities.
- ⇒ Feed should not be stored for a long time as it would lose its nutrition and there is a chance that feed would get fungal and can prove to be poisonous.

7 GEOGRAPHICAL POTENTIAL FOR INVESTMENT

Metropolitan cities like Lahore, Multan, Bahawalpur, Faisalabad, Rawalpindi, Karachi, Hyderabad, Quetta, Ziarat, Peshawar, D.I. Khan etc. are major markets of meat. The rural and peri-urban areas around these and other major cities across the country with abundant water and availability of fodder make a better choice for such farming; provided access to livestock mandies and veterinary services is ensured.

8 POTENTIAL TARGET CUSTOMERS / MARKETS

Apart from Sialkot, Jhang, Rahim Yar Khan, Bahawalnagar, Bahawalpur, Sahiwal in the Punjab, livestock markets in peri-urban locations of all cities of other provinces such as Karachi, Hyderabad, Nawabshah, Larkana, Dadu, Qila saifullah, Panjgur, Pishin, Quetta, Bannu, Laki Marwat, Kohat, Peshawar are primary markets, in addition to specially arranged locations for larger cities during Eid festival in the urban markets. Normally animals are sold on 'Live Body Weight' basis; the price of fattened calves varies according to animals' health and market conditions. Following are some of the target clients for farmers;

- Livestock traders
- Butchers
- Contractors
- Slaughter house owners

9 PROJECT COST SUMMARY

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

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

9.1 Project Economics

All the figures in this financial model have been calculated for estimated revenues of Rs. 54.08 Million in the year one.

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)	28%
Payback Period (Yrs.)	4.22
Net Present Value (Rs.)	11,829,661

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. 10,423,553
Bank Loan (50%)	Rs. 10,423,553
Markup to the Borrower (%age / annum)	12%
Tenure of the Loan (Years)	10 Years

9.3 Project Cost

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

Table 4: Project Cost

Description	Amount (Rs.)
Land	1,200,000
Building / Infrastructure	4,214,000
Machinery & Equipment	373,900
Furniture & Fixtures	77,640
Office Vehicles	69,525
Office Equipment	65,000
Pre-operating Cost	95,000

Total Capital Costs	6,095,065
Working Capital	
Equipment spare part inventory	124,633
Raw material inventory	4,058,546
Initial Purchase of animals (1 herd)	9,900,000
Cash	668,861
Total Working Capital	14,752,040
Total Investment	20,847,105

9.4 Space Requirement

Approximately, 4 kanal of land would be required for setting up the proposed Farm. As this business is land intensive, therefore, it is suggested to purchase the required land instead of rental or leased land. However, in order to avoid the initial high capital costs, the long-term lease contract for land acquisition may be considered. But entrepreneur can be more risk free on purchased land because of making heavy investment on shed and boundary wall as well as future business expansion.

The total cost for acquiring land is assumed at Rs. 1.2 million.

The infrastructural requirements of the project mainly comprise of the construction of Sheds, open space, labor room and other facilities. Details of space requirement and cost of construction of building and infrastructure for the proposed farm is provided in the table below:

Table 5: Space Requirement

Description	Area (Sq.ft.)	Cost / Sq.ft	Amount (Rs.)
Management building	100	1,000	100,000
Attendants room	100	1,000	100,000
Rest/Wash room	80	800	64,000
Shed for animals	7,200	500	3,600,000
Store	200	800	160,000
Dipping bath	100	500	50,000
Open paddock (Grounds)	14,000	10	140,000
Total Infrastructure			4,214,000

The entrepreneur should make sure that the following things are available at the farm site before setting up the farm:

- i. Electricity Connection
- ii. Clean Water Supply

9.5 Machinery & Equipment

Detail of Machinery & Equipment required for the farm is given below in table;

Table 6: Machinery & Equipment

Description	Quantity	Cost	Amount (Rs.)
Water Pump (5HP) & Tank	1	150,000	150,000
Feeding mangers	20	5,000	100,000
Tubs	10	1,500	15,000
Hand Cart	4	5,000	20,000
Movable Weighing Scale	1	50,000	50,000
Shed Ventilation Fans	2	3,000	6,000
Lighting (Shed)	72	150	10,800
Lighting (Grounds)	14	150	2,100
Misc. farm utensils	1	20,000	20,000
Total Machinery & Equipment			373,900

9.6 Furniture & Fixture

Detail of Furniture & Fixture required for the farm is given below in table;

Table 7: Furniture & Fixture

Description	Quantity	Cost	Amount (Rs.)
Office Table	1	10,000	10,000
Office chairs	4	5,000	20,000
Other chairs	4	2,500	10,000
Lighting	8	150	1,140
Exhaust fan	1	3,000	3,000
Ceiling fan	1	3,500	3,500
Sanitary fittings	2	10,000	20,000
Electric wiring & lighting	1	10,000	10,000
Total Furniture & Fixtures			77,640

9.7 Vehicle

A bike will be used for procurement of feed for animals and other business operations. The cost of bike is estimated at Rs. 69,525.

9.8 Office Equipment

Detail of Office Equipment required for the farm is given below in table;

Table 8: Office Equipment

Description	Quantity	Cost	Amount (Rs.)
Computers / Laptop	1	35,000	35,000
Computer printer (s)	1	10,000	10,000
UPS	1	20,000	20,000
Total Office Equipment			65,000

9.9 Procurement of Animals (1st Herd)

Detail of cost related to procurement of Calves for 1st herd is given in table below;

Table 9: Procurement of Animals*

Description	Live Weight (Kgs)	Purchase Price per kg (Rs.)	Herd Size (No. of Animals)	Total Cost (Rs.)
Calves	300	165	200	9,900,000

* It is assumed in this pre-feasibility study that initially the herd for Eid-ul-Azha will be purchased, as the sale prices are high during this season.

9.10 Raw Material Requirement

Detail of feed required is given as annexure.

9.11 Human Resource Requirement

In order to run operations of Calf Fattening Farm smoothly, details of human resources required in first year of operation along with monthly salary are recommended as under:

Table 10: Human Resource Requirement (Year 1)

Description	No. of Employees	Monthly Salary per person (Rs.)
Farm Manager	1	25,000
Helper at Farm	4	15,000
Total	5	

9.12 Utilities and Other Costs

An essential cost to be borne by the project is the cost of electricity which is estimated to be Rs. 193,948 in the first year of operations. The travelling expense being essential for purchase of quality animals and is estimated Rs. 102,000 in year one.

9.13 Revenue Generation

Revenue along with its assumption for the 1st year of operations is given in table below;

Table 11: Revenue Generation (Year 1)

Description	Calves (Regular)	Calves (Eid-ul-Azha)	Total
Total Animals	600	200	800
Mortality	6	2	8
Animals for Sale	594	198	792
Initial Weight (Kgs)	200	300	
Weight Gain / day (kgs)	0.85	1.00	
Weight at the time of Sale (Kgs)*	277	390	
Sale Price per Live Body Weight (Rs. / Kg)	200	275	
Sale Price per Animal (Rs.)	55,300	107,250	
Revenue (Rs.)	32,848,200	21,235,500	54,083,700

* Herd will be kept on farm for 90 days.

10 CONTACT DETAILS

In order to facilitate potential investors, contact details of consultants and experts relevant to the proposed project are provided below:

Consultant / Supplier	Contact	Website
Department of Livestock Production University of Veterinary & Animal Sciences (UVAS), Lahore	+92-42-99211374, 99211449	http://www.uvas.edu.pk
Department of Livestock Management, Faculty of Animal Husbandry, University of Agriculture, Faisalabad, Pakistan	+92 41 9200161-70	http://www.uaf.edu.pk
Department of Livestock Production and Management PMAS-Arid Agriculture University, Rawalpindi.	+92-51-9292159	http://www.uaar.edu.pk

11 USEFUL WEB LINKS

Small & Medium Enterprises Development Authority (SMEDA)	www.smeda.org.pk
Government of Pakistan	www.pakistan.gov.pk
Ministry of Industries & Production	www.moip.gov.pk
Government of Punjab	www.punjab.gov.pk
Government of Sindh	www.sindh.gov.pk
Government of Khyber Pakhtunkhwa	www.khyberpakhtunkhwa.gov.pk
Government of Baluchistan	www.balochistan.gov.pk
Government of Gilgit Baltistan	www.gilgitbaltistan.gov.pk
Government of Azad Jammu 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
Punjab Vocational Training Council (PVTC)	www.pvtc.gop.pk
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
Punjab Agriculture and Meat Company.	http://www.pamco.bz/
Punjab Livestock & Dairy Development Board	http://www.plddb.pk/
University of Agriculture Faisalabad	www.uaf.edu.pk
University of Veterinary & Animal Sciences, Lahore	http://www.uvas.edu.pk/

12 ANNEXURE

12.1 Feed Calculation and Its Cost

CAPEX & Operating Costs											SMEDA
Cost of Goods Sold (COGS)											
Feed Requirement	Regular	Eid	xx2	xx3	xx4	xx5	xx6	xx7	xx8	xx9	xx10
Initial Weight (Kgs)	200	300									
Weight Gain / day (kgs)	0.85	1.00									
Feeding Days	90	90									
Total Mixed Ration requirement (% of body weight)	3%	3%									
Total Mixed Ration (Rs./Kg)	28	28									
Agricultural Waste Requirement (% of body weight)	0.0%	0.0%									
Agricultural Waste Rate (in Rs./Kg) (incl. transportation cost)		0.0									
	per Animal	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
<i>Animals - Regular</i>											
Total Mixed Ration	17,980	10,787,742	11,866,516	13,053,168	14,358,485	15,794,333	17,373,766	19,111,143	21,022,257	23,124,483	25,436,931
Agricultural Waste	-	-	-	-	-	-	-	-	-	-	-
Total	17,980	10,787,742	11,866,516	13,053,168	14,358,485	15,794,333	17,373,766	19,111,143	21,022,257	23,124,483	25,436,931
<i>Animals - Eid</i>											
Total Mixed Ration	26,044	5,208,840	5,729,724	6,302,696	6,932,966	7,626,263	8,388,889	9,227,778	10,150,556	11,165,611	12,282,172
Agricultural Waste	-	-	-	-	-	-	-	-	-	-	-
Total	26,044	5,208,840	5,729,724	6,302,696	6,932,966	7,626,263	8,388,889	9,227,778	10,150,556	11,165,611	12,282,172

12.2 Animals Fattening Cycle

CAPEX & Operating Costs											SMEDA
Revenue Assumptions											
Herd Mix		xx1	xx2	xx3	xx4	xx5	xx6	xx7	xx8	xx9	xx10
Total No. of herds / year	4										
No. of herds / year (Regular)	3										
No. of herds / year (Eid)	1										
Installed capacity (animals / herd) Regular	200										
Initial capacity (animals / year)	800										
Maximum Capacity (animals / year)	800										
Annual Installed Capacity (Animals / Year)	800										
Mortality	1%										
Proposed Product Mix											
Regular	75%	600									
Eid	25%	200									
Production for Sale		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
<i>Animals - Regular</i>											
Production Capacity for the year		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Animals / herd / year		200	200	200	200	200	200	200	200	200	200
No. of herds		3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Animals / Year		600	600	600	600	600	600	600	600	600	600
Mortality		6	6	6	6	6	6	6	6	6	6
Net Animals / Year		594.00	594.00	594.00	594.00	594.00	594.00	594.00	594.00	594.00	594.00
<i>Animals - Eid</i>											
Animals / herd / year		200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00
No. of herds		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Animals / Year		200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00	200.00
Mortality		2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Net Animals / Year		198.00	198.00	198.00	198.00	198.00	198.00	198.00	198.00	198.00	198.00

12.3 Income Statement

Calculations										
Income Statement										
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Revenue	54,083,700	59,492,070	65,441,277	71,985,405	79,183,945	87,102,340	95,812,574	105,393,831	115,933,214	127,526,536
Cost of Sales										
COGS (Animals - Regular)	19,800,000	21,780,000	23,958,000	26,353,800	28,989,180	31,888,098	35,076,908	38,584,599	42,443,058	46,687,364
COGS (Animals - Eid)	9,900,000	10,890,000	11,979,000	13,176,900	14,494,590	15,944,049	17,538,454	19,292,299	21,221,529	23,343,682
COGS (Feed)	15,996,582	17,596,240	19,355,864	21,291,451	23,420,596	25,762,655	28,338,921	31,172,813	34,290,094	37,719,104
COGS (Vaccination)	237,600	261,360	287,496	316,246	347,870	382,657	420,923	463,015	509,317	560,248
Operating Cost (Direct Labor)	1,020,000	1,122,000	1,234,200	1,357,620	1,493,382	1,642,720	1,806,992	1,987,691	2,186,461	2,405,107
Operating Cost (Transportation)	180,000	198,000	217,800	239,580	263,538	289,892	318,881	350,769	385,846	424,431
Operating Cost (Machinery Maintenance)	60,000	66,000	72,600	79,860	87,846	96,631	106,294	116,923	128,615	141,477
Operating cost (Direct Electricity)	182,271	200,498	220,548	242,602	266,863	293,549	322,904	355,194	390,714	429,785
Total cost of sales	47,376,453	52,114,098	57,325,508	63,058,059	69,363,864	76,300,251	83,930,276	92,323,304	101,555,634	111,711,197
Gross Profit	6,707,247	7,377,972	8,115,769	8,927,346	9,820,081	10,802,089	11,882,298	13,070,527	14,377,580	15,815,338
General administration & selling expenses										
Electricity expense	11,678	12,845	14,130	15,543	17,097	18,807	20,688	22,756	25,032	27,535
Travelling expense	102,000	112,200	123,420	135,762	149,338	164,272	180,699	198,769	218,646	240,511
Communications expense (phone, mobile)	36,000	39,600	43,560	47,916	52,708	57,978	63,776	70,154	77,169	84,886
Office vehicles fuel expense	14,400	15,840	17,424	19,166	21,083	23,400	26,154	29,316	32,982	37,158
Stationary expenses (stationary, entertainment, etc.)	60,000	66,000	72,600	79,860	87,846	96,631	106,294	116,923	128,615	141,477
Depreciation expense	493,459	493,459	493,459	493,459	493,459	509,885	509,885	509,885	509,885	509,885
Amortization of pre-operating costs	19,000	19,000	19,000	19,000	19,000	-	-	-	-	-
Subtotal	736,537	758,944	783,593	810,706	840,531	861,973	897,182	935,911	978,514	1,025,377
Operating Income	5,970,711	6,619,028	7,332,176	8,116,640	8,979,550	9,940,116	10,985,116	12,134,616	13,399,066	14,789,961
Gain / (loss) on sale of office equipment	-	-	-	-	26,000	-	-	-	-	-
Gain / (loss) on sale of office vehicles	-	-	-	-	27,810	-	-	-	-	-
Earnings Before Interest & Taxes	5,970,711	6,619,028	7,332,176	8,116,640	9,033,360	9,940,116	10,985,116	12,134,616	13,399,066	14,789,961
Interest expense on long term debt (Project Loan)	340,236	280,216	212,584	136,374	50,499	-	-	-	-	-
Interest expense on long term debt (Working Capital Loan)	893,693	739,065	563,093	362,831	134,926	-	-	-	-	-
Subtotal	1,233,929	1,019,281	775,676	499,204	185,425	-	-	-	-	-
Earnings Before Tax	4,736,781	5,599,747	6,556,500	7,617,435	8,847,935	9,940,116	10,985,116	12,134,616	13,399,066	14,789,961
Tax	940,534	1,199,424	1,514,274	1,885,602	2,316,277	2,698,540	3,064,290	3,466,615	3,909,173	4,395,986
NET PROFIT/(LOSS) AFTER TAX	3,796,247	4,400,323	5,042,226	5,731,834	6,531,658	7,241,576	7,920,826	8,668,001	9,489,894	10,393,976

12.4 Balance Sheet

Calculations											
Balance Sheet											
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Assets											
<i>Current assets</i>											
Cash & Bank	668,861	3,273,926	4,959,242	6,900,922	9,099,612	11,395,954	17,069,368	23,214,228	29,877,678	37,111,577	79,689,971
Equipment spare part inventory	124,633	137,097	150,806	165,887	182,476	200,723	220,796	242,875	267,163	293,879	323,267
Raw material inventory	13,958,546	15,354,400	16,889,840	18,578,824	20,436,706	22,480,377	24,728,415	27,201,256	29,921,382	32,913,520	-
Total Current Assets	14,752,040	18,765,423	21,999,888	25,645,633	29,718,794	34,077,054	42,018,579	50,658,360	60,066,223	70,318,976	80,013,238
<i>Fixed assets</i>											
Land	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000
Building/Infrastructure	4,214,000	3,792,600	3,371,200	2,949,800	2,528,400	2,107,000	1,685,600	1,264,200	842,800	421,400	-
Machinery & equipment	373,900	336,510	299,120	261,730	224,340	186,950	149,560	112,170	74,780	37,390	-
Furniture & fixtures	77,640	69,876	62,112	54,348	46,584	38,820	31,056	23,292	15,528	7,764	-
Office vehicles	69,525	55,620	41,715	27,810	13,905	111,971	89,577	67,182	44,788	22,394	-
Office equipment	65,000	52,000	39,000	26,000	13,000	104,683	83,747	62,810	41,873	20,937	-
Total Fixed Assets	6,000,065	5,506,606	5,013,147	4,519,688	4,026,229	3,749,424	3,239,539	2,729,654	2,219,769	1,709,885	1,200,000
<i>Intangible assets</i>											
Pre-operation costs	95,000	76,000	57,000	38,000	19,000	-	-	-	-	-	-
Total Intangible Assets	95,000	76,000	57,000	38,000	19,000	-	-	-	-	-	-
TOTAL ASSETS	20,847,105	24,348,029	27,070,035	30,203,321	33,764,023	37,826,478	45,258,118	53,388,014	62,285,992	72,028,861	81,213,238
Liabilities & Shareholders' Equity											
<i>Current liabilities</i>											
Accounts payable	-	1,298,161	1,427,977	1,570,775	1,727,852	1,900,637	2,090,701	2,299,771	2,529,748	2,782,723	1,573,124
Total Current Liabilities	-	1,298,161	1,427,977	1,570,775	1,727,852	1,900,637	2,090,701	2,299,771	2,529,748	2,782,723	1,573,124
<i>Other liabilities</i>											
Long term debt (Project Loan)	3,047,532	2,574,280	2,041,008	1,440,104	762,989	-	-	-	-	-	-
Long term debt (Working Capital Loan)	7,376,020	6,255,788	4,980,927	3,530,094	1,879,000	-	-	-	-	-	-
Total Long Term Liabilities	10,423,553	8,830,068	7,021,935	4,970,198	2,641,989	-	-	-	-	-	-
<i>Shareholders' equity</i>											
Paid-up capital	10,423,553	10,423,553	10,423,553	10,423,553	10,423,553	10,423,553	10,423,553	10,423,553	10,423,553	10,423,553	10,423,553
Retained earnings	-	3,796,247	8,196,570	13,238,796	18,970,630	25,502,288	32,743,864	40,664,690	49,332,691	58,822,585	69,216,561
Total Equity	10,423,553	14,219,800	18,620,123	23,662,349	29,394,182	35,925,841	43,167,417	51,088,243	59,756,244	69,246,138	79,640,113
TOTAL CAPITAL AND LIABILITIES	20,847,105	24,348,029	27,070,035	30,203,321	33,764,023	37,826,478	45,258,118	53,388,014	62,285,992	72,028,861	81,213,238

12.5 Cash Flow Statement

Calculations											
Cash Flow Statement											
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
<i>Operating activities</i>											
Net profit		3,796,247	4,400,323	5,042,226	5,731,834	6,531,658	7,241,576	7,920,826	8,668,001	9,489,894	10,393,976
Add: depreciation expense		493,459	493,459	493,459	493,459	493,459	509,885	509,885	509,885	509,885	509,885
amortization of pre-operating costs		19,000	19,000	19,000	19,000	19,000	-	-	-	-	-
Equipment inventory	(124,633)	(12,463)	(13,710)	(15,081)	(16,589)	(18,248)	(20,072)	(22,080)	(24,288)	(26,716)	(29,388)
Raw material inventory	(13,958,546)	(1,395,855)	(1,535,440)	(1,688,984)	(1,857,882)	(2,043,671)	(2,248,038)	(2,472,841)	(2,720,126)	(2,992,138)	32,913,520
Accounts payable		1,298,161	129,816	142,798	157,077	172,785	190,064	209,070	229,977	252,975	(1,209,599)
Cash provided by operations	(14,083,179)	4,198,549	3,493,449	3,993,418	4,526,899	5,154,984	5,673,415	6,144,860	6,663,450	7,233,899	42,578,393
<i>Financing activities</i>											
Project Loan - principal repayment	-	(473,252)	(533,272)	(600,905)	(677,114)	(762,989)	-	-	-	-	-
Working Capital Loan - principal repayment	-	(1,120,232)	(1,274,861)	(1,450,833)	(1,651,095)	(1,879,000)	-	-	-	-	-
Additions to Project Loan	3,047,532	-	-	-	-	-	-	-	-	-	-
Additions to Working Capital Loan	7,376,020	-	-	-	-	-	-	-	-	-	-
Issuance of shares	10,423,553	-	-	-	-	-	-	-	-	-	-
Purchase of (treasury) shares											
Cash provided by / (used for) financing activities	20,847,105	(1,593,484)	(1,808,133)	(2,051,737)	(2,328,209)	(2,641,989)	-	-	-	-	-
<i>Investing activities</i>											
Capital expenditure	(6,095,065)	-	-	-	-	(216,654)	-	-	-	-	-
Acquisitions											
Cash (used for) / provided by investing activities	(6,095,065)	-	-	-	-	(216,654)	-	-	-	-	-
NET CASH	668,861	2,605,065	1,685,316	1,941,680	2,198,690	2,296,342	5,673,415	6,144,860	6,663,450	7,233,899	42,578,393

13 KEY ASSUMPTIONS

13.1 Operating Cost Assumptions

Description	Details
Communication Expense	Rs. 3,000 per month
Travelling Expenses	10% of Labor Cost
Operating Cost Growth Rate	10%

13.2 Production Cost Assumptions

Description	Animal for Routine Fattening	Animal for Eid-ul-Azha Fattening
Initial Weight at the time of Purchase	200 Kgs	300 Kgs
Weight Gain / Day	0.85 Kg	1.00 Kg
Total Mixed Ration (TMR)	Rs. 28 per Kg	Rs. 28 Per Kg
Animal Purchasing Cost per Kg as of Live Body Weight	Rs. 165	Rs. 165
Vaccination Cost per Animal	Rs. 300	Rs. 300
Production Cost Growth Rate	10%	

13.3 Revenue Assumptions

Description	Animal for Routine Fattening	Animal for Eid-ul-Azha Fattening
Sales Price per Kg	Rs. 200	Rs. 275
Live body Weight at the time of Sales	277 Kgs	390 Kgs
Growth in Sale Price	10%	

13.4 Financial Assumptions

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

Inflation Growth Rate	10%
Electricity Price Growth Rate	10%
Salaries Growth Rate	10%