



Pre-feasibility Study

# SEMI INTENSIVE SHEEP FATTENING FARM

June 2019

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, andrevenues 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

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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#### **Document Control**

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#### 2 EXECUTIVE SUMMARY

**Semi Intensive Sheep Fattening Farm** is proposed to be located at Quetta, Loralai, Mach, Sibi, Harnai, Duki, Qilla Abdullah, Pishin, Karak, Dera Ismail Khan, Kohat, Attock, Hub, Lahore, Faisalabad, Multan, Gujranwala, Rawalpindi, others

Products include Semi Intensive Sheep Fattening Farm

Capacity; Installed capacity 540 Sheep and initial utilization 432 Sheep, 80%

Total Cost Estimates is Rs. 4,733,778 with fixed investment Rs. 2,967,620 and working capital Rs. 1,766,157.

Given the cost assumptions IRR and payback are 38 % and 3.75 years respectively

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

Most significant consideration

Large quantity of livestock production in the country.

Availability of large quantities of varieties mix.

Availability of hard working & low-cost labor.

Increasing inland trends towards use of organic food.

Large and established world markets.

Improved technological changes available.

Equally important factor

Emphasizing on excellent services to its customers such as standardized products and timely order fulfillment.

New machinery should be purchased in order to increase the efficiency and lower the maintenance cost.

Refurbished standardized machinery is also recommended.

Adapt to the rapid, social, economic and technological changes.

Hiring of well-trained / experienced staff will add in the efficiency of the facility.



#### 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 **Semi Intensive Sheep 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 it's successful management.

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



#### 5 BRIEF DESCRIPTION OF PROJECT & PRODUCT

This project envisages production of Semi Intensive Sheep Fattening which is having a very bright prospect in Household use, Restaurants & Hotels and Export Market.

The project is related to setting up Semi Intensive sheep fattening farm in which, young sheep preferably males are raised on organic nutritionally balanced feed or Total Mixed Ration (TMR) & Grazing to get the targeted weight gain of greater value. These sheep are grown in groups and each batch stays on farm for a period of 120 days. The expected live body weight gain will be about 150 grams/day. Higher yields are achievable with better farm management and better quality breeds such as Bibrik, Kajli or Kajla, Kooka, Waziri, Afghan Arabi, Balkhi, Damani, Shinwari, Lohi, Silpi, Balochi, Harnai and Cholistani for meat production.

Sheep are raised in rural and semi-urban areas where there is abundance of fresh water, fodder and natural vegetation. The fattened sheep are sold primarily in livestock markets (mandies).

During 2017-18, livestock contributed 58.9 percent to the agriculture value added and 11.1 percent to the overall GDP compared to 58.9 percent and 11.3 percent during the corresponding period last year, respectively. Gross value addition of livestock at constant cost factor of 2005-06 has increased from Rs. 1,327 billion (2016-17) to Rs. 1,377 billion (2017-18), showing an increase of 3.8 percent over the same period last year.

Until recently the expansion of livestock food production was dependent on increased numbers of animals rather than higher carcass weight per animal. As a result of the higher demand, the livestock producers have to shift their focus to increase the use of new recourses rather than depending on the old production system of pastures. With the new production techniques including supplementary feeding and use of improved genetic material, the livestock farming can become a cost effective enterprise. Livestock producers can adopt non–conventional feed preparation and feeding techniques like treatment of wheat/ rice straws and other crop residues with urea or ammonia, molasses blocks, silage making, concentrate mixtures with low cost formulae and semi intensive farming etc. The country can thus also be benefited with increased productivity of animal protein.

Establishment of the sheep fattening farms at small level in Balochistan will create opportunities of livelihood for small farmers and unemployed rural inhabitants. The farm will serve the purpose of fattening of sheep. The project can be established in parts of the country where sheep farming is already taking place. Livestock

producers can obtain three to four flocks in one year depending upon their production and management techniques. The animals can be marketed in the local Piri as well as sold directly to the meat shops.

For this prefeasibility it is suggested that the farmers use open range grazing as well as give supplementary feed to the animals, animals should obtain at least half of the energy requirement from grazing which is very low cost and suited for local species of sheep. Supplementary feeding on the other hand will help in fattening of animals. Similarly storage and conservation of forage and use of high protein feed concentrates will overall improve forage quality and give better results.

Estimated Livestock Population						
Species 2015-16 2016-17 2017-18						
Sheep	29.8	30.1	30.5			

Estimated Meat Production					
Meat	2017-18				
Mutton	686,000	701,000	717,000		

This pre-feasibility study is about sheep fattening farm based on 30 animals per 120 days, to be set up for meat production;

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

- **Technology:** This proposed unit with machines including Chopper, Water Pump, Mangers, Tubs, Hand Cart, Weight Scale, etc.
- Location: The unit would be located in or near an area where the lambs are available easily like be located at Quetta, Loralai, Mach, Sibi, Harnai, Qilla Abdullah, Pishin, Karak, Dear Ismail Khan, Kohat, Attock, Hub, Lahore, Faisalabad, Multan, Gujranwala, and Karachi or any other site where lambs can be transported easily.
- Product: The unit would produce Sheep for commercial and meat processing uses.
- Target Market: In addition to local markets in Karachi, Lahore, Rawalpindi, Quetta, Peshawar, and Islamabad an enormous export market for the Pakistani sheep meat exists in Middle East, India, Europe and China etc.



• **Employment Generation:** The proposed project will provide direct employment to 13 people. Financial analysis shows the unit shall be profitable from the very first year of operation.

#### **5.1 Production Process:**

Selection of good sheep breed, The prominent breeds for fattening are Kajli, Bucchi, Lohi, Thalli, Silpi and Salt Range in Punjab; Dumbi, Kachhi and Kooka in Sindh; Balkhi, Damani and Kaghani in KPK and Balochi, Bibrik, Harnai and Rakhsani in Balochistan. The availability of young stock is not a problem as twin lambing and early maturity are common features of sheep.

Baluchi, Thalli, Kooka, Balkhi and Harnai are primarily meat type, small sized breed, kept for good meat production and conformation with 52-55% dressing percentage. After fattening, the fat to muscle composition is also acceptable. Sipli, Kajli and Lohi sheep are more desirable for Eid-ul-Azha as these have higher weights and more marbling with higher dressing percentage.

Selection of animals with excellent body score and conditions: initial live body weight should be around 15 kg at 6-8 months of age. Small and emaciated animals may also be accepted for fattening as research shows that these animals respond positively in terms of feed efficiency.

Housing: should be dry, comfortable and airy with proper and frequent removal of droppings, urine and waste material (droppings can be used as bio fertilizer for growing crops/ fodder). Farm should be established on scientific lines with adequate space allocation according to the number of sheep. It should be built east-west length wise to permit maximum day light and sun for natural disinfection.

A dipping bath pit of approximately 15-20 sq.ft is necessary for giving the dip of medicines mixed water to young stock for removing external parasites.

Feeding: Adequate weight gain can be achieved through use of balanced feed purchased from well reputed companies or it can be formulated accordingly. Animal should be fed TMR @ 3 % of live body weight. Additionally, salt blocks can help in better daily weight gains. Green fodder is offered at 5% of body weight (wet basis) to every animal.

Watering: Daily supply of clean drinking water in clean troughs i.e. 5 to 10 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.



Disease management: Timely vaccination against infectious diseases and timely medication for endoparasitic infestations. Following is a tentative schedule for vaccination;

**Table 1: Tentative Vaccination Schedule** 

Disease	Vaccine	Vaccination time	Duration of Immunity
Foot and Mouth Disease (FMD)	FMD Vaccine	Start of spring	4 months
Contagious Pustular Dermatitis (CPD)	CPD vaccine	April-October	4 months
Anthrax	Anthrax spore vaccine	March-April	One year
Sheep Pox	Sheep pox vaccine	March-September	4 months
Entero-toxaemia	Entero-toxaemia vaccine	January- July	Six months
Pleuro-pneumonia	Pleuropneumoni a vaccine	October-November	4 months

Selection of good productive animals and regular culling of uneconomical animal.

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, age, date of purchase etc. The records for regular weight gain, medication and deworming etc. are also important.

Regular technical assistance from the livestock professionals and experts.

#### 5.2 Installed And Operational Capacities

The total installed capacity of the project is 540 Sheep in three batches (180 Sheep per Batch in 120 Days) along with assumed operational capacity of 80% during the first year of operations i.e. 432 Sheep. A gradual increase of 5% in production capacity per annum.

S M E D

#### **6 CRITICAL FACTORS**

The effective use of resources by adopting following factors would lead towards maximization of profits.

- Improvement of individual animal performance through live weight gain.
- Improving the nutrition and feed supply through supplementation of feed and improvement of water supply.
- Improvement in livestock management practices taking care of Vaccination and Medicine etc.
- Establishment of the farms in areas where grazing is available.
- New feeding techniques including preparation of urea molasses blocks, wheat straw treatment should be used for better results.
- Availability of skilled labor.
- Higher return on investment and a steady growth of business is closely associated with regular training and capacity building of the entrepreneur and employees.
- Prior experience and related / education in the related field of business.

#### 7 GEOGRAPHICAL POTENTIAL FOR INVESTMENT

It is suitable to establish the Fattening farm Quetta, Swat, Hub, Khuzdar, Loralai Bostan, Peshawar, Lahore and Karachi. However such a farm could be established in other parts of the country provided the main conditions are fulfilled such as Availability of lamb and man power availability, accessibility to markets, and reasonable demand for Sheep.

#### 8 POTENTIAL TARGET CUSTOMERS / MARKETS

Apart from major cities, livestock markets in all the cities and peri-urban locations across the country are the primary markets in addition to specially arranged locations in larger cities during Eid festival in the urban markets. The price of fattened sheep varies according to health of animals and market conditions. Normally animals are sold on 'Live Body Weight' basis. In this feasibility, Rs. 12,375/ sheep, live body weight is assumed as selling price. Following are some of the target clients for sheep fattening farmers;

- Livestock traders
- Butchers



- Contractors
- Slaughter house owners

#### 9 PROJECT COST SUMMARY

#### 9.1 Project Economics

All the figures in this financial model have been calculated for estimated sales of Rs. 9,266,400 in the year one. The capacity utilization during year one is worked out at 80% 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)	34%
Payback Period (yrs.)	4.22
Net Present Value (Rs.)	5,424,141

#### **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%)	Rs. 2,366,889
Bank Loan (50%)	Rs. 2,366,889
Markup to the Borrower (%age / annum)	16%
Tenure of the Loan (Years)	5 Years



#### 9.2 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	357,724
Building / Infrastructure	1,349,200
Plant and Machinery	431,000
Furniture & Fixture	68,000
Office Equipment	185,000
Pre-operating Cost	576,696
Total Capital Cost	2,967,620
Working Capital	
Equipment Spare Parts Inventory	8,333
Raw Material Inventory	1,507,824
Cash	250,000
Total Working Capital	1,766,157
Total Project Cost	4,733,778

#### 9.3 Space Requirement

The space requirement for the proposed **Semi Intensive Sheep Fattening Farm** is estimated considering various facilities including management office, production hall, storage, open space, etc. Details of space requirement and cost related to land & building is given below;

**Table 4: Space Requirment** 

Description	Estimated Area (Sqft)	Unit Cost (Rs.)	Total Cost (Rs.)
Management Office	400	1,450	580,000
Shed for Animals	3,600	80	288,000
Raw Material Shed	400	150	60,000



Attendants Room	261	1,200	313,200
Open	5,400	20	108,000
Total	10,061		1,349,200

#### 9.4 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.)
Chopper	1	25,000	25,000
Water pump	1	250,000	250,000
Mangers	15	4,000	60,000
Tubs	8	2,000	16,000
Hand Cart	2	7,500	15,000
Weight Machine	1	50,000	50,000
Misc	1	15,000	15,000
Total			431,000

#### 9.5 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	1	50,000	50,000
Carpeting	400	45	18,000
Total			68,000

#### 9.6 Office Equipment Requirement

Following office equipment will be required for **Semi Intensive Sheep Fattening Farm**;



**Table 7: Office Equipment** 

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Desktop Computer with UPS	1	55,000	55,000
Printer	1	20,000	20,000
Telephone Sets	2	5,000	10,000
Fax Machine	1	20,000	20,000
Photo Copier	1	80,000	80,000
Total			185,000

#### 9.7 Human Resource Requirement

In order to run operations of **Semi Intensive Sheep Fattening Farm** smoothly, details of human resources required along with number of employees and monthly salary are recommended as under;

**Table 8: Human Resource Requirment** 

Description	No. of Employees	Monthly Salary per person (Rs.)		
CEO	1	60,000		
Farm Manager	1	35,000		
Accountant	1	22,000		
Marketing Manager	1	25,000		
Shepherd	5	20,000		
Peon	2	18,000		
Security Guard	2	18,000		
Total	12	314,000		

#### 9.8 Utilities and other costs

An essential cost to be borne by the project is the cost of electricity and gas. The electricity expenses are estimated to be around Rs. 186,873 / year. Furthermore, promotional expense being essential for marketing of **Semi Intensive Sheep Fattening Farm** is estimated as 1% of administrative / Cost of Sales expenses.



#### 9.9 Revenue Generation

Based on the capacity utilization of 80% for Sheep Fattening Sales revenue during the first year of operations is estimated as under;

Table 9: Revenue Generation - Year 1

Description	No. of sheep	Sale Price / Sheep	Sales Revenue
	Produced (No.)	(Rs.)	(Rs.)
Sheep	432	21,450	9,266,400



# **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 Feed Suppliers

Name of Supplier	Address	Phone	Fax	E- m ail	We bsit e
Hi-Tech Feeds (Pvt.) Ltd.	1-A, Shadman Chowk Jail Road, Lahore	042- 37564503	042- 37564508		
ICI Pakistan Feed	63-Mozang Road Lahore	042- 36370042			
Big Feed (PVT) Ltd.	63-Mozang Road Lahore	042- 36370042			

#### **10.2 Meat Processors**

Name of Processor	Address	Phone	Fax	E-mail	Website
Mr. Younas Qureshi	Red Cow Meat Products of Pakistan	042-35112603			
Punjab Agriculture and Meat Company	5/8 Shaheen Complex, Egerton Road Lahore	042-36370661			

# 10.3 Technical Experts / Consultants

Name of Expert/ Organization	Address	Phone	Fax	E- mail	Website
Prof. Dr. Muhammad Younas	University of Agriculture, Faisalabad,	041- 9200161			
Dr. Abdul Rehman	Directorate of Small Ruminants	061- 9210417			
Dr. M. Abdullah	University of Veterinary and Animal Sciences, Lahore	042- 9211398			



# 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	http://moptt.gov.pk				
Education					
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/ <b>prgtti</b> /				
Pakistan Council of Scientific and Industrial Research (PCSIR).	http://www.pcsir.gov.pk				
Punjab Industrial Estates (PIE)	www.pie.com.pk				
Faisalabad Industrial Estate Development and Management Company (FIEDMC)	www.fiedmc.com.pk				
Company (FIEDING)					



# **12 ANNEXURES**

#### 12.1 Income Statement

Revenue	Statement Summaries										SMEDA
Revenue	Income Statement										Rs. in actua
Cost of Goods Sold   1,283,472		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year
Cost of Goods Sold	Revenue	9 266 400	10.830.105	12 613 887	14 646 124	16 110 737	17 721 810	19 493 992	21 443 391	23 587 730	25,946,5
Feed & Vascination Cost		7,200,100	10,050,105	12,013,007	11,010,121	10,110,737	17,721,010	17,175,772	21,113,371	25,507,750	23,710,5
Cost of Sheeps 3,240,000 1,320,000 1,320,000 1,431,2440 4,743,684 5,218,052 5,798,588 6,313,843 6,945,228 7,7 6,000 1,00		1 283 472	1 411 819	1 553 001	1 708 301	1 879 131	2 067 044	2 273 749	2 501 124	2 751 236	3,026,3
Direct Labor   1,200,000   1,320,000   1,452,000   798,600   878,460   966,306   1,062,937   1,169,230   1,286,153   1,486,220   1,186,153   1,486,220   1,186,153   1,486,220   1,186,153   1,486,220   1,186,230   1,186,230   1,186,230   1,186,230   1,186,230   1,186,230   1,186,230   1,186,230   1,186,230   1,186,230   1,186,230   1,186,230   1,186,230   1,186,230   1,186,230   1,186,230   1,286,153   1,286,153   1,486,230   1,186,230   1,186,230   1,186,230   1,186,230   1,186,230   1,186,230   1,286,1											7,639,7
Repair & Maintenance   25,000   27,891   31,008   34,367   36,085   37,890   39,784   41,773   43,862   10,1116   10,000   12,0											1,414,7
Utilities         80,000         93,500         108,900         126,445         139,000         152,998         168,298         185,128         20,641         2           Total Cost of Sales         5,828,472         6,417,210         7,065,309         6,980,153         7,676,450         8,442,291         9,284,626         10,211,099         11,230,120         12,3           General administration & selling expenses         4,412,895         5,548,578         7,665,971         8,434,287         9,279,520         10,209,366         11,232,292         12,357,610         13,5           General administration & selling expenses         2,521,440         2,773,584         3,050,942         2,714,441         2,985,886         3,284,474         3,612,922         3,974,214         4,371,635         4,8           Office vehicles running expense         0         68,000         538,560         592,416         527,076         579,784         637,762         701,538         3771,692         848,861         9           Office vehicles running expense         0         61,200         67,320         74,052         65,885         72,473         79,720         87,692         96,461         106,108         1         10,009,300         115,339         115,339         115,339         115,339		, ,									46,0
Total Cost of Sales	•					,		,	,		224,0
Gross Profit 3,437,928 4,412,895 5,548,578 7,665,971 8,434,287 9,279,520 10,209,366 11,232,292 12,357,610 13,5  General administration & selling expenses  Administration expense 2,521,440 2,773,584 3,050,942 2,714,441 2,985,886 3,284,474 3,612,922 3,974,214 4,371,635 4  Travelling & Comme expense (phone, fax, etc.) 489,600 538,560 592,416 527,076 579,784 637,762 701,538 771,692 848,861 9  Office expenses (stationary, etc.) 61,200 67,320 74,052 65,885 72,473 79,720 87,669 96,461 106,108 1  Depreciation expense 203,320 203											12,350,9
General administration & selling expenses  Administration expense											13,595,5
Administration expense	Gloss 1 Ioil	3,437,720	7,712,075	3,340,370	7,005,771	0,434,207	7,217,320	10,207,300	11,232,272	12,337,010	13,373,
Travelling & Comm expense (phone, fax etc.) 489,600 538,560 592,416 527,076 579,784 637,762 701,538 771,692 848,861 99 Office expineses (stationary, etc.) 61,200 67,320 74,052 65,885 72,473 79,720 87,692 96,461 106,108 1 Depreciation expense 203,320 203,											
Office vehicles running expense	Administration expense	2,521,440	2,773,584	3,050,942	2,714,441	2,985,886	3,284,474	3,612,922	3,974,214	4,371,635	4,808,
Office expenses (stationary, etc.)  61,200  67,320  74,052  65,885  72,473  79,720  87,692  96,461  106,108  1 Depreciation expense 203,320  203,20  203,320  203,		489,600	538,560	592,416	527,076	579,784	637,762	701,538	771,692	848,861	933,
Depreciation expense   203,320   2	Office vehicles running expense	-	-	-	-	-	-	-	-	-	
Amortization expense 115,339 115,339 115,339 115,339 115,339 115,339 1 115,339 1 115,339 1 115,339 1 115,339 1 115,339 1 115,339 1 115,339 1 115,339 1 115,339 1 115,339 1 115,339 1 115,339 1 115,339 1 1 1 115,339 1 1 115,339 1 1 1 115,339 1 1 1 115,339 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Office expenses (stationary, etc.)	61,200	67,320	74,052	65,885	72,473	79,720	87,692	96,461	106,108	116,
Property tax expense	Depreciation expense	203,320	203,320	203,320	203,320	203,320	203,320	203,320	203,320	203,320	203,
Miscelaneous expense         46,332         54,151         63,069         73,231         80,554         88,609         97,470         107,217         117,939         1           Subtotal         3,437,231         3,752,274         4,099,139         3,699,292         4,037,355         4,293,885         4,702,942         5,152,904         5,647,862         6,1           Operating Income         697         660,621         1,449,439         3,966,679         4,396,932         4,985,634         5,506,424         6,079,388         6,709,747         7,4           Other income         - <t< td=""><td>Amortization expense</td><td>115,339</td><td>115,339</td><td>115,339</td><td>115,339</td><td>115,339</td><td>-</td><td>-</td><td>-</td><td>-</td><td></td></t<>	Amortization expense	115,339	115,339	115,339	115,339	115,339	-	-	-	-	
Subtotal         3,437,231         3,752,274         4,099,139         3,699,292         4,037,355         4,293,885         4,702,942         5,152,904         5,647,862         6,1           Operating Income         697         660,621         1,449,439         3,966,679         4,396,932         4,985,634         5,506,424         6,079,388         6,709,747         7,4           Other income         -	Property tax expense	-	-	-	-	-	_	_	-	_	
Subtotal         3,437,231         3,752,274         4,099,139         3,699,292         4,037,355         4,293,885         4,702,942         5,152,904         5,647,862         6,1           Operating Income         697         660,621         1,449,439         3,966,679         4,396,932         4,985,634         5,506,424         6,079,388         6,709,747         7,4           Other income         -	Miscellaneous expense	46,332	54,151	63,069	73,231	80,554	88,609	97,470	107,217	117,939	129,7
Operating Income         697         660,621         1,449,439         3,966,679         4,396,932         4,985,634         5,506,424         6,079,388         6,709,747         7,4           Other income         -		3,437,231	3.752.274	4.099.139	3.699.292	4.037.355	4.293.885	4.702.942	5.152.904	5.647.862	6,192,
Gain / (loss) on sale of assets         - <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>7,403,2</td></t<>											7,403,2
Gain / (loss) on sale of assets         - <t< td=""><td>Oil</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Oil										
Earnings Before Interest & Taxes 697 660,621 1,449,439 3,966,679 4,396,932 4,985,634 5,506,424 6,079,388 6,709,747 7,4  Interest expense 428,363 381,915 346,796 305,310 256,299 198,392 129,969 49,112 -  Earnings Before Tax (427,667) 278,706 1,102,643 3,661,369 4,140,632 4,787,242 5,376,455 6,030,276 6,709,747 7,4  Tax 190,737 732,274 828,126 957,448 1,075,291 1,206,055 1,341,949 1,4  NET PROFIT/(LOSS) AFTER TAX (427,667) 278,706 911,907 2,929,095 3,312,506 3,829,793 4,301,164 4,824,221 5,367,798 5,9  Balance brought forward (427,667) (148,960) 762,946 3,692,042 7,004,548 10,834,341 15,135,505 19,959,725 25,37  Total profit available for appropriation (427,667) (148,960) 762,946 3,692,042 7,004,548 10,834,341 15,135,505 19,959,725 25,327,523 31,200 10,000 10,		-	-	-	-	-	-	-	-	-	
Interest expense 428,363 381,915 346,796 305,310 256,299 198,392 129,969 49,112 - Earnings Before Tax (427,667) 278,706 1,102,643 3,661,369 4,140,632 4,787,242 5,376,455 6,030,276 6,709,747 7,4  Tax 190,737 732,274 828,126 957,448 1,075,291 1,206,055 1,341,949 1,4  NET PROFIT/(LOSS) AFTER TAX (427,667) 278,706 911,907 2,929,095 3,312,506 3,829,793 4,301,164 4,824,221 5,367,798 5,9  Balance brought forward (427,667) (148,960) 762,946 3,692,042 7,004,548 10,834,341 15,135,505 19,959,725 25,327,523 31,200 10,000 10 10 10 10 10 10 10 10 10 10 10 10		- (07			2.066.670	4 206 022	4.005.624	5.506.424	- 070 200		7.402.6
Earnings Before Tax (427,667) 278,706 1,102,643 3,661,369 4,140,632 4,787,242 5,376,455 6,030,276 6,709,747 7,4  Tax 190,737 732,274 828,126 957,448 1,075,291 1,206,055 1,341,949 1,4  NET PROFIT/(LOSS) AFTER TAX (427,667) 278,706 911,907 2,929,095 3,312,506 3,829,793 4,301,164 4,824,221 5,367,798 5,9  Balance brought forward (427,667) (148,960) 762,946 3,692,042 7,004,548 10,834,341 15,135,505 19,959,725 25,327,523 31,200 (148,960) 762,946 3,692,042 7,004,548 10,834,341 15,135,505 19,959,725 25,327,523 31,200 (148,960) 762,946 3,692,042 7,004,548 10,834,341 15,135,505 19,959,725 25,327,523 31,200 (148,960) 762,946 3,692,042 7,004,548 10,834,341 15,135,505 19,959,725 25,327,523 31,200 (148,960) 762,946 3,692,042 7,004,548 10,834,341 15,135,505 19,959,725 25,327,523 31,200 (148,960) 762,946 3,692,042 7,004,548 10,834,341 15,135,505 19,959,725 25,327,523 31,200 (148,960) 762,946 3,692,042 7,004,548 10,834,341 15,135,505 19,959,725 25,327,523 31,200 (148,960) 762,946 3,692,042 7,004,548 10,834,341 15,135,505 19,959,725 25,327,523 31,200 (148,960) 762,946 3,692,042 7,004,548 10,834,341 15,135,505 19,959,725 25,327,523 31,200 (148,960) 762,946 3,692,042 7,004,548 10,834,341 15,135,505 19,959,725 25,327,523 31,200 (148,960) 762,946 3,692,042 7,004,548 10,834,341 15,135,505 19,959,725 25,327,523 31,200 (148,960) 762,946 3,692,042 7,004,548 10,834,341 15,135,505 19,959,725 25,327,523 31,200 (148,960) 762,946 3,692,042 7,004,548 10,834,341 15,135,505 19,959,725 25,327,523 31,200 (148,960) 762,946 3,692,042 7,004,548 10,834,341 15,135,505 19,959,725 25,327,523 31,200 (148,960) 762,946 3,692,042 7,004,548 10,834,341 15,135,505 19,959,725 25,327,523 31,200 (148,960) 762,946 3,692,042 7,004,548 10,834,341 15,135,505 19,959,725 25,327,523 31,200 (148,960) 762,946 3,692,042 7,004,548 10,834,341 15,135,505 19,959,725 25,327,523 31,200 (148,960) 762,946 3,692,042 7,004,548 10,834,341 15,135,505 19,959,725 25,327,523 31,200 (148,960) 762,946 3,692,042 7,004,548 10,834,341 15,135,505 19,959,725 25,327,523 31,200 (148,960) 762,	Famings Before Interest & Taxes	697	660,621	1,449,439	3,900,079	4,390,932	4,985,034	3,306,424	0,079,388	0,709,747	7,403,2
Tax - 190,737 732,274 828,126 957,448 1,075,291 1,206,055 1,341,949 1,4  NET PROFIT/(LOSS) AFTER TAX (427,667) 278,706 911,907 2,929,095 3,312,506 3,829,793 4,301,164 4,824,221 5,367,798 5,9  Balance brought forward (427,667) (148,960) 762,946 3,692,042 7,004,548 10,834,341 15,135,505 19,959,725 25,327,523 31,2  Total profit available for appropriation (427,667) (148,960) 762,946 3,692,042 7,004,548 10,834,341 15,135,505 19,959,725 25,327,523 31,2  Dividend	Interest expense	428,363	381,915	346,796	305,310	256,299	198,392	129,969	49,112	-	
NET PROFIT/(LOSS) AFTER TAX (427,667) 278,706 911,907 2,929,095 3,312,506 3,829,793 4,301,164 4,824,221 5,367,798 5,9  Balance brought forward (427,667) (148,960) 762,946 3,692,042 7,004,548 10,834,341 15,135,505 19,959,725 25,37  Total profit available for appropriation (427,667) (148,960) 762,946 3,692,042 7,004,548 10,834,341 15,135,505 19,959,725 25,327,523 31,2  Dividend	Earnings Before Tax	(427,667)	278,706	1,102,643	3,661,369	4,140,632	4,787,242	5,376,455	6,030,276	6,709,747	7,403,2
NET PROFIT/(LOSS) AFTER TAX (427,667) 278,706 911,907 2,929,095 3,312,506 3,829,793 4,301,164 4,824,221 5,367,798 5,9  Balance brought forward (427,667) (148,960) 762,946 3,692,042 7,004,548 10,834,341 15,135,505 19,959,725 25,37  Total profit available for appropriation (427,667) (148,960) 762,946 3,692,042 7,004,548 10,834,341 15,135,505 19,959,725 25,327,523 31,2  Dividend	Toy			100.727	722 274	929 126	057 449	1 075 201	1 206 055	1 241 040	1,480,
Balance brought forward (427,667) (148,960) 762,946 3,692,042 7,004,548 10,834,341 15,135,505 19,959,725 25,3 Total profit available for appropriation (427,667) (148,960) 762,946 3,692,042 7,004,548 10,834,341 15,135,505 19,959,725 25,327,523 31,2 Dividend		(427 667)									5,922,
Total profit available for appropriation (427,667) (148,960) 762,946 3,692,042 7,004,548 10,834,341 15,135,505 19,959,725 25,327,523 31,2 Dividend		(.27,007)	2,0,,00	/**,///	2,,2,,0,0	5,512,500	5,025,755	.,501,101	.,02 .,221	2,201,190	2,722,
Total profit available for appropriation (427,667) (148,960) 762,946 3,692,042 7,004,548 10,834,341 15,135,505 19,959,725 25,327,523 31,2 Dividend	Balance brought forward		(427,667)	(148,960)	762,946	3,692,042	7,004,548	10,834,341	15,135,505	19,959,725	25,327,
Dividend	E .	(427,667)		. , ,		, ,		, ,		, ,	31,250,
		-	. , ,		, ,	, ,				, ,	- ,,
		(427,667)	(148,960)	762,946	3,692,042	7,004,548	10,834,341	15,135,505	19,959,725	25,327,523	31,250,

# 12.2 Balance Sheet

Statement Summaries											SMEDA
Balance Sheet											De in esta
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Rs. in actua
Assets											
Current assets											
Cash & Bank	250,000	-	-	406,103	2,925,298	5,745,017	8,863,111	12,308,468	16,109,012	20,880,349	31,962,
Accounts receivable		761,622	825,884	963,452	1,120,274	1,263,981	1,390,379	1,529,417	1,682,358	1,850,594	2,035,
Finished goods inventory	-	-	-	-	-	-	-	-	-	-	
Equipment spare part inventory	8,333	9,762	11,395	13,261	14,621	16,119	17,771	19,593	21,601	23,816	
Raw material inventory	1,507,824	1,741,537	2,011,475	2,323,254	2,683,358	3,099,278	3,579,666	4,134,515	4,775,364	5,515,546	
Total Current Assets	1,766,157	2,512,920	2,848,754	3,706,069	6,743,551	10,124,395	13,850,928	17,991,993	22,588,336	28,270,304	33,998,
E. I.											
Fixed assets	257.724	257 724	257.724	257.724	257.724	257.724	257 724	257.724	257.724	257 724	257
Land	357,724	357,724	357,724	357,724	357,724	357,724	357,724	357,724	357,724	357,724	357,
Building/Infrastructure	1,349,200	1,214,280	1,079,360	944,440	809,520	674,600	539,680	404,760	269,840	134,920	
Machinery & equipment	431,000	387,900	344,800	301,700	258,600	215,500	172,400	129,300	86,200	43,100	
Furniture & fixtures	68,000	61,200	54,400	47,600	40,800	34,000	27,200	20,400	13,600	6,800	
Office vehicles	-	-	-	-	-	-	-	-	-	-	
Office equipment	185,000	166,500	148,000	129,500	111,000	92,500	74,000	55,500	37,000	18,500	
Total Fixed Assets	2,390,924	2,187,604	1,984,284	1,780,964	1,577,644	1,374,324	1,171,004	967,684	764,364	561,044	357,7
Intangible assets											
0	576 606	461.257	246.019	220 (79	115 220						
Pre-operation costs	576,696	461,357	346,018	230,678	115,339	-	-	-	-	-	
Legal, licensing, & training costs	-	461.257	246.010		115 220	-	-	-	-	-	
Total Intangible Assets TOTAL ASSETS	576,696	461,357	346,018	230,678	115,339	- 11 400 720	15 021 022	- 10.050.677	- 22 252 701	- 20.021.240	24.255
IOTAL ASSETS	4,733,778	5,161,882	5,179,056	5,717,712	8,436,535	11,498,720	15,021,932	18,959,677	23,352,701	28,831,349	34,355,
Liabilities & Shareholders' Equity											
Current liabilities											
Accounts payable	_	517,789	577,527	644,459	719,432	803,367	897,569	1,003,356	1,122,222	1,255,865	880,
Total Current Liabilities	-	855,770	788,707	644,459	719,432	803.367	897,569	1,003,356	1,122,222	1,255,865	880,
		,,,,,	, , , , , , ,	211,122	,,,,,,,			-,000,000	-,,	-,,	
Other liabilities											
Long term debt	2,366,889	2,366,889	2,172,421	1,942,833	1,671,760	1,351,676	973.685	527,271	_	_	
Total Long Term Liabilities	2,366,889	2,366,889	2,172,421	1,943,417	1,658,172	1,323,916	923,133	453,927	(96,136)	(118,928)	(141,
Shareholders' equity											
Paid-up capital	2,366,889	2,366,889	2,366,889	2,366,889	2,366,889	2,366,889	2,366,889	2,366,889	2,366,889	2,366,889	2,366,
Retained earnings		(427,667)	(148,960)	762,946	3,692,042	7,004,548	10,834,341	15,135,505	19,959,725	25,327,523	31,250,
Total Equity	2,366,889	1,939,222	2,217,929	3,129,835	6,058,931	9,371,436	13,201,230	17,502,394	22,326,614	27,694,412	33,617,
TOTAL CAPITAL AND LIABILITI	4,733,778	5,161,882	5,179,056	5,717,712	8,436,535	11,498,720	15,021,932	18,959,677	23,352,701	28,831,349	34,355,

#### 12.3 Cash Flow Statement

Statement Summaries Cash Flow Statement											SMEDA
Cash Flow Statement											Rs. in actua
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 1
Operating activities		(427,667)	278,706	011 007	2 020 005	2 212 506	2 920 702	4 201 164	4 924 221	5 267 700	5 022 50
Net profit Add: depreciation expense	-	(427,667)	,	911,907	2,929,095	3,312,506	3,829,793	4,301,164	4,824,221	5,367,798	5,922,59
	-	203,320	203,320	203,320	203,320	203,320	203,320	203,320	203,320	203,320	203,32
amortization expense	-	115,339	115,339	115,339	115,339	115,339	-	-	-	-	-
Deferred income tax	-	-	-	584	(14,172)	(14,172)	(22,792)	(22,792)	(22,792)	(22,792)	(22,79
Accounts receivable	-	(253,874)	(21,421)	(45,856)	(52,274)	(47,902)	(42,133)	(46,346)	(50,981)	(56,079)	(61,68
Finished good inventory											
Equipment inventory	(8,333)	(1,428)	(1,634)	(1,866)	(1,359)	(1,499)	(1,652)	(1,822)	(2,008)	(2,214)	23,81
Raw material inventory	(1,507,824)	(233,713)	(269,938)	(311,779)	(360,104)	(415,920)	(480,388)	(554,848)	(640,850)	(740,181)	5,515,54
Accounts payable	-	683,482	78,854	88,351	98,963	110,794	124,347	139,639	156,904	176,408	(495,54
Other liabilities	-	-	-	-	-	-	-	-	-	-	-
Cash provided by operations	(1,516,157)	85,459	383,227	960,000	2,918,808	3,262,467	3,610,495	4,018,315	4,467,814	4,926,259	11,085,25
Financing activities											
Change in long term debt	2,366,889	-	(194,468)	(229,587)	(271,073)	(320,084)	(377,991)	(446,414)	(527,271)	-	-
Issuance of shares	2,366,889	-	-	-	-	-	-	-	-	-	-
Purchase of (treasury) shares	-	-	-	-	-	-	-	-	-	-	-
Cash provided by / (used for) financ	4,733,778	-	(194,468)	(229,587)	(271,073)	(320,084)	(377,991)	(446,414)	(527,271)	-	-
Investing activities											
Capital expenditure	(2,967,620)	-	-	-	-	-	-	-	-	-	-
Acquisitions	-	-	-	-	-	-	-	-	-	-	-
Cash (used for) / provided by invest	(2,967,620)	-	-	-	-	-	-	-	-	-	-
NET CASH	250,000	85,459	188,759	730,413	2,647,735	2,942,382	3,232,504	3,571,901	3,940,542	4,926,259	11,085,25
	•	•	-	· · · · · · · · · · · · · · · · · · ·							
Cash balance brought forward		250,000	335,459	524,218	1,254,631	3,902,366	6,844,748	10,077,253	13,649,153	17,589,696	22,515,95
Cash available for appropriation	250,000	335,459	524,218	1,254,631	3,902,366	6,844,748	10,077,253	13,649,153	17,589,696	22,515,955	33,601,2
Dividend	,	-	-	-	-	-	-	-	-	-	,,
Cash carried forward	250,000	335,459	524,218	1,254,631	3,902,366	6,844,748	10,077,253	13,649,153	17,589,696	22,515,955	33,601,2
Cush curricu for ward	230,000	333,737	327,210	1,207,001	5,702,500	0,011,710	10,077,233	13,077,133	17,505,070	<u> </u>	33,001,2

# **13 KEY ASSUMPTIONS**

# 13.1 Operating Assumptions

Description	Details
Days operational per month	30
Days operational per year	360

# 13.2 Production Assumptions

Description	Details
Maximum Capacity Utilization	95%
Total Production of Sheep per Batch	180
Total Production of the unit per year (100%)	540

# 13.3 Economy Related Assumptions

Description	Details
Electricity price growth rate	10%
Wage growth rate	10%
Sales price growth rate	10%

#### 13.4 Cash Flow Assumptions

Description	Details
Accounts Receivable cycle (in days)	30
Accounts payable cycle (in days)	30



# Small and Medium Enterprises Development Authority HEAD OFFICE

4th Floor, Building No. 3, Aiwan-e-Iqbal Complex, Egerton Road, Lahore Tel: (92 42) 111 111 456, Fax: (92 42) 36304926-7

www.smeda.org.pk, helpdesk@smeda.org.pk

REGIONAL OFFICE	REGIONAL OFFICE	REGIONAL OFFICE	REGIONAL OFFICE
PUNJAB	SINDH	KPK	BALOCHISTAN
3 <sup>rd</sup> Floor, Building No. 3,	5 <sup>TH</sup> Floor, Bahria	Ground Floor State Life Building The Mall, Peshawar. Tel: (091) 9213046-47 Fax: (091) 286908 helpdesk-pew@smeda.org.pk	Bungalow No. 15-A
Aiwan-e-Iqbal Complex,	Complex II, M.T. Khan Road,		Chaman Housing Scheme
Egerton Road Lahore,	Karachi.		Airport Road, Quetta.
Tel: (042) 111-111-456	Tel: (021) 111-111-456		Tel: (081) 831623, 831702
Fax: (042) 36304926-7	Fax: (021) 5610572		Fax: (081) 831922
helpdesk.punjab@smeda.org.pk	helpdesk-khi@smeda.org.pk		helpdesk-qta@smeda.org.pk