



Pre-feasibility Study

INTENSIVE GOAT AND SHEEP BREEDING FARM

September 2023

“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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DISCLAIMER

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1. EXECUTIVE SUMMARY

The proposed project aims to establish an Intensive Goat and Sheep Breeding Farm in Balochistan, near major cities, to boost economic growth and create employment opportunities. The market for goat and sheep farming is crucial in the region's agricultural landscape, with high demand for meat and wool products. Factors such as climate, access to grazing lands, and local consumer preferences influence market dynamics. Balochistan's goat and sheep farmers face challenges like fluctuating livestock prices and limited access to modern farming techniques. However, the growing demand for these products presents opportunities for expansion and improved market integration, potentially enhancing the economic prospects for the pastoral communities.

The demand for goats and sheep in Balochistan, has remained consistently robust due to the region's predominantly agrarian and pastoral economy. These animals play a vital role in the livelihoods of Balochistan's residents, serving as a primary source of meat, milk, and hides. The local demand for goats and sheep is driven by cultural and religious traditions, including frequent festivities and celebrations that involve the consumption of goat and sheep meat. Additionally, the arid and semi-arid landscape of Balochistan is well-suited for small ruminant farming, further contributing to the sustained demand. As a result, the goat and sheep sector continue to be significant and resilient components of Balochistan's agricultural and economic landscape, offering both sustenance and income opportunities for its residents.

The proposed farm will operate for 360 days a year. Initially, it will run at 65% of its installed capacity and gradually increase this utilization by 5% annually until reaching a maximum capacity utilization of 95%. The project will be established using 100% equity financing. The total investment required for the project is Rs. 11.94 million, with a capital cost of 11.73 million and working capital cost of approximately 0.21 million. This investment offers an impressive Internal Rate of Return (IRR) of 35% and a Net Present Value (NPV) of 4.33 million. The entire project investment is expected to be recovered in 3.67 years.

Alternatively, the proposed project may also be established using leveraged financing. With 50% financing at a cost of 28.3%, the proposed business provides a Net Present Value (NPV) of PKR 1.769 million, an Internal Rate of Return (IRR) of 31%, and a Payback period of 3.93 years.

2. 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.

3. 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 **Intensive Goat and Sheep 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.

4. BRIEF DESCRIPTION OF PROJECT & PRODUCT

The Proposed project aim to sell up to 100,000 animal yearly and establish a breeding and rearing farm specifically focused on Goats and Sheep. It will be strategically located in areas conducive to Goat and Sheep breeding, where an ample supply of fresh water is readily available. This farm aims to eliminate the risk of disease transmission associated with acquiring animals from traditional animal markets (Mandi) by ensuring the breeding of disease-free animals.

A distinctive aspect of this project is its plan to create a completely new breed. This will be achieved by crossbreeding female local goats with male goats of different breeds, such as Burburi and Tedi, among others. Following two breeding cycles, the project intends to develop its own breed that is well-suited to the local environment.

The increasing gap between demand and supply in the Goat and Sheep farming sector has turned it into a highly profitable venture. Therefore, it is prudent to promote the transition of livestock owners with fixed land holdings into intensive farming, notwithstanding the initial higher investment requirements. This shift is prompted by the current favorable meat prices across the country and the potential for expanding exports, which can lead to substantial profitability. By embracing full-fledged intensive farming practices, which include acquiring quality breeds, implementing stall feeding or supplementary feeding, adopting cost-effective feeding techniques, and enhancing genetic resources, livestock farming can become a financially viable venture with positive spill-over effects on the farming community. Furthermore, increased production of animal protein would be advantageous for the entire nation.

Selecting and developing suitable breeds tailored to the local environment is of paramount importance, and is ensuring proper nutrition. While people may have knowledge of the best breeds, traditional farming practices often present limitations. Instead of consistently pursuing crossbreeding, it is essential to give more attention to utilizing animals that yield the best breeding outcomes. Nutrition stands out as a significant constraint in Balochistan's livestock industry, resulting in animals reaching the market in suboptimal physical condition and with lower body weights. Ensuring the availability of year-round feed with sufficient protein content is crucial for boosting livestock productivity, rather than solely focusing on expanding herd size. In this context, the adoption of non-conventional feed preparation and feeding methods, such as treating wheat/rice straws and other crop residues with urea or ammonia, using molasses blocks, creating silage, developing low-cost concentrate mixtures, implementing feedlots, practicing semi-intensive farming, and employing ewe flushing techniques, becomes imperative. These techniques have already been successfully tested and demonstrated to farmers through various projects. In context of sales Goat will be sold after 12 months of its birth and Sheep could be sold after 7 months of its birth.

In light of the information provided above, this pre-feasibility study has been prepared as a guiding resource for prospective entrepreneurs interested in

establishing a Goat and Sheep farm consisting of 336 Goats and Sheep. The farm will employ stall feeding practices and comprehensive animal Breeding coverage.

Below mentioned table describes 10 year balance stock will be available for sale after breeding of Goat and Sheep.

	Year	1-2			3-4			5-6			7-8			9-10		
		8	16	24	32	40	48	56	64	72	80	88	96	104	112	120
Total Adult Female	200	200	180	162	236	294	316	350	365	365	365	365	365	365	365	365
Extra Females sold at Breeding age		0	0	0	70	24	90	80	95	95	95	95	95	95	95	95
Adult Females retained at farm	200	200	180	162	236	270	270	270	270	270	270	270	270	270	270	270
Adult Mortality	2%	4	4	3	5	5	5	5	5	5	5	5	5	5	5	5
Adult Females Culled	8%	16	14	13	19	22	22	22	22	22	22	22	22	22	22	22
Female Population after mortality and culling		180	162	146	212	243	243	243	243	243	243	243	243	243	243	243
Adult Male Required	3%	6.00	5	5	7	8	8	8	8	8	8	8	8	8	8	8
Progeny	95%	190	171	154	224	257	257	257	257	257	257	257	257	257	257	257
Progeny Mortality	5%	10	9	8	11	13	13	13	13	13	13	13	13	13	13	13
Progeny after Mortality		181	162	146	213	244	244	244	244	244	244	244	244	244	244	244
Female Progeny	50%	90	81	73	107	122	122	122	122	122	122	122	122	122	122	122
Male Progeny	50%	90	81	73	107	122	122	122	122	122	122	122	122	122	122	122
3-10 Month old Female		0	90	81	73	107	122	122	122	122	122	122	122	122	122	122
11-18 Month old Female		0	0	90	81	73	107	122	122	122	122	122	122	122	122	122
Young Male Culled		0	90	81	73	107	122	122	122	122	122	122	122	122	122	122
Total Heads (Adults and Progeny at farm)		367	420	468	587	674	723	738	738	738	738	738	738	738	738	738

6 PROCESS FLOW.

The dynamics of the goat and sheep market Price fluctuations throughout the year, primarily driven by Eid-ul Azha celebrations and the winter season. For farmers who intend to target Eid for selling young livestock, it is advisable to acquire female goats suitable for breeding at least 12 to 14 months before the upcoming Eid. The ideal timing for impregnation typically falls within the months of March, April, May, and October. This schedule allows for a five-month gestation period, ensuring that the offspring are born with adequate nourishment and in good health.

The peak season, which precedes Eid-ul Azha, witnesses a significant surge in demand for goats and sheeps due to the widespread practice of Qurbani (sacrifice). During this time, numerous middlemen from various regions, including Punjab, Balochistan, Sindh, and others, converge on the markets to purchase livestock and transport them to their respective areas. Another period of heightened supply and demand occurs in November and December when goat and sheep reach maturity, gain weight, and no longer rely on their mothers. Producers bring them to the market for sale during this period. Additionally, nomadic and other livestock breeders prefer to sell their surplus stock during this time, as breeding becomes more challenging in the winter months.

Conversely, the off-peak season takes place in June and July, characterized by reduced demand for livestock. This decline in demand is attributed to the fact that February, March, and April are the reproductive months for goats and sheeps, with newly born Goat and Sheeps dependent on their mothers during this period. Moreover, meat consumption tends to decrease during the summer months. However, it's worth noting that goats and sheep are often utilized for milking purposes during this season.

In summary, comprehending the seasonal patterns of supply and demand is crucial for successful goat farming. Peak seasons occur before Eid-ul Azha and

during November and December, while an off-peak season prevails in June and July.

7 CRITICAL FACTORS

- Livestock represents one of Balochistan's key assets and is deeply ingrained in its rural fabric.
- The province has a rich tradition of practicing traditional farming methods spanning centuries.
- There exists significant demand for livestock, particularly from Middle Eastern countries.
- The northern and central regions of Balochistan boast an ideal climate for raising our native goat and sheep breeds.
- Opting for fully intensive farming proves to be cost-effective and yields superior outcomes.
- A fully intensive breeding farm reduces the likelihood of diseases in animals since only the parent breed is procured once at the project's outset.
- A skilled labor force for farming is readily available.
- Abundant local sources of raw materials and our own green fodder, often obtainable at approximately one-third of the market price.

8 PRODUCTION CAPACITY:

The farm's initial production phase will commence with 200 adult female and 3% of adult male animals, with a planned to a total of 206 adult animals. At this capacity, the farm will comprise approximately of 367 animals, including both young male and female progeny and female stock of breeding age. The choice to limit the number of adult breeding females arises from the acknowledgment that managing an excessively large herd would pose logistical difficulties.

9. RE-PRODUCTION PROCESS.

In the initial production phase, the farm will start with 110 adult female animals, which will consist of a combination of both goats and sheep. These females will be bred with a suitable number of adult males for reproduction. As the farm expands, the goal is to have a total of 146 adult female animals.

Here's an outline of the breeding process, taking into account the numbers and a balanced ratio of male to female goats and sheep:

1. Initial Phase (200 adult female animals):

- Female Goats: 100
- Female Sheep: 100

To ensure effective breeding, Farm Owner may consider having approximately 5-10% of adult male animals, depending on the breeding method (natural or artificial insemination). This would translate to 5-11 male animals.

10. POTENTIAL TARGET CUSTOMERS / MARKETS

The target customers for a goat and sheep farm in Balochistan can include:

- **Local Market:** Farmers and individuals residing in Balochistan who have a demand for goat and sheep meat, especially during religious festivals such as Eid-ul Azha.
- **Middlemen and Traders:** Middlemen and traders who purchase livestock from farms to transport and sell them in other regions or markets across the country.
- **Butchers and Meat Shops:** Local butchers and meat shops in Balochistan who require a regular supply of goat and sheep meat to meet the demands of their customers.
- **Restaurants and Hotels:** Restaurants and hotels catering to the local population and tourists, which may include dishes featuring goat and sheep meat on their menus.
- **Export Market:** There is a potential export market for goat and sheep meat, especially in neighboring countries such as Iran and Afghanistan, as well as international markets.
- **Livestock Breeders:** Other livestock breeders and farmers who may be interested in purchasing quality breeding stock or animals for crossbreeding purposes.

It's important for the goat and sheep farm in Balochistan to identify and target these specific customer segments to effectively market and sell their products.

11. PROJECT COST SUMMARY

11.1 Project Economics

All the figures in this financial model have been calculated for estimated sales of **Rs. 1,236,250/-** in 1st year. The capacity utilization during year one is worked out at **65%** 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)	35%
Payback Period (yrs.)	3.67

Net Present Value (Rs.)	4,956,479

a. Financial Feasibility Analysis with 50% Debt

The financial feasibility analysis provides the information regarding projected IRR, NPV and payback period of the study on the basis of Debt: Equity Model (50:50), which is shown in Table 1.1 .

Table 2.1: Project Economics

Description	Details
Internal Rate of Return (IRR)	31%
Payback Period (yrs.)	3.93
Net Present Value (Rs.)	1,769,514
Interest rate	Kibor+3%

11.2 Project Cost

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

Table 3: Project Cost

Capital Investment	Rs. in actuals
Land	4,579,338
Building/Infrastructure	4,211,500
Machinery & equipment	1,500,000
Livestock	1,442,000
Pre-operating costs	500,000
Total Capital Costs	11,732,838

Working Capital	Rs. in actuals
Equipment spare part inventory	-
Raw material inventory	8,453
Cash	200,000
Total Working Capital	208,453

Total Investment	11,941,291
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Initial Financing	Rs. in actuals
Debt	-
Equity	11,941,291
Lease	-
Export re-finance facility	-

a. Project Cost

Following fixed and working capital requirements have been identified for operations of the proposed business with 50:50 Equity and debt Model.

Table 4.1: Project Cost

Capital Investment	Rs. in actuals
Land	4,579,338
Building/Infrastructure	4,211,500
Machinery & equipment	1,500,000
Livestock	1,442,000
Pre-operating costs	14,300
Total Capital Costs	11,747,138

Working Capital	Rs. in actuals
Equipment spare part inventory	-
Raw material inventory	8,453
Cash	200,000
Total Working Capital	208,453

Total Investment	11,955,591
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Initial Financing	Rs. in actuals
Debt	5,991,040
Equity	5,964,550
Lease	-
Export re-finance facility	-

11.3 Space Requirement

The space requirement for the proposed Unit is estimated considering various facilities including management office, Machinery processing area, warehouse and open space, etc. Details of space requirement and cost related to land & building is given below;

Table 5: Space Requirement (all table must be in one format & color)

Area of Land and Building Requirement Sq. Ft. Description	Estimated Area Price (Sq. Ft.)	Unit Cost (Rs.)	Total Cost (Rs.)
Store Room 10X12	1,000	180	180,000
New Building to be constructed	3,665	1,100	4,031,500
Total	13000		4,211,500

11.4 Machinery & Equipment Requirement

Plant, machinery and equipment for the proposed project are stated below.
The Total Machinery and Equipment cost of Proposed Pre-Feasibility is **1,500,000**

11.5 Live Stock Requirement.

Details of the Live Stock required for the project are given below.

Table 6: Live stock

Description	Quantity	Unit Cost (Rs.)	Total Cost (Rs.)
Livestock	200	7,210	1,442,000
Total			1,442,000/-

11.6 Human Resource Requirement

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

Table 7: Human Resource Requirement

No of Labors	Salary/Person/Month (Rs.)	No of Months	Total (Rs.)
Farm Manager	45,000	12	540,000
Farm Labor	35,000	12	840,000
Total Annual cost			1,380,000

11.7 Utilities and other costs

An essential cost to be borne by the project is the cost of utilities. The administrative expenses are Rs. 30,000 per month which includes the utilities. Furthermore, promotional expense being essential for marketing of Goat and Sheep Farming is estimated as 1% of Revenue that for year 1.

11.8 Revenue Generation

Based on the capacity utilization of **65%**, sales revenue during the first year of operations is estimated as under;

Table 8: Revenue Generation first year

Description	Price	Number of Animal Sold	Total
Extra Females sold @ Breeding age	30,000	0	0
Adult Females Culled after giving birth	20,000	16	320,000
Young Male Culled	30,000	0	0
Manure + Milk by products	1500	367	549,750
Wool 1.5 kg / sheep	1000	367	366,500
Total Revenue 10 Mo. Basis			1,465,500

12. 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

13. ANNEXURES

a. Income Statement

Statement Summaries										SMEDA
Income Statement										
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
	Rs. in actuals									
Revenue	1,236,250	7,912,550	6,137,978	14,618,565	8,318,777	17,556,750	8,778,375	17,556,750	8,778,375	17,556,750
Cost of goods sold	202,865	284,508	370,946	437,625	464,921	464,921	464,921	464,921	464,921	464,921
Gross Profit	1,033,385	7,628,042	5,767,031	14,180,940	7,853,856	17,091,829	8,313,454	17,091,829	8,313,454	17,091,829
<i>General administration & selling expenses</i>										
Utilities expense	300,000	330,000	363,000	399,300	439,230	483,153	531,468	584,615	643,077	707,384
Depreciation expense	360,575	360,575	360,575	548,347	548,347	648,377	650,377	650,377	650,377	650,377
Miscellaneous expense	600,000	630,000	661,500	694,575	729,304	765,769	804,057	844,260	886,473	930,797
Subtotal	2,448,575	2,508,575	2,573,075	2,830,222	2,904,881	3,085,299	3,173,903	3,267,252	3,367,927	3,476,558
Operating Income	(1,415,190)	5,119,467	3,193,956	11,350,718	4,948,976	14,006,530	5,139,552	13,824,577	4,945,527	13,615,271
Other income	4,000	93,722	187,646	434,586	766,613	1,167,938	1,632,394	2,112,542	2,608,325	3,120,661
Earnings Before Interest & Taxes	(1,411,190)	5,213,189	3,381,602	11,785,304	5,715,589	15,174,468	6,771,946	15,937,119	7,553,852	16,735,932
Interest expense	26,631	26,631	-	-	-	-	-	-	-	-
Earnings Before Tax	(1,437,821)	5,186,558	3,381,602	11,785,304	5,715,589	15,174,468	6,771,946	15,937,119	7,553,852	16,735,932
Tax	-	1,180,295	579,480	3,489,856	1,365,455	4,676,063	1,735,180	4,942,991	2,008,848	5,222,576
NET PROFIT/(LOSS) AFTER TAX	(1,437,821)	4,006,263	2,802,122	8,295,448	4,350,134	10,498,405	5,036,766	10,994,128	5,545,005	11,513,357
Balance brought forward		(1,437,821)	2,568,443	5,370,564	13,666,012	18,016,146	28,514,551	33,551,316	44,545,444	50,090,449
Total profit available for appropriation	(1,437,821)	2,568,443	5,370,564	13,666,012	18,016,146	28,514,551	33,551,316	44,545,444	50,090,449	61,603,806
Dividend	-	-	-	-	-	-	-	-	-	-
Balance carried forward	(1,437,821)	2,568,443	5,370,564	13,666,012	18,016,146	28,514,551	33,551,316	44,545,444	50,090,449	61,603,806

b. 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	200,000	-	4,686,084	4,696,196	17,033,089	21,297,584	37,099,294	44,520,426	61,106,671	69,309,587	86,723,478
Raw material inventory	8,453	12,447	17,040	21,109	23,546	24,724	25,960	27,258	28,621	30,052	-
Total Current Assets	208,453	12,447	4,703,125	4,717,304	17,056,635	21,322,308	37,125,254	44,547,684	61,135,292	69,339,639	86,723,478
<i>Fixed assets</i>											
Land	4,579,338	4,579,338	4,579,338	4,579,338	4,579,338	4,579,338	4,579,338	4,579,338	4,579,338	4,579,338	4,579,338
Building/Infrastructure	4,211,500	4,000,925	3,790,350	7,295,211	6,898,865	8,503,121	8,006,744	7,510,367	7,013,990	6,517,613	6,021,236
Machinery & equipment	1,500,000	1,350,000	1,200,000	1,070,000	918,000	766,000	634,000	480,000	326,000	172,000	18,000
C Livestock	1,442,000	1,465,500	1,539,030	2,046,434	2,419,815	2,465,775	2,465,775	2,465,775	2,465,775	2,465,775	2,465,775
Total Fixed Assets	11,732,838	11,395,763	11,108,718	14,990,983	14,816,018	16,314,234	15,685,857	15,035,480	14,385,103	13,734,726	13,084,349
<i>Intangible assets</i>											
Total Intangible Assets	-	-	-	-	-	-	-	-	-	-	-
TOTAL ASSETS	11,941,291	11,408,210	15,811,843	19,708,287	31,872,653	37,636,542	52,811,112	59,583,164	75,520,395	83,074,365	99,807,828
Liabilities & Shareholders' Equity											
<i>Current liabilities</i>											
Accounts payable	-	17,697	24,785	32,224	37,904	40,245	40,346	40,453	40,565	40,683	38,213
Short term debt	-	863,543	-	-	-	-	-	-	-	-	-
Total Current Liabilities	-	881,240	24,785	32,224	37,904	40,245	40,346	40,453	40,565	40,683	38,213
<i>Other liabilities</i>											
Total Long Term Liabilities	-	-	1,180,295	1,759,775	5,249,630	6,615,086	11,291,149	13,026,329	17,969,320	19,978,168	25,200,744
<i>Shareholders' equity</i>											
Paid-up capital	11,941,291	11,964,791	12,038,321	12,545,725	12,919,106	12,965,066	12,965,066	12,965,066	12,965,066	12,965,066	12,965,066
Retained earnings	-	(1,437,821)	2,568,443	5,370,564	13,666,012	18,016,146	28,514,551	33,551,316	44,545,444	50,090,449	61,603,806
Total Equity	11,941,291	10,526,970	14,606,763	17,916,289	26,585,118	30,981,212	41,479,616	46,516,382	57,510,510	63,055,515	74,568,871
TOTAL CAPITAL AND LIABILITIES	11,941,291	11,408,210	15,811,843	19,708,287	31,872,653	37,636,542	52,811,112	59,583,164	75,520,395	83,074,365	99,807,828
Note: Total assets value will differ from project cost due to first installment of leases paid at the start of year 0											

c. Cash Flow Statement

Statement Summaries Cash Flow Statement											SMEDA
											Rs. in actuals
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
<i>Operating activities</i>											
Net profit	-	(1,437,821)	4,006,263	2,802,122	8,295,448	4,350,134	10,498,405	5,036,766	10,994,128	5,545,005	11,513,357
Add: depreciation expense	-	360,575	360,575	360,575	548,347	548,347	648,377	650,377	650,377	650,377	650,377
Raw material inventory	(8,453)	(3,995)	(4,593)	(4,068)	(2,438)	(1,177)	(1,236)	(1,298)	(1,363)	(1,431)	30,052
Accounts payable	-	17,697	7,088	7,439	5,681	2,340	102	107	112	118	(2,470)
Other liabilities	-	-	-	-	-	-	-	-	-	-	-
Cash provided by operations	(8,453)	(1,063,543)	5,549,628	3,745,548	12,336,893	6,265,099	15,821,710	7,421,132	16,586,245	8,202,916	17,413,891
<i>Financing activities</i>											
Change in short term debt	-	863,543	(863,543)	-	-	-	-	-	-	-	-
Issuance of shares	11,941,291	-	-	-	-	-	-	-	-	-	-
Cash provided by / (used for) financing act	11,941,291	863,543	(863,543)	-	-	-	-	-	-	-	-
<i>Investing activities</i>											
Capital expenditure	(11,732,838)	-	-	(3,735,436)	-	(2,000,604)	(20,000)	-	-	-	-
Cash (used for) / provided by investing acti	(11,732,838)	-	-	(3,735,436)	-	(2,000,604)	(20,000)	-	-	-	-
NET CASH	200,000	(200,000)	4,686,084	10,111	12,336,893	4,264,495	15,801,710	7,421,132	16,586,245	8,202,916	17,413,891
Cash balance brought forward		200,000	-	4,686,084	4,696,196	17,033,089	21,297,584	37,099,294	44,520,426	61,106,671	69,309,587
Cash available for appropriation	200,000	-	4,686,084	4,696,196	17,033,089	21,297,584	37,099,294	44,520,426	61,106,671	69,309,587	86,723,478
Dividend	-	-	-	-	-	-	-	-	-	-	-
Cash carried forward	200,000	-	4,686,084	4,696,196	17,033,089	21,297,584	37,099,294	44,520,426	61,106,671	69,309,587	86,723,478

14. KEY ASSUMPTIONS

a. Operating Cost Assumptions

Description	Details
Operational Days/ year	360
Hours operational/ days	8
Shift Length (Hours)	8

b. Production Cost Assumptions

Expenses for feed	2,125
Adult	1,275
New born	
Balance Adult Female	91,800
Adult Male	3,060
New born female	0
Young male culled	0
3-10 Month old Female	0
11-18 Month old Female	0
Culled Females	6,120
Medicine	18,325
total Costs	119,305
Costs on 12 Mo. Basis	202,865