

Business Plan

Sheep Breeding and Fattening Farm

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Executive Summary

This business plan is prepared for a particular client interested in sheep farming. The client's needs were assessed and, accordingly, a sheep breeding and fattening farm business is proposed. The farm will start with procurement of 104 animals (100 ewes and 4 rams) of Lohi sheep breed. Three calving cycles are expected in every two years and it is proposed that farm's strength should be capped at 325 with a stable breeding herd of 100 ewes. The farm-born lambs fattened till one year of age will be the major farm output. No animals will be available for sale in the 1st years of operations. In the 2nd year, about 113 animals will be sold. The farm will reach its output potential in 3rd year when farm's annual output will stabilize to 169 animals annually. The premium markets of Lahore and nearby cities will be targeted by offering healthy and traceable meat.

A comprehensive operational plan is prepared addressing every significant aspect of the business (i.e. plans for personnel; feeding; health; herd management; production; and marketing). And analysis of various operational risks is also offered. Similarly, a comprehensive financial plan which offers insight about expected profitability, cash flows, and business's net worth over five year period is prepared and discussed. The expected returns and their underlying factors are also analyzed.

An equity investment of 5,979,150 will be needed in the first year to finance the herd (Rs. 2,202,000), breeding-shed infrastructure (Rs. 1,943,400), and working capital (Rs.1,833,750) needs of the business. An additional investment of 3,919,810 will be needed in 2nd year to finance the fattening-shed infrastructure (Rs. 1,244,000) and 2nd year's working capital (Rs. 2,675,810). The peak investment level will be in the 2nd year at Rs. 9,838,960. However, by the end of 2nd year the farm will have surplus cash flows to allow drawing of 2 million rupees. From 3rd to 5th year, the farm will have enough cash flows to allow drawings of 2.5 million, 2.75 million, and 3 million rupees respectively. The payback period is 4.46 years. And the proposed business offers an internal rate of return of 25.5% and has a net present value of 5,692,801 on five year horizon.

The proposed business offers handsome and consistent returns based on current opportunity and conditions/factors. However, significant change in circumstances or substantial deviations from proposed course of actions can lead to significantly different outcomes and the estimates will need to be revised accordingly.

1. Analyzing Business Opportunity

There is huge and ever increasing demand for meat in Pakistan. A population of over 220 million people with increasing disposable income offers a promising outlook. The increasing per capita income and constrained supply of meat has led to consistent rise in mutton prices in Pakistan.

The opportunity for meat production is likely to persist for foreseeable future as the per capita meat supply in Pakistan is much lower than most regional and developed countries.

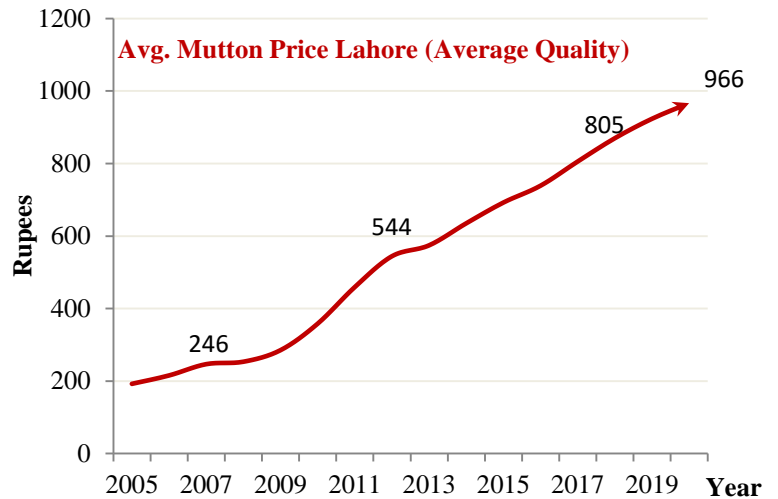
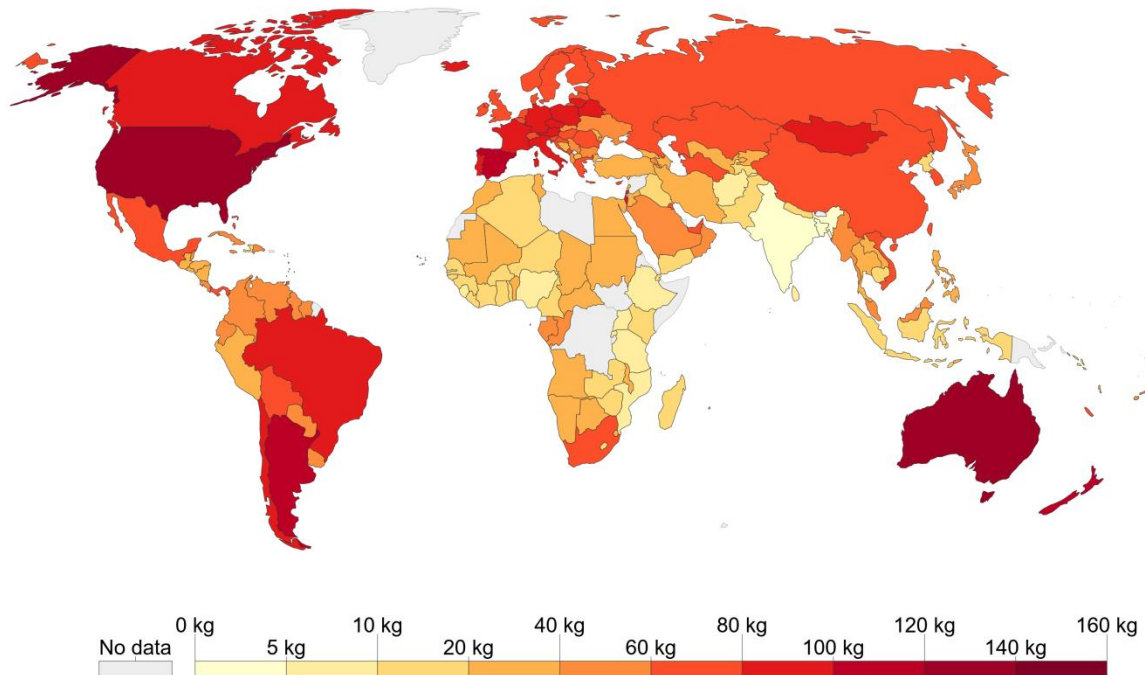


Figure 1. Avg. Mutton Price Lahore (Average Quality)
Data source: Pakistan bureau of statistics

Meat supply per person, 2017

Average total meat supply per person measured in kilograms per year.



Source: UN Food and Agriculture Organization (FAO)

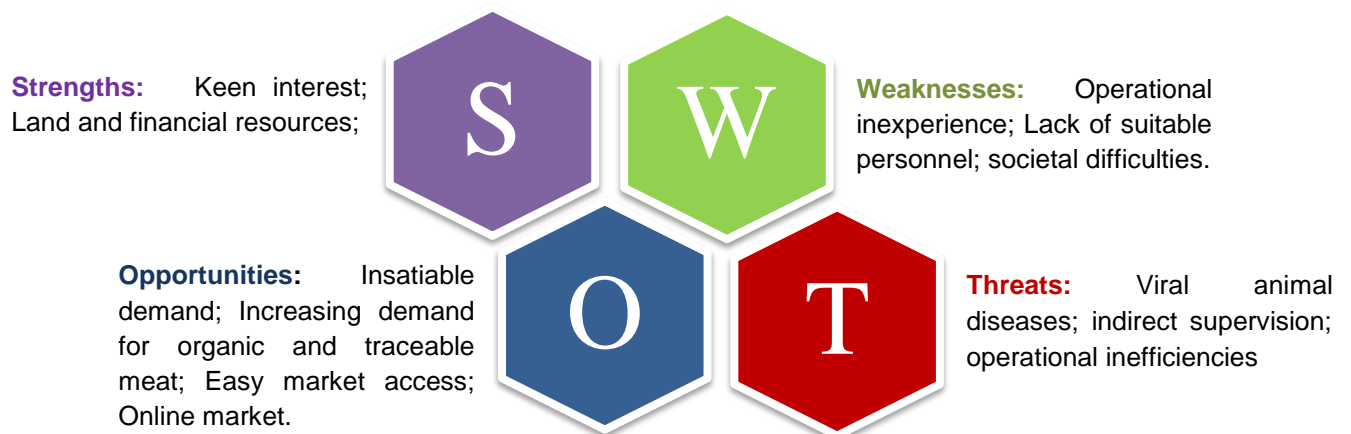
OurWorldInData.org/meat-production • CC BY

Note: Data excludes fish and other seafood sources. figures do not correct for waste at the household/consumption level so may not directly reflect the quantity of food finally consumed by a given individual.

Figure 2 Per-capita meat consumption across world

1.1 Client Analysis

The client is an active entrepreneur in food value chain and is resident of Lahore. The client has a keen interest in starting an animal farming business and has land (12.2 acres, near Muridkay) usable for this purpose. Moreover, the client has adequate financial resources to finance the establishment of a medium level semi-intensive farm. However, the client herself lack prior animal farming experience and will be needing a lot of technical and logistic support and will be dependent on others/supervisor to establish and run the proposed business venture. Apart from land, the client does not possess any farm related infrastructure or human resources. The whole infrastructure will need to be set up anew and suitable personnel will have to be acquired. So this will be a greenhorn project requiring a lot of attention and hard work from the client, especially in the initial two years. However, setting up the proposed business in vicinity of major urban centers (i.e. Lahore, Sheikhpura, and Gujranwala) having insatiable demand for meat promises healthy and consistent returns in foreseeable future. Moreover, having the animal farm and the urban access can provide platform to launch value-added products and to target urban niche market of organic food.



2. Proposed Business Venture

It is proposed that a sheep breeding business with a breeding herd of 100 ewes may be started. It will be a semi intensive farm with major reliance on stall feeding. Considering the climatic conditions of the Muridkay area it is suggested that the Lohi breed may be selected. The farm will grow its own fodders and an experienced supervisor may be hired to run the affairs of farm with the assistance of laborers.

Apart from breeding and rearing, the farm will also embark upon fattening of the farm born lambs and will sell the one year old live animals to quality meat shops of major urban centers including Lahore, Gujranwala, and Sheikhpura. The following table 1 provides details about cost of animal procurement.

Table 1 Animal procurement and related costs

		Average Cost	Amount
1	100 ewes.	20000	2,000,000
2	4 rams	25000	100,000
3	Logistics, transport, and related costs of procureme	500	50,000
4	Brokerage cost	500	52,000
Total cost of animal procurement			<u>2,202,000</u>

Note: The Lohi breed is recommended for farming in Muridkay area. They are accustomed to this weather and are expected to yield better returns. Ewes weighing at least 30 kg, having 2 teeth replaced, healthy, and preferably already impregnated for first calving cycle should be procured. The required animals may be procured from various mandis of south Punjab through brokers or from other sheep breeding farms.

To smoothly run the farm, the working capital needs of the first two years are to be financed by the entrepreneur. Afterwards, the farm is expected to run and grow with its own generated cash flows. The working capital needs of the initial two years are tabled below.

Table 2 Working capital needs

For	Year 1	Year 2
Salaries & wages	1,016,000	1,303,500
Feeding Cost	531,750	921,310
Vaccination/Medication	178,000	275,000
Electricity	48000	96,000
Miscellaneous	60,000	80,000
Total	1,833,750	2,675,810

Apart from working capital and animal procurement, capital investment will be needed to build the farm shed infrastructure and to buy needed equipment. The Appendix 1 provides details concerning cost of building required shed infrastructure and other related costs.

About 5.98 million rupees will be needed in the first year and further 3.92 million rupees of additional investment will be needed in the start of second year (see table 3). The peak investment will be by the start of second year and will amount rupees 9,838,960. By the end of second year we expect the farm to return 2 million rupees and we expect higher positive cash flows in subsequent years.

Table 3 Peak investment need

For	Year 1	Year 2	Total
Fixed Infrastructure investment	1,943,400	1,244,000	3,127,400
Animal Procurement	2,202,000	0	2,202,000
Working Capital Needs	1,833,750	2,675,810	4,509,560
Aggregate Investment	5,979,150	3,919,810	9,838,960

3. Operational Plan

3.1 Personnel Plan

A supervisor with animal husbandry experience and two laborers will be hired initially. They will be responsible for feeding and looking after the animals in the breeding shed. They will shepherd the flock whenever grazing outside and they will be responsible to cut, chop, and feed forages when stall feeding. Another employee will be hired after 8 to 10 months when there will be newborn lambs and farm strength increased above 150 heads. Additional daily wage labor will be hired on need basis.

The initial monthly salary of experienced supervisor would be Rs.35000. He will be responsible to see every aspect of farm management and will also be physically involved in farm's work when needed. The salary of laborer would be Rs. 18000. For stability of farm personnel, an additional salary should be rewarded on completion of each year. About 30 days of daily wage labor would be employed for Rs 700 per day in peak times such as preparing and storing dry rations for rainy days.

Table 4 Annual personnel cost

<u>1st year personnel cost</u>			<u>2nd year personnel cost</u>		
	Details	Amount		Details	Amount
1 Supervisor	13 x 35000	455,000	1 Supervisor	13 x 38500	500,500
2 laborer staff	(13x18000) x 2	468,000	3 laborer staff	3 x (13x19800)	772,200
1 laborer*	4 x 18000	72,000			
Daily Wagers	30 x 700	21,000	Daily Wagers	40 x 770	30,800
Total		1,016,000	Total		1,303,500

* Another laborer will be recruited after first calving cycle (to cope with increased farm strength)

3.2 Feeding Plan

There will be a mixed feeding scheme including grazing but mostly stall feeding will be done. Fodders will be grown by the farm on nearby rented land. Mixed fodders including lucerne, rai grass, corn, sorghum, etc will be cultivated as per season. For this purpose, 4 acres of fertile land will be needed in the first year and 6 acres of land will be needed from 2nd year onwards. For grazing, nearby vegetable/crop fields where harvesting is already done or canal banks etc may be focused. Moreover, the last cut of certain fodders may be used for grazing.

In times of fodder shortages, grains such as corn, wheat, etc will be added in the feed to fulfill the nutritional requirements. Regular diet plan, including mineral mixtures, will be prepared in consultation with veterinary expert for breeding as well as fattening animals. Dry chopped wheat straw will be purchased in the wheat harvesting season and stored for use throughout the year.

The annual per acre cost of forage growing is expected to be Rs 44000 (i.e. ploughing 10,000; Seed 10,000; irrigation (electric) 6,000; Fertilizers 10,000; crop care/pesticides 8,000) and annual rent of rupees 45000 per acre. Totaling 89,000 per acre per year.

Table 5 Annual feeding cost estimates

First year feeding cost			2nd year feeding cost		
	<i>Details</i>	<i>Amount</i>		<i>Details</i>	<i>Amount</i>
6 acre fodder	4x 44000	176,000	6 acre fodder	6 x 45000	270,000
Land rent	4 x 45000	180,000	Land rent	6 x 46000	276,000
Wanda etc		127,750	Wanda etc		269,710
Dry straw		48,000	Dry straw		105,600
Total		531,750	Total		921,310

3.3 Health/Vaccination Plan

The farm will be registered with local public veterinary hospital and the concerned DVM doctor will be requested to visit the farm at least once a week. However, an experienced veterinary doctor will be contracted for regular farm visits and medication when needed. The scheduled vaccinations of Enterotoxaemia, Foot and Mouth Disease, Pleuropneumonia, PPR, and Sheep Pox, etc must be done on time. Daily cursory inspection of herd will be done by farm supervisor to timely medicate the sick animals. And the herd must be thoroughly inspected every week. Deworming will be done after every two months, except to those in the final stage of pregnancy.

Table 6 Annual vaccination/medication cost estimates

First year cost		2nd year cost	
	<i>Amount</i>		<i>Amount</i>
Vaccination	8,000	Vaccinations	20,000
Medication	35,000	Medication	70,000
Deworming	15,000	Deworming	35,000
Veterinary Consultant	120,000	Veterinary Consultant	150,000
Total	178,000	Total	275,000

3.4 Herd Management Plan

Special care and attention must be paid to the 4 rams in the breeding herd. The timely impregnation of ewes is crucial for farm's success. Two of the four rams should be replaced every 6 months. Moreover, non-performing ewes, which do not get impregnated timely, must be culled upon identification. For reduced child mortality, it is recommended that rams should be taken out of the herd from Jun till mid-August to avoid calving in extreme winter months. From 2nd year and onwards, 1/3rd of the ewes (underperforming ones) should be replaced by new young adults born in the farm. In this way the size of the breeding herd will be maintain over long run.

Each animal born in the farm will be tagged properly and their sickness and periodic weight record will be kept in a register. Those frequently sick or underperforming in weight gain will be culled on priority. Moreover, tagging will help identifying ewes better performing in calving and their progeny will be preferred in herd replacement.

The breeding shed should be subdivided into four subsections with makeshift dividers. The size of each section may be adjusted as needed. First section should keep the open ewes (which are not yet pregnant) and the rams. Second section should host the pregnant ewes until they are near calving. Third section should consist of calving pens. Fourth is the nursery section which would host newly calving ewes and the newborns till they are aged 3 months.

Nearing calving ewes will be placed in calving pens where special care and attention will be paid to them during calving. After calving the newborns will be kept for up to 10 days with mothers within the calving pen where they will be acquainted. Newborns aged 3 months will be moved out of breeding shed to the fattening shed.

Like breeding shed, the fattening shed will also be subdivided into four sub-sections. Animals aging 3 to 6 months should be kept in a separate section. After 6 month of age the males should be separated from females to avoid pre-mature pregnancies. The fourth section should host animals available for sale or to be culled.

3.5 Farm Production Plan

We expect that some of the procured ewes will already be pregnant but most will be impregnated upon arrival at farm. During first year we expect that ewes will calve one time and will be half way through their second cycle of pregnancy. Thus we conservatively expect three calving cycles in two years. And thus we conservatively estimate that there will be on average 1.25 new born per ewe per breeding cycle. Thus we expect 125 newborn each breeding cycle, half male half female.

The newborns' mortality rate is usually higher than the adult mortality rate so we expect 10% kid mortality until they reach one year of age, when they will be either sold out or replace in the breeding farm. The following table presents the farm strength projections over time and the number of animals available for sale each period.

Table 7 farm production and output estimates

Year	Year 1		Year 2		Year 3		Year 4	
Breeding Cycle #	<i>Cycle 1</i>	<i>Cycle 2</i>	<i>Cycle 3</i>	<i>Cycle 4</i>	<i>Cycle 5</i>	<i>Cycle 6</i>		
# Breeding ewes	100	100	100	100	100	100	100	
# Newborn	125	125	125	125	125	125	125	
Mortality	12	13	12	13	12	13	12	
Surviving (till 1 year age)	113	112	113	112	113	112	113	
Farm Strength Projections	213		325		325		325	
breeding herd	100		100		100		100	
< 6 month old	113		113		112		112	
<12 month old	0		112		113		113	
Sold	0		113		112		225	
Average Annual output (#)	0		113		169		169	

The table 7 above presents the farm production estimates of first four years. Three breeding cycles are expected in each two-year period. The newborn are reared and fattened till the age of 1 year. Selling earlier will adversely affect the profitability of the farm. By the end of first year the farm strength will reach to 213 but there will be no animal ready to be sold. By the end of second year, even after sale of 113 animals, the farm strength will reach to 325 animals. The farm strength will be capped to 325 heads and we expect an average annual sale of 169 animals in 3rd year and afterwards.

1/3rd of the breeding ewes will be replaced by young ewes born from over performing ewes. Thus the strength of the breeding herd (100) will be maintained over time.

3.6 Selling/Marketing Plan

The animals produced/culled by the farm will be sold via different channels on weight basis. The fine quality meat shops/brands of the main cities including Lahore, Gujranwala, and Faisalabad will be targeted for premium price. Traceability and disease freeness will be propagated to fetch better prices. Moreover, online and social media presence will enable access to consumers buying for Sadaqa or Qurbani.

Over time, farm's own brand of healthy/premium meat may be launched where slaughtering and packaging services may initially be outsourced.

3.7 Assessing Operational Risks

There are several major operational risks which can significantly harm the farm’s profitability and future.

The most important risk is the outbreak of some viral disease. If herd is not vaccinated properly and timely and appropriate medication is not done then, in some severe cases, a larger portion of the herd can die. The lukewarm approach toward vaccination and medication can cause huge losses, so the farm must be vigilant in this respect.

Moreover, the personnel risk is the next major operational risk. If an experienced and dedicated farm supervisor is not recruited and the farm relies on inexperienced laborers then the productivity potential of farm can be at risk and can severely impact farm’s profitability. Also, there need to be contingency plans in place to handle the situation where farm laborers or supervisors leave without adequate prior notice. Without personnel the farm cannot function even a few hours.

Unavailability of fodders in certain months is another operational risk. There is need to have a reasonable reserve of dry fodder/feed or silage to endure these periods. Having reserve fodder/feed can also be helpful in times when farm laborers leave without prior notice.

4 Financial Plan

In this section we first present and discuss the income prospects of the business and what factors may adversely affect business’s profitability. Afterwards, we analyze the future cash flows and assess the financing needs of the business over time. Also the pro forma balance sheets are prepared to provide glimpse of changes in business’s worth over time. And, finally, an appropriate capital structure is recommended along with discussion of various potential financial risks.

4.1 Income Prospects

Table 8 Pro forma Income Statements (5-year)

	Year 1	Year 2	Year 3	Year 4	Year 5
Farm strength (kept)	213	325	325	325	325
No. of sold animals	0	113	169	169	169
Average sale price	-	27,000	29,700	32,670	35,937
1. Operating Income	1,310,000	5,033,250	5,351,775	5,886,953	6,475,648
1.1 Sale of Sheep	0	3,051,000	5,019,300	5,521,230	6,073,353
1.2 Sale of manure/wool etc.	180,000	302,250	332,475	365,723	402,295
1.3 Increase in #animals	1,130,000	1,680,000	-	-	-
2. Operating Expenses	1,833,750	2,675,810	2,951,391	3,256,130	3,593,263
2.1 Salaries & wages	1,016,000	1,303,500	1,433,850	1,577,235	1,734,959
2.2 Feeding Cost	531,750	921,310	1,013,441	1,114,785	1,226,264
2.3 Vaccination/Medication	178,000	275,000	302,500	332,750	366,025
2.4 Electricity/ utilities	48,000	96,000	105,600	116,160	127,776
2.5 Miscellaneous	60,000	80,000	96,000	115,200	138,240
3 Gross Profit (1-2)	-523,750	2,357,440	2,400,384	2,630,822	2,882,385
4 Depreciation expense	164946	247921	247922	247923	247918

5 Net Profit Before Tax (3-4)	-688,696	2,109,519	2,152,462	2,382,899	2,634,467
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The above table presents a summary overview of the expected financial performance of first five year of the farm. No animal will be available for sale in the first year and therefore we expect a gross loss of 523,750 rupees. After considering depreciation expenses, the net loss in the first year is 688,696.

In the second year we expect 113 animals available for sale at average price of 27,000 rupees and we expect net profit of over 2.1 million rupees. The farm out is expected to reach its potential in third year when we expect to sell 169 animals at an average price of 29700 rupees. The third's year expected net profits are 2,152,462. Afterwards we expect a consistent rise of about 10% based on inflationary expectations. The table 9 below presents the adopted depreciation schedules for farm infrastructure and equipment.

Table 9 Depreciation schedules

Equipment (5 year)			
	<u>Opening Value</u>	<u>Depreciation</u>	<u>Ending Value</u>
<i>Year 1</i>	295,000	59,000	236,000
<i>Year 2</i>	236,000	59,000	177,000
<i>Year 3</i>	177,000	59,001	117,999
<i>Year 4</i>	117,999	59,002	58,997
<i>Year 5</i>	58,997	58,997	0
Sheds & Buildings (15 years)			
	<u>Opening Value</u>	<u>Depreciation</u>	<u>Ending Value</u>
<i>Year 1</i>	1,588,400	105,946	1,482,454
<i>Year 2</i>	2,726,454	188,921	2,537,533
<i>Year 3</i>	2,537,533	188,921	2,348,612
.	.	.	.
.	.	.	.
<i>Year 15</i>	270,480	188,921	81,559
<i>Year 16</i>	81,559	81,559	0

4.2 Return Analysis

The return analysis of the business, on accruals basis as well as on cash flow basis, is tabulated below. As the business is expected to register net losses of 688,696 in the first year and the first year's total investment is 5,979,150, the first year's return on investment (ROI) is -11.52%. We expect 22.90% ROI in 2nd year and 23.10% in the third year. From 4th year the level of

investment in business is reducing due to increased drawing of surplus cash and reduced book value of depreciable assets. Therefore, and also because of expected inflation, the ROIs for 4th and 5th year are expected to be 26.56% and 30.62% respectively.

The cash base analysis of returns is given in the second half of the below table. Equity injections of 5.979 million and 3.919 million will be needed in the beginning of 1st and 2nd year respectively. Surplus cash will be available by the end of 2nd year and thus cash drawing of 2 million rupees is expected by the end of 2nd year. The drawings will increase in subsequent years due to increased profitability. In the 5th year surplus cash drawings of 3 million will be allowed and the farm's book value will stand at 8,239,610 (the market value of farm is expected to be even higher).

Based on these cash flows, we compute the net present value of the business using a required rate of 11.3% (i.e. KIBOR + 4% as on 21-09-2020). The net present value of the proposed business is 5,692,801 rupees. And the internal rate of return is 25.5% which is quite attractive, especially considering the expected consistency of returns in the long run.

Table 10 Return analysis (5 years)

	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Year 4</i>	<i>Year 5</i>
<u>Accruals based analysis:</u>					
Net Profit	-688,696	2,109,519	2,152,462	2,382,899	2,634,467
Investment level	5,979,150	9,210,264	9,319,783	8,972,245	8,605,144
Return on Investment (ROI)	-11.52%	22.90%	23.10%	26.56%	30.62%
<u>Cash based analysis</u>					
Equity inflows	5,979,150	3,919,810	0	0	0
Drawings	0	2,000,000	2,500,000	2,750,000	3,000,000
Terminal Business Value					8,239,610
Net present Value @ 11.3% (12 month KIBOR+4%)	= 5,692,801				
Internal rate of Return (IRR)	= 25.5%				

4.3 Cash Flow Analysis

The table below presents the five year cash flow forecasts of the farm. There will be net out flow of cash for operations and investment activities whereas cash inflow will come from equity financing. By the end of 1st year we expect to have 180,000 cash on hand. In the second year we expect positive cash flows from operations but there will be net outflow of 1.244 million in investment activity (i.e. building new shed). We will require additional equity financing of 3,919,810 in the second year but by the end of 2nd year we will have surplus cash to allow equity drawing of 2 million rupees. Overall we expect net cash inflow of 1,919,810 from financing activities.

After 2nd year, there will be no outflow for investment activities and we expect healthy positive cash flows from operations thus enabling farm to allow healthy equity drawings in the same period. From 2nd year the cash reserves with farm will remain above 1 million to address working capital needs. And after 2nd year, the original investment in business will continuously decline due to drawings and in approximately 4.46 years all of the original investment will be returned.

Table 11 Pro forma cash flow statements (5 years)

	<i>Year 1</i>	<i>Year2</i>	<i>Year 3</i>	<i>Year 4</i>	<i>Year 5</i>
<i>1. Net Cash flows (operations)</i>	<i>-1653750</i>	<i>677440</i>	<i>2400384</i>	<i>2630822</i>	<i>2882385</i>
Operating cash outflows	1833750	2675810	2951391	3256130	3593263
Operating cash inflows	180000	3353250	5351775	5886953	6475648
<i>2. Net Cash flows (investment)</i>	<i>-4145400</i>	<i>-1244000</i>	<i>0</i>	<i>0</i>	<i>0</i>
Infrastructure investment	1943400	1244000	-	-	-
Animal Procurement outflows	2202000	0	-	-	-
<i>3. Net Cash flows (financing)</i>	<i>5979150</i>	<i>1919810</i>	<i>-2500000</i>	<i>-2750000</i>	<i>-3000000</i>
Equity inflows	5979150	3919810	0	0	0
Equity drawings	0	2000000	2500000	2750000	3000000
<i>Net Cash Flows (1+2+3)</i>	<i>180000</i>	<i>1353250</i>	<i>-99616</i>	<i>-119178</i>	<i>-117615</i>
Cash on hand	180000	1533250	1433634	1314456	1196841
Original investment in business	5979150	7898960	5398960	2648960	-351040

Payback period: 4.46 year

4.4 Balance Sheet and Net Business Worth

The following table presents the pro forma balance sheet of the farm for the first five years. At the end of first year the book value of farm's assets will stand at 5,290,454. The largest part of the assets will be the animal herd with a book value of 3,332,000 followed by farm infrastructure (1,778,454) and cash on hand (180,000). These assets are wholly financed by equity.

The book value of farm's assets will be highest (9,319,783) in the 2nd year after which there is consistent decline in book value of total assets mainly caused by depreciation expense. The book value of herd will be unchanged at 5,012,000 from 2nd year onwards. And though the profits will accumulate over time, the equity level will remain near 8 million due to consistently increased drawings. By the end of 5th year, the business will have a book value of 8,239,610.



Table 12 Pro forma Balance Sheets (5 years)



	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Year 4</i>	<i>Year 5</i>
Total Assets	5,290,454	9,319,783	8,972,245	8,605,144	8,239,610
<i>Farm Infrastructure</i>	<i>1,778,454</i>	<i>2,774,533</i>	<i>2,526,611</i>	<i>2,278,687</i>	<i>2,030,769</i>
Gross amount	1,943,400	3,187,400	3,187,400	3,187,400	3,187,400
Accumulated Depreciation	164,946	412,867	660,789	908,713	1,156,631
<i>Herd value</i>	<i>3,332,000</i>	<i>5,012,000</i>	<i>5,012,000</i>	<i>5,012,000</i>	<i>5,012,000</i>
Procured Animals	2,202,000	2,202,000	2,202,000	2,202,000	2,202,000
Value of increased herd size	1,130,000	2,810,000	2,810,000	2,810,000	2,810,000
<i>Cash & equivalents</i>	<i>180,000</i>	<i>1,533,250</i>	<i>1,433,634</i>	<i>1,314,456</i>	<i>1,196,841</i>
Total Liabilities & Equity	5,290,454	9,319,783	8,972,245	8,605,144	8,239,610
Capital	5,979,150	9,898,960	9898960	9898960	9898960
Accumulated Drawings	0	2,000,000	4,500,000	7,250,000	10,250,000
Accumulated profits/losses	-688,696	1,420,823	3,573,285	5,956,184	8,590,650

APPENDICES

Appendix I (Infrastructure Cost Details)

Needed infrastructure & costs

#	Items	Details	Cost Estimates	Amount (Rs)
1	Breeding shed (to host 104 adults and newborn lambs)	<p>12 square feet of covered area is required per adult animal.</p> <p>A shed of 60 feet length (from north to south) and 25 feet wide (North to south).</p> <p>Shed should be 2 feet higher than surrounding land. Ready to install cemented roof may be used.</p>	 <p>1500 square feet @ approx. Rs 750</p>	1,120,000
2	Fencing open area attached to the breeding shed	<p>24 square feet of open area (in addition to the roofed area) is required per adult animal. The space equal to the space of roofed shed should be left on each side of the shed as open area freely accessible to animals.</p> <p>Fencing length will be approximately 340 feet. A mixture of bamboo and bricks may be used for fencing purpose.</p> <p>Trees should be planted around shed to diminish the effects of extreme weather.</p>	<p>340 feet long fence @ approx. Rs 190</p>	64,000
3	Makeshift calving pens	<p>Where calving sheep along with newborn(s) will be held for about 10~15 days for intensive care.</p> <p>20 pens which could be installed and removed when needed.</p>	 <p>Rough Estimate: Rs. 4000 per pen</p>	80,000

4	Feeding stalls	15 feeding stalls for main shed.		Rs. 4000 per feeding stall	Rs. 60,000
5	Store room and space for chaff cutter	To store dry feed, concentrates, and other related supplies. And the place to host the chaff cutter. 24 x 12 feet size, and may be constructed adjoining the roofed part of the main shed.		288 square feet @ Rs 800 per square feet	230,400
6	1 Residence room and a wash room .	1 residence room for employee staying 24/7 on the farm. And a wash room.		174 square feet @ 1000	174,000
7	Fattening Shed (to host young sheep aged 3 months and above)	8 square feet of roofed area is required per animal. So a shed similar to the breeding shed will be needed within 1 year of starting farming.		Shed cost Rs. 1,120,000. Fencing cost Rs. 64,000 Feeding stalls Rs. 60,000	1,244,000
8	Miscellaneous tools and equipment	<ul style="list-style-type: none"> • 1 Chaff Cutter with electric motor @ Rs 40,000 • 1 electric water pump with boring cost and related equipment to supply water to shed Rs. 60,000 • Electric wirings and Lighting etc Rs. 30,000 • Equipment to cut and transport fodder from the field. Rs 35,000. • Electric meter and other miscellaneous Rs. 50000 			215,000
Total Infrastructure Cost Estimate					3,127,400

Assumptions:

- 1) Electricity supply lines are accessible nearby.
- 2) Land for shed construction is owned by the entrepreneur.