

PRE-FESIBILITY STUDY

(Goat Fattening)

CONTENTS

1. DISCLAIMER	1
2. PURPOSE OF THE DOCUMENT	2
3. INTRODUCTION TO SCHEME.....	2
4. EXECUTIVE SUMMARY	2
5. BRIEF DESCRIPTION OF PROJECT	3
• Selection of suitable breed.....	3
• Location.....	3
• Target Markets.....	3
• Employment Generation.....	3
6. CRITICAL FACTORS	3
7. OPERATIONAL CAPACITIES	4
8. POTENTIAL TARGET MARKET	4
9. PRODUCTION PROCESS FLOW	4
10. BREED SELECTION.....	4

11. PROJECT COST SUMMARY	4
11.1 Project Economics.....	4
11.2 Project Financing.....	5
11.3 Project Cost.....	5
11.4 Space Requirement.....	5
11.5 Machinery and Equipment.....	6
11.6 Human Resource Requirement.....	6
11.7 Revenue Generation.....	6
12. CONTACTS – SUPPLIERS, EXPERTS / CONSULTANTS	6
13. USEFUL LINKS	7
14. ANNEXURES	11
15. KEY ASSUMPTIONS	13

LIST OF TABLES

Table 1: Project Economics	4
Table 2: Project Financing	5
Table 3: Project Cost	5
Table 4: Space Requirement	5
Table 5: List of Machinery and Equipment	6
Table 6: Human Resource Requirement	6
Table 7: Revenue Generation	6

LIST OF ANNEXURES

14.1. Income Statement	11
14.2. Cash Flow Statement	12

1. PURPOSE OF DOCUMENT

The purpose of this document is to facilitate potential investors in **Goat Fattening** by providing them with a general understanding of the business, with the intention of supporting potential investors in crucial investment decisions. 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, production, finance, and business management. 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, certain industrial norms and well established research findings 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 the basis of investment decisions.

2. EXECUTIVE SUMMARY

Goat Fattening Farm is proposed to be located at any suitable areas of Pakistan. The project is related to Goat fattening purposes, the total capacity is 50 goats. Project Cost Estimate is Rs. 0.64 Million with fixed investment of Rs. 0.07 Million. The cost assumptions, IRR 20% and payback 5.83 years of goats.

3. BRIEF DESCRIPTION OF PROJECT

The following parameters must be addressed as per pre-feasibility study,

- **Selection of suitable Goat breed**

In Punjab, Beetal, Teddy goat breeds are most suitable. In Sindh, Kamori, Pateri, Kacchan, Jattan goat breeds are most suitable. In KPK, Damani goat breeds are most suitable most suitable breeds. My selection of a breed is Rajanpoori, Beetal and Makhi Cheeni due to great growth and reproduction abilities in them. Moreover, from the physical surveys conducted in the region of mianwali rural areas and by examining the revenue generated by the farms associated with these breeds are more economical.

- **Location:**
Rural area of mochh pakka in a district mianwali is choose to be the best area for the goat farming. Due to great land for growth of grass is located and I own some kanals so it would be the ideal place for it to be productive with less cost.
- **Targets Market**
In addition to major cities such as Lahore, Multan, Karachi, Hyderabad and Islamabad, there is demand of Pakistani mutton in Middle East and Malaysia countries.
- **Employment Generation:** The proposed project will provide direct employment to two individuals. Financial analysis shows the profitability of proposed business within first year of its operation.

4. CRITICAL FACTORS

The following are critical factors for the successful commercial goat farming.

- Strict vaccination and deworming program for successful operation may be followed.
- Good feeding and management practice will give the success in the business. Fresh water will be available all the time. In the concentrate; minerals may also be included.
- Establishment of the farm in areas where cheap land is available, but it should not be far away from the market.
- The farming should be done on scientific grounds taking care of Vaccination, Medicine etc.
- Healthy and quality male stock should be selected for fattening.
- New feeding techniques including concentrate feeding and preparation of mixed ration will give the good results.
- Well-trained / experienced staff adding to the efficiency of the farm.

5. OPERATIONAL CAPACITY

The farm will start production with 25-35 goats. The limit of goats has been imposed on the farm because a very large flock would be difficult to manage. The farm would focus on rearing of young stock for fattening and marketing. Goat from aged less than 1 year of age will be purchased and after their age suitable for reproduction, the number of goats will increase by 200-300% per year. After 6-8 months those

baby goats would grow young and will be sold to generate revenue for the farm. The cycle will continue in the way and revenue would be generated.

6. POTENTIAL MARKETS

Target market would be the areas where breeding is being undertaken as well as major cities like Karachi, Lahore, Rawalpindi, Islamabad, Peshawar etc. In addition to local markets there is an enormous export potential to Middle Eastern countries.

7. PRODUCTION PROCESS FLOW

Animals selected for fattening should be of less than 1 year of age and male members. During this age the daily weight-gain capacity is also better particularly in goat.

8. PROJECT COST SUMMARY

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

8.1 Project Economics

All the figures in this financial model have been calculated for 25-35 goat for total area of around 1 Kanal that would be used for different functions of the farm. The following table shows internal rates of return and payback period.

Table 1. Project Economics

Description	Goat
Internal Rate of Return (IRR)	20 %
Payback Period (yrs)	5.83
Net Present Value (NPV)	552,121

8.2 Project Financing

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

.

.

Table 2. Project Financing

Description	Goat
Total Equity (@ 10%)	Rs. 1,200,000
Bank Loan (@ 90%)	Rs. 1,000,000
Markup to the Borrower (%age/annum)	3%
Tenure of the Loan (Years)	3
Grace Period (Year)	1

8.3 Project cost

Following requirements have been identified for operations of the proposed business.

Table 3. Project cost

Project Investment	Amount (Rs.)
Building	220,000
Machinery & Equipment	100,000
Total Capital Cost	320000

8.4 Space Requirement

Details of the area required are given below:

Table 4. Space Requirement

Description	Space per animal sq ft	Total space sq ft	Cost per sq ft	Total cost (Rs.)
Shed for 35 kids (covered)	12	600	300	120000
Open paddock for 50 kids	24	1200	50	50000
Isolation Pen for 5 kids (covered)	12	60	300	15000
Stores for ration & machinery (12x20)	-	240	300	70000
Total				255,000

8.5 Machinery and Equipment

Following table provides list of machinery and equipment required for Goat Fattening Farm working for Livestock sector.

Table 5 List of Machinery and Equipment

Farm supplies	Unit Cost (Rs)	Total Cost (Rs)
Feeding mangers 5	3000	15000
Chaff cutter	50000	50000
Water pump	20000	20000
Other farm equipment	-	5000
Total cost		90000

8.6 Human resource requirement

The table above provides details of human resource required for goat fattening farm.

Table 6 Human Resource Requirement

Description	No. of Employees	Salary per month
Worker	1	10,000

8.7 Revenue Generation

Table 7. Revenue Generation

Product	Sales Price (Rs./Unit)	Average weight per kg live weight	First Year Production	First Year Sales Revenue (Rs)
Sale of Live Goats	350 kg	45	50	787500
Total Sales Revenue				787500



9. ANNEXURES

9.1 Income Statement

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Revenue	826,875	888,891	955,557	1,027,224	1,104,266	1,187,086	1,276,117	1,371,826	1,474,713	1,585,317
Feed & Vaccination Cost	252,500	265,125	278,369	292,312	306,938	322,280	338,374	355,307	373,070	391,704
Cost of Calves	375,000	393,750	413,438	434,109	455,815	478,606	502,536	527,663	554,046	581,748
Direct Labor	60,000	66,000	72,600	79,860	87,846	96,631	106,294	116,923	128,615	141,477
Repair & Maintenance	4,900	5,145	5,402	5,672	5,956	6,254	6,566	6,895	7,240	7,602
Utilities	29,400	32,340	35,574	39,131	43,045	47,349	52,084	57,292	63,022	69,324
Total Cost of Sales	723,800	764,460	807,588	853,401	902,030	953,671	1,008,534	1,066,894	1,128,947	1,194,957
Gross Profit	103,075	124,431	147,970	173,824	202,236	233,415	267,584	304,932	345,766	390,360
General administration & selling expenses -Travelling & Comm. expense (phone, fax, etc.)	6,000	6,300	6,615	6,946	7,293	7,658	8,041	8,443	8,865	9,308
Depreciation expense	42,000	42,000	42,000	42,000	42,000	42,000	42,000	42,000	42,000	42,000
Amortization expense	9,726	9,726	9,726	9,726	9,726	-	-	-	-	-
Subtotal	69,726	70,626	71,571	72,563	73,605	64,973	66,122	67,328	68,594	69,924
Operating Income	33,349	53,805	76,399	101,260	128,631	168,442	201,462	237,604	277,172	320,436
Earnings Before Interest & Taxes	33,349	53,805	76,399	101,260	128,631	168,442	201,462	237,604	277,172	320,436
Interest expense	53,300	48,797	42,878	36,468	29,526	22,007	13,865	5,047	-	-
Earnings Before Tax	(19,951)	5,008	33,521	64,793	99,105	146,434	187,597	232,557	277,172	320,436
NET PROFIT/(LOSS) AFTER TAX	(19,951)	5,008	33,521	64,793	99,105	146,434	187,597	232,557	277,172	320,436
Balance brought forward		(19,951)	(14,944)	18,577	83,370	182,475	328,909	516,506	749,064	1,026,235
Total profit available for appropriation	(19,951)	(14,944)	18,577	83,370	182,475	328,909	516,506	749,064	1,026,235	1,346,672
Balance carried forward	(19,951)	(14,944)	18,577	83,370	182,475	328,909	516,506	749,064	1,026,235	1,346,672

14.2 CASHFLOW STATEMENT

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Operating activities											
Net profit	-	(19,951)	5,008	33,521	64,793	99,105	146,434	187,597	232,557	277,172	320,436
Add: depreciation expense	-	42,000	42,000	42,000	42,000	42,000	42,000	42,000	42,000	42,000	42,000
amortization expense	-	9,726	9,726	9,726	9,726	9,726	-	-	-	-	-
Equipment inventory	(1,633)	(167)	(185)	(203)	(224)	(247)	(273)	(301)	(331)	(365)	3,931
Raw material inventory	(209,167)	(21,440)	(23,633)	(26,069)	(28,736)	(31,675)	(34,915)	(38,509)	(42,448)	(46,790)	503,381
Accounts payable	-	35,540	2,278	2,444	2,624	2,817	3,025	3,253	3,500	3,766	(18,929)
Cash provided by operations	(210,800)	45,708	35,195	61,418	90,182	121,725	156,272	194,040	235,278	275,782	850,819
Financing activities-											
Change in long term debt	642,177	-	(71,312)	(77,231)	(83,641)	(90,583)	(98,102)	(106,244)	(115,062)	-	-
Issuance of shares	71,353	-	-	-	-	-	-	-	-	-	-
Cash provided by / (used for) financing activities	713,530	-	(71,312)	(77,231)	(83,641)	(90,583)	(98,102)	(106,244)	(115,062)	-	-
Investing activities- Capital expenditure	(468,630)	-	-	-	-	-	-	-	-	-	-
Cash (used for) / provided by investing activities	(468,630)	-	-	-	-	-	-	-	-	-	-
NET CASH	34,100	45,708	(36,117)	(15,813)	6,541	31,142	58,170	87,795	120,215	275,782	850,819
Cash balance brought forward		34,100	79,808	43,690	27,877	34,418	65,560	123,730	211,526	331,741	607,523
Cash available for appropriation	34,100	79,808	43,690	27,877	34,418	65,560	123,730	211,526	331,741	607,523	1,458,342
Cash carried forward	34,100	79,808	43,690	27,877	34,418	65,560	123,730	211,526	331,741	607,523	1,458,342

15. Key Assumptions

Particulars	Assumption
Sales Price Growth Rate	5 % per year
Capacity Utilization Growth Rate	10 % per year
Increase in Cost of Raw Materials	5 % per year
Increase in Staff Salaries	10 % per year
Increase in Utilities (Electricity / Water / Gas)	10 % per year
Debt / Equity Ratio	90 : 10
Depreciation	
Plant Building	10 % per annum
Machinery	10 % per annum
Office Furniture & Equipment	10 % per annum
Loan Period	8 Years (inclusive of 1 year grace period)
Loan Installments	Quarterly