

# PROJECT REPORT ON GOAT FARMING

## Project description

Goat is a multi-functional animal and plays a significant role in the economy and nutrition of landless, small and marginal farmers in the country. Goat rearing is an enterprise which has been practiced by a large section of population in rural area. Goats are among the main meat-producing animals in India and has huge domestic demand. Goat rearing under intensive and semi-intensive system for commercial production has been gaining momentum. A number of commercial goat farms have been established in different regions of the country.

## Production Technology

### *Project Location*

Goat farm is located in the area where assured market round the year is available. It is easily accessible to the main road.

### *Housing*

Low cost housing will be constructed on a raised platform (about 1 meter height from ground level) by using bamboo/wooden poles or 'pakka' building by establishing concrete pillars. Floor and side walls will be made of wooden material. Roof will be thatched with coconut leaves, grass or asbestos sheets. Average floor space per kid is 0.75 to 1 sq. meter. Floor should have at least 1 cm space between bamboos/wooden planks to allow passage of dung and urine down to the ground.

### *Feed & Fodder cultivation*

Fertile land with assured irrigation facilities is available so that fodder crops could be successfully raised and abundant good quality green fodders will be made available for animal feeding throughout the year.

### *Water*

Good quality fresh water for animal drinking and for the cleaning, washing etc. is available.

### *Labour*

Honest, economic and regular supplies of labours are available.

### *Veterinary Aid*

Veterinary aid/ breeding centres facilities are availability near the proposed goat farm.

### *Market potential*

More than 80 percent of the Indian Population are meat eaters. Purchasing power of the people is on the rise and there is a distinct shift in consumption patterns, Non-Veg now becoming almost an essential part of the diet. Mutton is relished by people more than chicken or beef /pork (Consumed by a select section). Availability of Mutton is less than the demand. It requires smaller investments and is not as risky a business proposition as compared to Dairy. Sale of goats/goat meat is never a problem for the above mentioned reasons. India occupies first position in terms of goat population and milk production. The demand for goat meat is increasing faster than the growth in goat population. Goat plays a significant role in providing supplementary income and livelihood to millions of resource poor farmers and landless labourers of rural India.

### *Export Potential*

The scope for exports too is huge, however for selling goat meat abroad one has to adhere to strict phytosanitary conditions and standards of the respective nations.

### **SWOT Analysis**

#### *Strengths:*

- Low labour requirement.
- Goat is a multi-functional animal and plays a significant role in the economy and nutrition of landless, small and marginal farmers in the country.
- Goats can efficiently survive on available shrubs and trees in adverse harsh environment in low fertility lands where no other crop can be grown.
- The initial investment needed for Goat farming is low.
- No religious taboo against goat slaughter and meat consumption prevalent in the country.
- Goat milk is easy to digest.
- Goat creates employment to the rural poor besides effectively utilizing unpaid family labour.
- Goats are strong creatures that are able to resist various diseases.
- Since goats are relatively small in size, the facilities and amenities to support them are also minimal.
- Goats generally love being with humans and they are extremely docile.
- They have a high fertility rate achieving maturity with just 5 - 6 months. The probability of producing twins is high.

- Risk associated with drought is less in commercial goat farming compared to other livestock breeds.
- Goats are good instruments to enhance the health of the grazing land and minimize encroachment of bushes.
- Goat meat is a great appeal to the public because of the health benefits it provides to its consumers. It is extremely low in fat, cholesterol and calories. This is good for people who have low energy diet scheme.

#### *Opportunities:*

- High and ready market of goat meat.
- Confirmed ever increasing Market price.

#### *Weakness*

- Large-scale, organized goat farming has not yet become a successful venture in the country.
- High mortality rate of goat kids

#### *Threats*

- The goat population is increasing & according to the government census, declining grazing land poses a big challenge to the industry.

## Economics of the Project

### *A. BASIS & PRESUMPTIONS*

<b>I. Techno-economic parameters</b>			
	<b>Particulars</b>	<b>Unit</b>	<b>Quantity</b>
1	Breed of Goat		Osmanabadi
2	System of rearing		Semi Intensive
3	No. of does		50
4	No. of bucks		2
5	Age of maturity		10-12
6	Kidding interval	Months	8
7	No. of kidding	Per month	1.5
8	Kidding percentage	%	80
9	Average litter size (average of single, twinning, triplet, quadruplet)		2
10	Sex ratio		1.1
11	Mortality of kids	%	20
12	Saleable age of kids	Months	11
13	Payback period: 6 years including moratorium for the 1st year		

<b>II. Expenditure norms</b>			
1	Space requirement per head for buck	Sq.ft	15
2	Space requirement per head for doe	Sq.ft	15
3	Space requirement per head for kid	Sq.ft	4
4	Cost of construction of shed for buck, doe & kid	Rs./sq.ft	120
5	Cost of one doe (Female)	Rs.	10,000
6	Cost of one buck (Male)	Rs.	12,000
7	No. of unskilled labour	Nos.	1
8	Cost of one semiskilled labour/annum	Rs.	72,000
9	Cost of Chaff of cutter- 1 nos.	Rs.	10,000
10	Requirement of concentrate feed (adult animal/month)	Kg.	10.5
11	Requirement of concentrate feed (kid/month)	Kg.	4.5
12	Rate of concentrate per Kg	Rs.	17
13	Misc. expenditure i.e. Vaccine medicine and Veterinary aid per animal per year	Rs.	100
14	Electricity and Water supply	per month	1,000
15	Rate of interest for bank loan	%	12
16	Own contribution in project cost	%	25
<b>III. Income norms</b>			
1	Sale price of Buck (at the age 11 months)	Rs.	8,500
2	Sale price of Doe (at the age 11 months)	Rs.	7,500

### *B. TOTAL COST OF PROJECT*

Sl. No	PARTICULARS	UNIT	UNIT/Rs	QUANTITY	AMOUNT (Rs)
<b>I. Capital Cost</b>					
1	Land				Own
2	Site development	Ls.			25,000
3	Cost of does	Nos.	10,000	50	500,000
4	Cost of bucks	Nos.	12,000	3	30,000
5	Shed of does	Sq.ft.	120	750	90,000
6	Shed of bucks	Sq.ft.	120	30	3,600
7	Shed for kids	Sq.ft.	120	750	90,000
8	Equipment for feeding ghemale & other	Nos.	100	53	5,250
9	Chaff cutter	Nos.	10,000	1	10,000
10	Rope, chains	Ls.			5,000
11	Water storage and distribution	Ls.			10,000
12	Contingencies	%	5		38,443
<b>TOTAL-A</b>					<b>807,293</b>
<b>II. Working Capital (1<sup>st</sup> Year requirement)</b>					
1	Fodder cultivation	Acre/season	5,000	2	10,000
2	Concentrate feeds for two months @ 7.5 kg	Kg.	17	780	13,260

	/animal/month				
3	Cost of concentrate feed for kids @ 4.5 kg month/kid for one months	Kg.	17	270	4,590
4	Wages of labour per annum	Per labour	72,000	1	72,000
5	Insurance	%	5		26,500
6	Misc expenditure i.e.vaccine, medicine	/Animal/year	100	52	5,200
7	Electricity and water supply	/month	1,000	52	52,000
8	Transport charges	Ls.			5,000
<b>TOTAL-B</b>					<b>188,550</b>
<b>TOTAL COST OF PROJECT</b>			<b>TOTAL (A+B)</b>		<b>995,842</b>

### C. Means of finance

Particulars	Unit	Unit Rate	Amount Rs
(1) Term Loan	%	75	746882
(2) Own Contribution	%	25	248960
		Total	995842
(3) Subsidy entitlement @36% from NABARD under ACABC Scheme			358503

### D. PROJECTED PERFORMANCE & PROFITABILITY

<b>I. FLOCK PRODUCTION CHART</b>							
Sl. No	Particulars	I Year	II Year	III Year	IV Year	V Year	VI Year
1	Nos. of kidding/year	1.5	1.5	1.5	1.5	1.5	1.5
2	Nos. of kids born male	75	75	75	75	75	75
3	Nos. of kids born female	75	75	75	75	75	75
4	Nos. of kids died male 20%	15	15	15	15	15	15
5	Nos. of kids died female 20%	15	15	15	15	15	15
6	Nos. of male kids available for sale	*	60	60	60	60	60
* Kids produced in first year will be sold in second year & so on.							
7	Nos. of female kids available for sale	-	60	60	60	60	60

## II. PROJECTED PROFITABILITY

(Value in Rs.)

Sl. No	Particulars	Unit	Unit rate	Quantity	I Year	II Year	III Year	IV Year	V Year	VI Year
<b>A. Income</b>										
1	From sale of male goats	Buckling	8,500	60	-	510,000	510,000	510,000	510,000	510,000
2	From sale of female goats	Doeling	7,500	60	-	450,000	450,000	450,000	450,000	450,000
3	Mannure	Tonne	5,000	10	50,000	50,000	50,000	50,000	50,000	50,000
4	Interest on subsidy @ 6%				21,510	21,510	21,510	21,510	21,510	-
5	Subsidy				-	-	-	-	-	358,503
<b>TOTAL (A)</b>					<b>1,031,510</b>	<b>1,031,510</b>	<b>1,031,510</b>	<b>1,031,510</b>	<b>1,031,510</b>	<b>1,368,503</b>
<b>B. Expenditure</b>										
	Concentrate feeds	Rs./kg	17	6,300	107,100	117,810	117,810	117,810	117,810	117,810
	Concentrate feeds for kids	Rs./kg	17	3,240	55,080	60,588	60,588	60,588	60,588	60,588
	Fodder cultivation	acre/year	5,000	1	5,000	5,000	5,000	5,000	5,000	5,000
	Unskilled workers	Nos.	72,000	1	72,000	79,200	79,200	79,200	79,200	79,200
	Misc expenditure i.e vaccine, medicine	Per animal	100	170	17,000	17,000	17,000	17,000	17,000	17,000
	Insurance of animals	%	5		26,500	26,500	26,500	26,500	26,500	26,500
	Electricity and Water supply	Animal/year	1,000		52,000	57,200	62,920	69,212	76,133	83,747
	Transport charges	Ls.			5,000	5,500	6,050	6,655	7,321	8,053
<b>TOTAL (B)</b>					<b>339,680</b>	<b>368,798</b>	<b>375,068</b>	<b>381,965</b>	<b>389,552</b>	<b>397,898</b>
<b>III. Net Income</b>				<b>TOTAL(A-B)</b>	<b>691,830</b>	<b>662,712</b>	<b>656,442</b>	<b>649,545</b>	<b>641,958</b>	<b>970,605</b>

## E. FINANCIAL ANALYSIS

Particular	I Year	II Year	III Year	IV Year	V Year	VI Year	Total
Capital costs	807,293						
Recurring costs	217,720	194,776	375,068	381,965	389,552	397,898	
<b>Total COST</b>	<b>1,146,972</b>	<b>194,776</b>	<b>375,068</b>	<b>381,965</b>	<b>389,552</b>	<b>397,898</b>	
<b>Benefit</b>	<b>1,031,510</b>	<b>1,031,510</b>	<b>1,031,510</b>	<b>1,031,510</b>	<b>1,031,510</b>	<b>1,368,503</b>	
Depreciated value of building @10%						107,498	
Depreciated value of machinery & equipment's @15%						8,677	
Closing stock value (adult & kids)						363,010	
<b>Total benefit</b>	<b>1,031,510</b>	<b>1,031,510</b>	<b>1,031,510</b>	<b>1,031,510</b>	<b>1,031,510</b>	<b>1,847,688</b>	
<b>Net benefit</b>	<b>-115,462</b>	<b>662,712</b>	<b>656,442</b>	<b>649,545</b>	<b>641,958</b>	<b>970,605</b>	
Discounting factor @15%	0.87	0.76	0.66	0.57	0.5	0.43	
NPV cost at 15% DF	997,866	280,286	247,545	217,720	194,776	171,096	2,109,289
NPV benefits at 15% DF	897,414	783,948	680,797	587,961	515,755	794,506	4,260,380
NPW at 15% DF	2,151,091						
BCR at 15% DF	2.02:1						
IRR%	69.76						