

## **Ram - Lamb Fattening**

### **1. Introduction**

1.1 Sheep contributes to food production, rural employment and gross national product by converting roughages into meat, wool and skin. There is an increasing demand for mutton and scope for export of meat.

1.2 Under the existing small ruminant production system the slaughter weight of lambs and kids in the country is lower and age at which usually achieved is much higher. The system of raising lambs for meat under grazing with supplementation although is cost effective, the procedure has not been largely adopted by the farmers due to their poor economical background and age old traditional practices. Grazing with supplementation has potential for still higher production. The major advantage of this programme is that the sheep owner can rear the animals only for six months and not for the whole year. He will get handsome profit after six months, which is at par with the lambs reared for 11-12 months under extensive grazing system. This technology would help the farmers in reducing the time period of rearing from 11-12 months and getting almost same profit per animal in addition to avoiding the mortality risk and unnecessary rearing of lambs for the whole year.

### **2. Objectives**

- To rear the lambs with improved feeding for gaining desired body weight in a shorter period.
- To avoid the risk of high mortality in lambs
- Weaning age can be reduced from 90 to 60 days

### **3. Technical Feasibility**

#### **3.1 Scheme Area**

This programme can be implemented in States having large population of sheep like Rajasthan, Uttar Pradesh, Andhra Pradesh, Tamil Nadu, Karnataka, Maharashtra and North and Sourashtra regions of Gujarat. The selected area should be nearer to veterinary aid, livestock market and bank branch.

#### **3.2 Selection of lambs**

Fat lamb production is a commercial programme. The profit earned after 6 months of rearing after weaning under semi intensive system is at par with or more than that earned after rearing lambs for 11-12 months under range condition. By selective breeding and intensive selection in some of the important indigenous sheep breeds of Malpura, Sonadi Muzafarnagari, Madras Red, Mandya, Nellore, Deccani, Marwari, Patanwadi and Dumba, lamb fattening programme can be successfully implemented in these breed tracts and in the States having large sheep population.

### 3.3 Housing

Normally sheep do not require elaborate housing facility. They should be protected against inclement weather and predators. Shelter should be provided with gunny bags or temporary removable protections made of thatching material and bamboo.

### 3.4 Feeding

In India sheep are traditionally maintained on extensive range management with supplementation of top feed resources during lean season. Due to progressive shrinkage of grazing land and market requirement of quality meat for local consumers as well as export market, fattening lambs are to be maintained on grazing / feeding on roughages with supplementation of concentrate feed on 80:20 basis.

### 3.5 Management of lambs

- The lamb should be taken care of to a maximum extent for better survival during the early period of life.
- Weaning can be done at two months of age.
- Lambs may be ear tagged or tattooed on the ear for identification.
- Use sterilized and clean knife for castration and docking and resort to proper legation and antiseptic dressing.
- During castration, keep the lambs on perfectly dry, clean and hygienic site so as to minimize the risk of loss from tetanus.
- The lamb should be protected against ecto and endo parasites by first month and vaccinated against enterotoxaemia and sheep pox. They should be protected against the vagaries of climate and predators.
- Intensive application of flock health technology to be followed instead of treating individual lamb

### 3.6 Marketing

Shepherds generally market their animals through rural agents or village weekly markets on rough estimates of weight or the appearance of the animal. The lambs can be marketed through Sheep Cooperative Societies, Meat Development Corporations of the State Government on weight basis wherever they exist and a regular marketing channel has to be established where sheep farmer can not be exploited.

## 4. Model economics of lamb fattening unit

4.1. Unit cost ( two batches of 50 lambs in a year) is given in **Annexure I**.

4.3 The techno-economic parameters and flock schedule are given in **Annexure II and III** respectively.

4.4 Cash flow statement along with net benefits generated is given in **Annexure IV**.

## **5. Lending terms**

### ***5.1 Margin Money***

Minimum down payment varies from 5 % in case of small farmers to 15% in respect of other farmers.

### ***5.2 Rate of Interest***

As determined by the financing institution. However, a rate of interest of 12% is considered in the present model.

### ***5.3 Security***

As stipulated by RBI.

### ***5.4 Insurance***

The financing bank may ensure that the beneficiary takes adequate insurance of the assets.

### ***5.5 Repayment period***

Depends on the gross surplus generated and in the present model 4 years is considered as adequate, with first year as grace

**Annexure - I**  
**Unit cost - Lamb fattening unit**

Sr.No.	Particulars	Specifications	Phy. units	Rs. per unit	Cost (Rs.)
<b>A</b>	<b>Capital cost</b>				
1	Shed cost	Sft	400	40	16000
2	Cost of equipment	Ls.			800
<b>B</b>	<b>Recurring cost</b>				
1	Cost of ram lambs	No.	50	800	40000
2	Cost of roughage for 1 batch	No.	7200	1.5	10800
3	Cost of conc. feed for 1 batch	No.	1800	8	14400
4	Cost of medicines per batch	No.	50	20	1000
5	Insurance for 6 months	% per annum	4		800
6	Miscellaneous expenses	No.	50	10	500
<b>C</b>	Total unit cost				84300
				Say Rs.	84300
<b>D</b>	Margin money				12645
<b>E</b>	Bank loan				71655

**Annexure - II****Techno-economic parameters - Lamb fattening unit**

<b>A.</b>	<b>Production norms</b>	
1	Construction period (months)	2
2	Unit size (no. of lambs per batch)	50
3	Frequency of introduction of batch (months interval)	6
4	Age of lambs at the time of purchase (months)	2
5	Weight at the time of purchase (kg)	8
6	Fattening period (days)	180
7	Age at the time of sale (months)	8
8	Average weight at the time of sale (kg)	28
<b>B.</b>	<b>Expenditure norms</b>	
1	Shed space requirement (sft per lamb)	8
2	Cost of construction of kutcha shed (Rs. per sft.)	40
3	Cost of equipment (Ls.)	800
4	Cost of Ram lamb of two months age	800
5	Quantity of roughages (kg/lamb/day)	0.8
6	Cost of roughages (Rs./kg)	1.5
7	Conc. feed requirement (kg/lamb/day)	0.2
8	Feed cost (Rs./kg)	8
9	Cost of medicines for 6 months (Rs. per lamb)	20
10	Cost of labour	Family labour
11	Miscellaneous expenses (Rs. per lamb)	10
12	Insurance for 1 year (%)	4
13	Insurance for 6 months (Rs. per unit of 50 rams)	800
14	Mortality in lambs is ignored as the insurance claim amount will be used for replacement	
<b>C.</b>	<b>Income norms</b>	
1	Sale value of ram lambs at the end of 6 months (9-10 months age)	1960
2	Income from sale of manure (Rs. per lamb)	20
<b>D.</b>	<b>Banking norms</b>	
1	Margin money (% of total cost)	15
2	Interest rate (% per annum)	12
3	Grace period (years)	1
4	Repayment period (years)	4
5	Depreciation on sheds and equipment	15
6	Closing stock value of 6-7 months old ram lambs (Rs. per lamb)	1500

### Annexure - III

#### Flock replacement schedule and lamb days - Lamb fattening unit

Sr. No.	Particulars	Years				
		I	II	III	IV	V
1	Month of introduction - I batch	3	15	27	39	51
2	Month of introduction - II batch	9	21	33	45	57
3	Month of sale - I batch	9	21	33	45	57
4	Month of sale - II batch*	15	27	39	51	-
5	No. of batches purchased	2	2	2	2	2
6	No. of batches sold	1	2	2	2	2
7	Lamb rearing days	15000	18000	18000	18000	18000
8	Capitalised	9000	0	0	0	0
9	Net lamb rearing days	6000	18000	18000	18000	18000

\*II batch introduced in fifth year will be sold in 63rd month i.e in sixth year of the project period

### Annexure - IV

#### Cash flow analysis - Lamb fattening unit

(Rupees)

Sr. No.	Particulars	Years				
		I	II	III	IV	V
<b>A</b>	<b>Costs :</b>					
1	Capital cost	84300	0	0	0	0
2	<b>Recurring costs*</b>					
i	Cost of ram lambs	40000	80000	80000	80000	80000
ii	Cost of roughages	7200	21600	21600	21600	21600
iii	Cost of concentrate feed	9600	28800	28800	28800	28800
iv	Cost of medicines	667	2000	2000	2000	2000
v	Insurance	800	1600	1600	1600	1600
vi	Miscellaneous expenses	333	1000	1000	1000	1000
	<b>Total of recurring expenditure</b>	<b>58600</b>	<b>135000</b>	<b>135000</b>	<b>135000</b>	<b>135000</b>
	<b>Total costs</b>	<b>142900</b>	<b>135000</b>	<b>135000</b>	<b>135000</b>	<b>135000</b>
<b>B</b>	<b>Benefits:</b>					
1	Sale of ram lambs	98000	196000	196000	196000	196000
2	Sale of manure	1667	2000	2000	2000	2000
3	Value of sheds and equipments					4200

4	Closing stock value (6-7 months age)					75000	
	<b>Total benefits</b>	<b>99667</b>	<b>198000</b>	<b>198000</b>	<b>198000</b>	<b>277200</b>	
<b>D</b>	DF @ 15%	0.8696	0.7561	0.6575	0.5718	0.4972	
<b>E</b>	Present Worth of costs @15%	124261	102079	88765	77187	67119	459411
<b>F</b>	Present Worth of benefits @15%	86667	149716	130188	113207	137817	617596
<b>G</b>	NPW @ 15%		<b>158185</b>				
<b>H</b>	BCR		<b>1.34</b>	<b>:1</b>			
<b>I</b>	Net benefits	-43233	63000	63000	63000	142200	
<b>J</b>	IRR		>50%				

\* Recurring expenditure during first year is other than capitalised recurring expenditure

### Annexure - V Repayment schedule - Lamb fattening unit

Bank loan (Rs.) 71655  
Interest rate (%) 12

(Rupees)

Sr.No	Particulars	Years			
		I	II	III	IV
1	Income	99667	198000	198000	198000
2	Expenditure*	58600	135000	135000	135000
3	Gross surplus (1-2)	41067	63000	63000	63000
4	Bank loan at the beginning of the year	71655	71655	48755	25655
5	Interest accrued	8599	8599	5851	3079
6	Repayment of interest	8599	8599	5851	3079
7	Repayment of principal	0	22900	23100	25655
8	Total repayment (6+7)	8599	31499	28951	28734
9	Net surplus (3-8)	32468	31501	34049	34266

\* Expenditure during first year is other than capitalised amount