

### Model Unit Cost and Economics of a 10 Cross Bred Unit

<b>B. Techno economic parameters</b>		
Type of Animal	:	Cross Bred
No. of Animals	:	10
Cost of Animal (Rs./animal)	:	40000
Transportation Cost/Animal	:	2000
Average Milk Yield (litre/day)	:	10
Floor space (sqft) per adult animal	:	60
Floor space (sqft) per calf	:	20
Cost of construction per sqft (Rs.)	:	150
Cost of chaff cutter (power operated) (Rs.)	:	50000
Cost of equipment per animal (Rs.)	:	1000
Cost of fodder cultivation (Rs./acre/season)	:	4500
Insurance premium (% per annum)	:	5
Veterinary aid/animal/ year (Rs.)	:	250
Cost of concentrate feed (Rs./kg)	:	15
Cost of dry fodder (Rs./kg)	:	3
No. of labourers	:	1
Salary of labourer per month (Rs.)	:	3000
Cost of electricity and water/animal/year (Rs.)	:	150
Margin (%)	:	15
Rate of interest (%)	:	12
Repayment period (years)	:	7
Selling price of milk/litre (Rs./kg)	:	30
Sale price of gunny bags (Rs. per bag)	:	15
Lactation days	:	305
Dry days	:	60

#### **A. Project Cost**

Cost of milch animals (@ 40000/) including transportation cost	<b>Rs.</b>	: 420000
Cost of construction of shed for adult animals		: 90000
Cost of construction of shed for calves		: 30000
Cost of chaff cutter		: 50000

Cost of equipment	: 10000
<b>Capital cost</b>	<b>: 600000</b>
Cost of feed for 1 <sup>st</sup> month(Rs102X30daysX10 animals)	: 30600
Cost of fodder cultivation in 2 acres	: 9000
Insurance of first batch of milch animals	: 20000
<b>Recurring cost</b>	<b>: 59600</b>
<b>Total cost (600000 +59600)</b>	<b>: 659600</b>
or say	<b>: 660000</b>
Margin (15%)	<b>: 99000</b>
Bank Loan	<b>: 561000</b>

- Freshly calved animals in 1st or 2nd lactation are purchased
- Cost of rearing calves not considered as it will be nullified by their sale value or retention value.
- Fodder cultivation considered in two acres and working capital for one crop / season considered. Two crops considered per year.
- Manure utilised for fodder cultivation.

### Feeding Schedule Per Day

	Lactation			Dry	
	Price (Rs.)	Qty. (kg)	Cost Per Day (Rs.)	Qty. (kg)	Cost Per Day (Rs.)
Concentrate Feed	15.00	6	90.00	1	15.00
Green Fodder	Home grown	25	0.00	20	0.00
Dry Fodder	3.00	4	12.00	5	15.00
<b>Total</b>			<b>102.00</b>		<b>30.00</b>

### Lactation Chart

<b>Years</b>	<b>1</b>	<b>2</b>
Lactation Days	305	305
Dry Days	60	60

### C. Economics

<b>Income</b>	<b>1</b>	<b>2</b>
Sale of Milk (10 animals x 10 lit yield X305 days x Rs 30)	<b>915000</b>	915000
<b>Recurring Expenditure</b>		
Cost of feeding during lactation(305days x Rs102 x 10animal)	311100	311100
Cost of feeding during dry period (60daysxRs30x10animal)	18000	18000
Cost of fodder cultivation	18000	18000
Veterinary aid and breeding charges	2500	2500
Labour charges	36000	36000
Electricity and misc. charges	1500	1500
Insurance charges	20000	20000
<b>Total</b>	<b>389100</b>	<b>389100</b>
<b>Surplus (915000 – 389100)</b>	<b>525900</b>	<b>525900</b>

### D. Repayment schedule

Bank loan : Rs. 561000

Interest Rate (%) : 12%

<b>Years</b>	<b>Income</b>	<b>Expenses</b>	<b>Gross surplus</b>	<b>Instalment</b>	<b>Interest</b>	<b>Total EMI</b>	<b>Net surplus</b>
1	915000	389100	525900	80143 (561000/7)	67320	147463	378437

This type of expenses and income will be continued for 7 years till repayment of loan.