

APPRAISAL OF COMMERCIAL DAIRY UNIT
FARM MODEL OF DAIRY UNIT OF 20 BUFFALOES

TECHNO-FINANCIAL ASSUMPTIONS

Components:-

Type Of Animal	Buffaloes
No of animals	20
Cost of animal(including transportation and insurance) (Rs/-)	35,000
Average milk yield (liters/day)	8
Selling price of milk/lit (Rs/-)	21
Sale of manure/animal/year (Rs/-)	500
Culled value/ animal at the end of fifth lactation (Rs/-)	10,000
Veterinary aid /animal/year	500
Rate of interest (%)	12
Residual value of shed and equipment to be taken(yes/no)	NO
Repayment period(years)	3
% Of net surplus towards repayment	80

Feeding Schedule:-

	Lactation Period		Dry Period &	
	Quantity(Kg)	Cost	Quantity(Kg)	Cost
i. Concentrate Feed (Rs.10/Kg)				
For milk (1 kg/3 litre)	4	40	0	0
For Maintenance+preg.	1	10	1.5	15
ii. Green Fodder	20	0	20	0
iii. Dry Fodder(Rs.3/Kg)	5	15	5	15

Particulars	Cost (Rs.)
A. Capital Cost	
Cost of Crossbred Cows including transport cost & Insurance cost (20animals; Rs. 35,000 each)	7,00,000
Shed for adult animals (40 sq.ft/animal; Rs. 80/sq.ft)	96,000
Equipment cost	25,000
Cost for fodder cultivation(for 1 acre)	30,000
B. Working capital	
Cost of Feeding first animal for one month	24,000
Total	8,75,000

- Based on the Norms the funding for dairy unit was as follows

Total Project Cost	8,75,000
Margin Money (Borrower/company)	1,50,000
Bank Loan	7,25,000

- Based on an inter-calving period of 400 days (250 lact.days + 150 dry days), the lactation chart for the animal farm is given below.

Year	I Batch		II Batch		Total	
	Lactation days	Dry days	Lactation days	Dry days	Lactation days	Dry days
I	2500	1150	1800	0	4300	1150
II	2800	850	2150	1500	4950	2350
III	2650	1000	2150	1500	4800	2500
IV	2150	1500	2150	1500	4300	3000
V	2150	1500	2650	1000	4800	2500

Projected Profitability:-

Particulars	I year	II year	III year	IV year	V year
Income:					
By sale of Milk	7,22,400	8,31,600	8,06,400	7,22,400	8,06,400
By sale of Manure	7,500	10,000	10,000	10,000	10,000
Total	7,29,900	8,41,600	8,16,400	7,32,400	8,16,400
Expenditure:					
concentrated feed	2,26,500	2,71,000	2,65,000	2,45,000	2,65,000
Dry Fodder	81,750	1,09,500	1,09,500	1,09,500	1,09,500
Labor cost	48,000	48,000	48,000	48,000	48,000
On Veterinary Aid	7,500	10,000	10,000	10,000	10,000
Total	3,63,750	4,38,500	4,32,500	4,12,500	4,32,500
Net Income	3,66,150	4,03,100	3,83,900	3,19,900	3,83,900

Financial Analysis:-

Particulars	I year	II year	III year	IV year	V year
Cost:					
Capital Cost	8,75,000				
Recurring cost	3,63,750	4,38,500	4,32,500	4,12,500	4,32,500
Total Cost	12,14,750	4,38,500	4,32,500	4,12,500	4,32,500
Benefits	7,29,900	8,41,600	8,16,400	7,32,400	8,16,400
Residual value					2,00,000
Total Benefit	7,29,900	8,41,600	8,16,400	7,32,400	10,16,400
Net Benefit	-4,84,850	4,03,100	3,83,900	3,19,900	5,83,900
Discount Factor at 15 %	0.87	0.76	0.66	0.57	0.50
BCR	1.34: 1				
NPV	6,40,123				
IRR	>50% (80.87 %)				

Repayment Period:-

Year	Loan Outstanding	Interest (12%)	Net Profit	Repayment of Principal	Total Repayment	Net Surplus
1	7,25,000	87,000	3,66,150	2,05,920	2,92,920	73,230
2	5,19,080	62,290	4,03,100	2,60,190	3,22,480	80,620
3	2,58,890	31,067	3,83,900	2,58,890	2,89,956	93,944
4	0	0	3,19,900	0	0	3,19,900
5	0	0	5,83,900	0	0	5,83,900