

MODEL PROJECT REPORT

DAIRY FARMING

20 CB COWS/GRADED BUFFALOES

INTRODUCTION

Dairy farming from being a traditional family run businesses, today has grown hugely to an organized dairy industry with technological specializations in every part of the process. There has been tremendous growth in dairy farming sector in terms of technological advancement that help the modern dairy farms to manage thousands of dairy cows and buffaloes. This huge boost in the industry has created a lot of farming jobs for the people. But many of the dairy farms still manage and run organic dairy farms mostly in villages and supply the milk to get processed by large companies and finally sell to the retail outlets. The best approach is to create and run a sustainable dairy farm that gives maximum profits to the farm and also takes care of the effects of dairy farms on environments and animals for a longer period. Though a profitable business venture dairy farming in India requires hard work, proper planning and an active and very alert managers and supervisors. In today's technological world there have been many advances in modern dairy farming. Everything from feed for dairy cows to milk processing equipment have added tremendous scope to the dairy farming industry.

Milk plays an important essential food for human life, since babyhood to end of elderly life. Milk is a complex food that contains vital nutrients for the bodies of young mammals. Milk is the only food of the mammal during the first period of its life and the substances in milk provide energy and antibodies that help protect against infection. For humans, milk and dairy products make a significant contribution to meeting our bodies' needs for calcium, magnesium, selenium, riboflavin, vitamin B12 and pantothenic acid (vitamin B5) and therefore play a key role for health and happiness in our development.

Scope of dairy farming-

The share of livestock product is estimated at 21% of total agriculture sector. The fact that dairying could play a more constructive role in promoting rural welfare and reducing poverty is increasingly being recognized. Dairying is an important source of subsidiary income to small/marginal rural farmers and agricultural labourers. The manure from animals provides a good source of organic matter for improving soil fertility and crop yields. The bio gas from the dung is used as fuel for domestic purposes as also for running engines for drawing water from well. The surplus fodder and agricultural by-products are gainfully utilized for feeding the animals. Almost all draught power for farm operations and transportation is supplied by bullocks. Since agriculture is mostly seasonal, there is a possibility of finding employment throughout the year for many persons through dairy farming. Thus, dairy also provides employment throughout the year

Future prospects

- Large rural market gap
- Increasing quantity of available milk for processing
- Fast growing economy
- Diversification
- large market and investment opportunity
- increasing income of consumers,
- Changing life style and preference for milk and milk products, more number of adult consumers, untapped markets

A	TECHNO ECONOMIC PARAMETERS						
1	Type of Animal						CB Cows/ Graded Buffaloes
2	No of animals						20
3	No of animals/batch						10
4	Cost of animal(Rs.)						50000
5	Cost of culled animals						5000
6	Tranportation cost/animal						1500
7	Average milk yeld(ltr/day)						10
8	Floor space(sq.ft/adult animal)						50
9	Floor space(sq.ft/calf)						20
10	Cost of construction/sq.ft						200
11	Cost of chaff cutter(power operated)						50000
12	Cost of equipments/animal						1500
13	Insurance premium/annum (%)						5
14	Veterinary aid/animal/year						1000
15	Quantity of conc Feed/Bag in Kg						50
16	Cost of conc feed/kg						16
17	Cost of dry fodder/kg						2
18	Cost of green fodder/kg						1
19	No of labourers						2
20	Salary of labourer/month						6000
21	Cost of electricity & water/animal/year						600
22	Promoter's margin (%)						30
23	Rate of Interest(%)						10
24	Repayment period(years)						7
25	Selling price of milk/liter(Rs.)						30
26	Sale price of gunny Bag(Rs.)						15
27	Lactation days(nos)						270
28	Dry days(nos)						150

B	CAPITAL COST						
1	Cost of animals						1000000
2	Transportation cost						30000
3	Construction of animal shed						200000
4	Construction of calf shed						80000
5	Cost of chaff cutter & equipment						80000
						TOTAL	1390000

C	MEANS OF FINANCE						
1	Bank Loan					70%	973000
2	Promoter's contribution					30%	417000
						TOTAL	1390000

D	FEEDING SCHEDULE						
				Lactation		Dry	
	Type of Feed		Rate/Kg (Rs.)	Quantity	Cost/day	Quantity	Cost/day
1	Conc. feed/animal/day		16	5	80	2	32
2	Green fodder/animal/day		1	25	25	20	20
3	Dry fodder/animal/day		2	4	8	5	10
	Total				113		62

E	TOTAL CONCENTRATE FEED CONSUMED(kg)						
	Year			Lactation	Dry	Total	No of gunny bags
1	1st Year			16500	600	17100	342
2	2nd Year			22500	5400	27900	558
3	3rd Year			22500	5400	27900	558
4	4th Year			24000	4800	28800	576
5	5th Year			24000	4800	28800	576
6	6th Year			24000	4800	28800	576
7	7th Year			24000	4800	28800	576

F	LACTATION CHART/ANIMAL	Year	1st Batch		2nd Batch	
			Lactation Days	Dry Days	Lactation Days	Dry Days
			1	1st Year	240	30
2	2nd Year	240	120	210	150	
3	3rd Year	210	150	240	120	
4	4th Year	210	150	270	90	
5	5th Year	210	150	270	90	
6	6th Year	210	150	270	90	
7	7th Year	210	150	270	90	

G	ECONOMICS	Years						
		1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	7th Year
1	Sale of Milk	990000	1350000	1350000	1440000	1440000	1440000	1440000
2	Sale of Gunny Bags	5130	8370	8370	8640	8640	8640	8640
3	TOTAL	995130	1358370	1358370	1448640	1448640	1448640	1448640
4	Cost of feeding during lactation	372900	508500	508500	542400	542400	542400	542400
5	Cost of feeding during dry period	18600	167400	167400	148800	148800	148800	148800
6	Veterinary & breeding charges	20000	20000	20000	20000	20000	20000	20000
7	Labour charges	144000	144000	144000	144000	144000	144000	144000
8	Electric & Misc. expenses	12000	12000	12000	12000	12000	12000	12000
9	Insurance charges	50000	50000	50000	50000	50000	50000	50000
10	Interest on Bank loan	97300	83400	69500	55600	41700	27800	13900
11	TOTAL	714800	901900	901900	917200	917200	917200	917200
12	Surplus	280330	456470	456470	531440	531440	531440	531440

H	BCR & IRR								
		Capital Cost	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	7th Year
1	Capital Cost	1390000	0	0	0	0	0	0	0
2	Recurring Cost	0	714800	901900	901900	917200	917200	917200	917200
3	Total Cost	1390000	714800	901900	901900	917200	917200	917200	917200
4	Benefit	0	995130	1358370	1358370	1448640	1448640	1448640	1448640
5	Net benefit	-1390000	280330	456470	456470	531440	531440	531440	531440
6	PW cost@12%	5372076							
7	PW benefit@12%	6070106							
8	NPW	698030							
9	Benefit Cost Ratio (BCR)	1.13							
10	IRR in %	25%							

LOAN REPAYMENT SCHEDULE									
I	Year		Loan O/S (Opening)	Gross Surplus	Interest Payment	Principal Payment	Total Repayment	Net Surplus	Loan O/S. (Closing)
1	1st Year		973000	377630	97300	139000	236300	141330	834000
2	2nd Year		834000	539870	83400	139000	222400	317470	695000
3	3rd Year		695000	525970	69500	139000	208500	317470	556000
4	4th Year		556000	587040	55600	139000	194600	392440	417000
5	5th Year		417000	573140	41700	139000	180700	392440	278000
6	6th Year		278000	559240	27800	139000	166800	392440	139000
7	7th Year		139000	545340	13900	139000	152900	392440	0
				3708230	389200	973000	1362200	2346030	

J	RECEIPT & PAYMENT ACCOUNT								
	RECEIPT	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year	7th Year	Total
1	Opening Balance	0	39330	93400	161370	198210	248950	313590	0
2	Bank loan	973000	0	0	0	0	0	0	973000
3	Promoter's contribution	417000	0	0	0	0	0	0	417000
4	Sales Revenue	995130	1358370	1358370	1448640	1448640	1448640	1448640	9506430
5	TOTAL	2385130	1397700	1451770	1610010	1646850	1697590	1762230	10896430
	PAYMENT								
6	Cost of animals	1000000	0	0	0	0	0	0	1000000
7	Transportation of animals	30000	0	0	0	0	0	0	30000
8	Construction of cow & calf sheds	280000	0	0	0	0	0	0	280000
9	Machinery & equipments	80000	0	0	0	0	0	0	80000
10	Cost of feeding during lactation	372900	508500	508500	542400	542400	542400	542400	3559500
11	Cost of feeding during dry period	18600	167400	167400	148800	148800	148800	148800	948600
12	Veterinary & breeding charges	20000	20000	20000	20000	20000	20000	20000	140000
13	Labour charges	144000	144000	144000	144000	144000	144000	144000	1008000
14	Electric & Misc. expenses	12000	12000	12000	12000	12000	12000	12000	84000
15	Insurance charges	50000	50000	50000	50000	50000	50000	50000	350000
16	Repayment of Bank loan	139000	139000	139000	139000	139000	139000	139000	973000
17	Interest on Bank loan	97300	83400	69500	55600	41700	27800	13900	389200
18	Promoter's Drawal	102000	180000	180000	300000	300000	300000	300000	1662000
19	Total Payment and expenses	2345800	1304300	1290400	1411800	1397900	1384000	1370100	10504300
20	Closing Balance	39330	93400	161370	198210	248950	313590	392130	392130
21	TOTAL	2385130	1397700	1451770	1610010	1646850	1697590	1762230	10896430

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