

PROJECT REPORT ON

DAIRY FARMING(COW)



SUBMITTED BY

PKC AGRO

AURANGABAD

Mobile No.: 9921571234

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CHAPTER - I**HIGHLIGHTS OF THE PROJECT REPORT****A. ABOUT THE PROMOTER**

PARTICULARS	ABOUT THE PROMOTER
1. Name	: PKC AGRO
2. Address	: AURANGABAD
3. Contact Number	9921571234
4. Date of Birth	: 15/06/1992
5. Project Location	: AURANGABAD
6. Constitution	: Proprietorship
7. Product	: Milk, Mannure
8. Experience	: AVAILED TRAINING AT PANDURANG KRUSHI

B. PROJECT PROFILE (FINANCIAL)

PARAMETERS	VALUES
1. Breed	Jersey Cow(cross breed)
2. Unit Size	10
3. Product	Milk, Mannure
4. Cost of the Project	1,165,750
5. Bank Loan	874,313
6. Margin Money	291,438
7. Financial Indicators	
BCR at 15% DF	1.25:1
NPW 15% DF(Rs.)	913,189
IRR (%)	61.27
DSCR	2.0
8. Interest Rate (% per annum)	12
9. Repayment	5 years

CHAPTER - II

PROJECT DESCRIPTION

Introduction

Animal husbandry and agriculture are synergistically involved and are the important source of income and employment in rural areas. Among them, dairying provides security to farmers, especially when agriculture fails. Dairy farming is essential to millions of poor households across the country not only as a source of income but also as a major source of protein, supplementary nutrition, fertilizer, fuel and a store of wealth.

Enhancement in milk processing has necessitated the increased demand for milk and this triggered the setting up of many commercial dairy units in medium and small scale in different parts of the country. Introduction of improved technologies, availability of compounded feed are the other factors responsible for this shift from traditional mixed farming production to specialized dairy production system. Dairying with high yielding breeds has generated ample scope for developing the dairy farming on commercial lines as a business enterprise.

Production Technology

Project Location:

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

Feed & Fodder:

- (1) Feed should be balanced and offered twice a day with 8-10 hours interval.
- (2) Cow require dry matter daily @2.5 kg and 3.0 kg/100kg body weight, respectively.
- (3) About 2/3 parts from dry +green roughages and 1/3 part of total dry matter need should be fulfilled with concentrate mixture.
- (4) If green fodder is in practice of feeding the animal, concentrate mixture should have 11-12 % protein. If there is no green fodder then atleast 18% protein must be in the concentrate mixture.
- (5) Type of feed should be changed gradually otherwise it will provide adverse effect on the digestion system of the animal.
- (6) Dry and green fodder should be offered just after feeding the concentrate mixture.
- (7) Animal should be allowed to drink fresh and clean water twice a day.
- (8) Animal should be offered clean, tasty, digestible, nutritious and cheap feed.
- (9) 40 -50 gm Sodium chloride and 2%mineral mixture should be given/day/animal.
- (10) For growth, milk production and pregnancy, extra ration in the form of concentrate mixture should be offered.
- (11) 1 kg concentrate mixture for production of each 3 kg milk in case of cattle and each 2 1/2 kg milk in Cow should be given per day.
- (12) Above 6 months of pregnancy, 1 kg and 1 ½ kg concentrate mixture per day should be given to cow.
- (13) At least 5 kg green fodder per day must be included in the feeding of milch animal otherwise milk production will be decreased. While feeding the animal, one should behave lovely.

Electricity:

Adequate supply of electricity is available.

Labour:

Honest, economic and regular supplies of labours are available.

Veterinary Aid:

Veterinary Hospital, Artificial Insemination Center/livestock Aid Centers is available close to dairy farm.

CHAPTER - III

MARKET POTENTIAL

Milk is one of the widely and extensively used items in Indian cuisine throughout country. India has the privilege to be the largest producer of liquid milk but still there is a gap between demand and supply

The country production of milk is one hundred and twelve million ton and there is increase of production of milk in the country at the rate of 3.5 million ton per year but it is not enough to meet the demand in the country of milk which is increasing at the rate of six million ton per year. So this is massive gap of demand and supply of milk.

With milk product exports forming around 5 per cent of India's total milk production, and domestic demand for dairy products remaining strong, there is the demand-supply gap. The demand for milk and value-added dairy products in the domestic market has been growing at over 6 to 8 per cent per annum because of increasing income, rising aspirations, and consequent growth in per capita milk consumption.

The demand for milk more than doubled on the religious occasion like Maha Shivratri. Apart from 'abhishek' rituals, milk is also required for the preparation of thandai which is consumed as prasad by the devotees. A number of vendors, thandai shop owners and sweet makers purchase milk in bulk one day in advance. There is good demand of milk during peak wedding season also.

Milk can be sold to milk cooperative societies as well as entrepreneur can develop his network of consumers. Milk can be sold in the immediate market directly to customers, hotels, hospitals, sweet makers etc. Hotels and some general customers (can be around 30%) prefer pure Cow milk where as hospitals, sanitariums prefer cow's milk. One can reach buy back agreement with either district milk union or with private milk marketing company

CHAPTER - IV

SWOT ANALYSIS

Strengths:

- Cow is India's milking machine, accounting for more than half of the country's milk production.
- Urbanisation, burgeoning population, raise in per capita income and change in food habits which leads to increased consumption of milk.
- Whitening property of Cow milk makes it more suitable for manufacture of some dairy products and its acceptance as fluid milk is high.
- Provide regular income to the farmer.
- Provide employment to rural population mainly women.
- Dairy farming helps directly in increasing crop production by making available draught power, manure and cash income on day- today basis.
- Additional income improves the quality of life in rural areas.
- Favorable Government policies for development of livestock sector.

Opportunities:

- Cost of milk production in India is low.
- Scope exists for higher milk yield through better use of crop residues and other feeds Upgrading cattle.
- Improving availability of animal health care facilities Improving availability of animal health care facilities.
- Better returns because of increased awareness in consumers about quality.
- Good scope exists for value-added products like desserts, puddings, custards, sauces, mousse, stirred yogurt, nectars and sherbets.
- Latest packaging technology can help retain nutritive value of packaged products and extend their shelf-life.

Weakness

- Feed availability to cattle throughout the year is not adequate.
- Frequent disease outbreaks.
- Lower productivity of Animals.
- Labour shortage and high wage rate in dairy farming.
- Limited investment or delay in the availability of funds in setting up or expansion of milk procurement.
- Poor infrastructure in many areas for transporting rurally-produced milk to major processing centers.

Threats

- Natural calamities like floods, drought, diseases that can affect feed to cattle/cattle population.
- Seasonal fluctuations in milk production.
- Dwindling fodder resources.

CHAPTER-V
ECONOMICS OF THE PROJECT

A. BASICS AND PRESUMPTIONS

PARTICULARS	UNIT	QUANTITY
<u>I. Techno-economic parameters</u>		
1. Floor space (sqft) per adult animal	Sq.ft	80
2. Floor Space (sqft) per calf	Sq.ft	60
3. Inter-Calving period(Lactation days 280 + Dry days 120) Days		400
4. Rate of Interest of bank loan	%	12
5. Repayment Period	Years	5
6. Freshly calved animals in 1st and 2nd lactation are purchased in two batches at an interval of 5 to 6 months.		
7. Once the young animal reared within the herd that is ready to calve, would replace the oldest animal.		
8. The animals apart from 1st, 2nd or 3rd lactations are assumed to be sold off to maintain constant herd size.		
9. Male calves are assumed to be sold off.		
10. Cost of rearing calves is not considered as it will be nullified by their sale value.		
<u>II. Expenditure norms</u>		
1. Cost of cow including transportation	Rs./animal	50,000
2. Cost of concentrate feed	Rs./kg.	25
3. Cost of fodder cultivation	Rs./acre/annum	10,000
4. Cost of dry fodder	Rs./kg.	20
5. Cost of construction of shed	Rs./sq.ft	200
6. Rate of construction of labour quarter, store room	Rs./sq.ft	300
7. Cost of chaff cutter (power operated)	Rs.	30,000
8. Electric motor	Rs.	25,000
9. Cost of milking machine with accessories	Rs.	0
10. Cost of equipment per animal	Rs.	1,000
11. No. of unskilled labour required	Nos.	1
12. Cost of unskilled labour per annum	Rs.	60,000
13. Cost of veterinary aids	Rs./animal/annuum	1,500
14. Cost of elctricity and water	Rs./month	2,500
15. Insurance	%	5
<u>III. Income norms</u>		
1. Milk yield per cow per day	Liters	15
2. Selling price of milk	Rs./liter	30
3. Production of manure	Tonn/year/cow	5
4. Selling price of mannure	Rs./tonn	2,500

B. TOTAL COST OF PROJECT

PARTICULARS	UNIT	UNIT RATE	QUANTITY	AMOUNT
		Rs.		Rs.
I. Capital Cost				
1. Land & Site Development				
Land				Own
Site development				25,000
2. Buildings				
Shelter shed for adult animal	Sq.ft.	200	800	160,000
Shed for adult calves	Sq.ft.	200	600	120,000
Labour quarter	Sq.ft.	300	100	30,000
Milk room	Sq.ft.	200	200	40,000
Water tank	Ls.			<u>50,000</u>
				400,000
3. Cost of Cow including transportation	Nos.	50,000	10	500,000
4. Plant & Machinery				
Chaff cutter and equipment	Nos.	30,000	1	30,000
Electronic motor	Nos.	25,000	1	25,000
Generator set	Nos.	50,000	1	50,000
Cost of electrification	Ls.			10,000
Cost of equipments like Weighing Machine, Milk cans, Buckets etc.	Rs./animal	1,000	10	<u>10,000</u>
				125,000
5. Preliminary Exp. (Project Formulation, Consultancy, Contingency etc.)	%	5		52,500
			TOTAL-A	1,102,500
II. Working Capital (for first month of first batch)				
1. Cost of concentrate feed for first batch for first month	/day/animal	205	150	30,750
2. Cost of fodder cultivation in 2 acres	Ls.			20,000
3. Insurance for the first batch animal	%	5		<u>12,500</u>
			TOTAL-B	63,250
TOTAL COST OF PROJECT			TOTAL (A+B)	1,165,750

C. MEANS OF FINANCE

PARTICULARS	UNIT	UNIT RATE	AMOUNT Rs.
1. Term loan	%	75	874,313
2. Own contribution	%	25	<u>291,438</u>
		TOTAL	1,165,750

D. PROJECTED PROFITABILITY**I. Feeding Schedule per Day**

Feeding Stuff	Cost/Kg.	Lacation Period		Dry Period	
	Rs.	Quantity Kg.	Amount Rs.	Quantity Kg.	Amount Rs.
1. Concentrate Feed	25	5	125	2	50
2. Green Fodder	-	25	Home Grown	20	Home Grown
3. Dry Fodder	20	4	<u>80</u>	5	<u>100</u>
		TOTAL	205		150

II. Lactation/ Dry Chart

PARTICULARS	I YEAR	II YEAR	III YEAR	IV YEAR	V YEAR
I. Lactation Days					
First batch of animals					
No. of animals	5	5	5	5	5
Lactation days per Cow per year	250	280	280	280	280
TOTAL-A	1,250	1,400	1,400	1,400	1,400
Second batch of Animals					
No. of animals	5	5	5	5	5
Lactation days per Cow per year	145	245	245	245	245
TOTAL-B	725	1,225	1,225	1,225	1,225
TOTAL(A+B)	1,975	2,625	2,625	2,625	2,625
II. Dry Days					
First batch of animals					
No. of animals	5	5	5	5	5
Dry days per Cow per year	115	85	85	85	85
TOTAL-A	575	425	425	425	425
Second batch of animals					
No. of animals	5	5	5	5	5
Dry days per Cow per year	0	120	120	120	120
TOTAL-B	0	600	600	600	600
TOTAL(A+B)	575	1,025	1,025	1,025	1,025

III. Projected Profitability

(Value in Rs.)

PARTICULARS	UNIT	UNIT RATE	QUANTITY	I YEAR	II YEAR	III YEAR	IV YEAR	V YEAR
1. Income								
I. Sale of Milk								
Quantity (Milk yield per cow per lactation day * Total no. of lactation days)	ltrs			29,625	39,375	39,375	39,375	39,375
Selling price of milk	Rs./ltrs			30	30	30	30	30
Income from milk	Rs.			888,750	1,181,250	1,181,250	1,181,250	1,181,250
II. Sale of culled animals	Rs.			26,663	59,063	59,063	59,063	59,063
III. Sale of manure	Ton	2,500	50	125,000	125,000	125,000	125,000	125,000
			TOTAL (A)	1,040,413	1,365,313	1,365,313	1,365,313	1,365,313
2. Expenditure								
Feed during lactation period	/day/animal	205	2,625	404,875	538,125	538,125	538,125	538,125
Feed during dry period	/day/animal	150	600	86,250	153,750	153,750	153,750	153,750
Cultivation of green fodder	acre	10,000	2	20,000	20,000	20,000	20,000	20,000
Electricity, water	Rs./month	2,500	12	30,000	30,000	30,000	30,000	30,000
Unskilled workers	Rs./annum	1	60,000	60,000	60,000	60,000	60,000	60,000
Veterinary aids	Rs./animal	1,500	10	15,000	15,000	15,000	15,000	15,000
Insurance	%	5		25,000	25,000	25,000	25,000	25,000
Transportation	Ls.			25,000	25,000	25,000	25,000	25,000
			TOTAL (B)	666,125	866,875	866,875	866,875	866,875
3. Net Income				TOTAL (A-B)	374,288	498,438	498,438	498,438

E. FINANCIAL ANALYSIS*(Value in Rs.)*

PARTICULAR	I Year	II Year	III Year	IV Year	V Year
Capital Costs	1,102,500				
Recurring Costs	666,125	866,875	866,875	866,875	866,875
TOTAL COST	1,768,625	866,875	866,875	866,875	866,875
Benefit	1,040,413	1,365,313	1,365,313	1,365,313	1,365,313
Depreciated Value of Building, Fencing, borewell etc @10%					264,939
Depreciated Value of Equipments @15%					53,563
Closing Stock value @10% Depreciation					292,750
TOTAL BENEFIT	1,040,413	1,365,313	1,365,313	1,365,313	1,976,564
NET BENEFIT	-728,213	498,438	498,438	498,438	498,438
Discounting Factor @15%	0.87	0.76	0.66	0.57	0.5
NPV Cost at 15% DF	572,138	658,825	572,138	494,119	433,438
NPV Benefits at 15% DF	905,159	1,037,638	901,106	778,228	988,282
NPW at 15% DF	913,189				
BCR at 15% DF	1.25:1				
IRR%	61.27				

F. TERM LOAN REPAYMENT

Rate of interest - % per annum : 12.00

Opening balance of term loan : 874,313

(Value in Rs.)

Year	Loan Outstanding	Net Income	Principal	Interest	Total Repayment	Net Surplus	DSCR
1	874,313	374,288	174,863	104,918	279,780	94,508	1.3
2	699,450	498,438	174,863	83,934	258,797	239,641	1.9
3	524,588	498,438	174,863	62,951	237,813	260,625	2.1
4	349,725	498,438	174,863	41,967	216,830	281,608	2.3
5	174,863	498,438	174,863	20,984	195,846	302,592	2.5
						Average DSCR	2.0