

Annexure I

Economics of Integrated Dairy Farm (2 CB Cows with Azolla culture and vermicompost)

A. Techno-economic parameters

Sl. No.	Particulars	Parameter Value
1	No of Animals (No.)	2
2	No of Animal in First Batch	1
3	No of Animal in Second Batch	1
4	No. of Days after which Second batch animal Purchased after First	180
5	Stage at which the animal is bought (Days of Lactation)	30
6	Milk Yield (Litre/Day/Animal)	8
7	Rate of Animal (₹/Litre Milk)	5000.00
8	Cost of Animal (₹/Animal)	40000.00
9	Cost of Transportation (₹/ Animal)	1000.00
10	Cost of Equipment (₹/Animal)	3500.00
11	Shed - Area (Sq. Ft./Animal)	65
12	Cost of Construction of Shed (₹/ Sq.Ft.)	200
13	Green Fodder Requirement (Kg./Animal/Day)	10.00
14	Dry Fodder (Kg./Animal/Day)	5.00
15	Concentrate Feed - Maintenance (Kg./Animal/Day)	1.25
16	Concentrate Feed - Production (Kg./Animal/Day) 2.75 for 8 kg milk / 0.25 kg additional for every kg of milk	2.75
17	Concentrate Feed - Last 60 Days of Pregnancy (Kg./Animal/Day)	0.50
18	Cost of Green Fodder (₹/Kg) derived at cost out of cultivation in own farm	0.50
19	Cost of Dry Fodder (₹/Kg)	2.50
20	Cost of Concentrate (₹ /Kg)	15.00
21	Insurance Premium (%) I Year(5%)	5.00
22	Cost of Breeding (₹/Animal/Year)	200.00
23	Lactation Period (Days)	270
24	Dry Period (Days)	120
25	Calving Interval (Days)	390
26	Dry Matter Requirement (Kg. /100 Kg Body Weight)	2.50
27	Veterinary Aid (₹/Animal/Year)	1000.00
28	Price of Milk (₹/Liter)	25.00
29	Income from sale of manure (₹/Animal/Year)	2500.00
30	Residual Value (₹/Animal)	5000.00
31	Margin (%)	15.00
32	Interest Rate (%)	12.00
33	Cost of cultivation of Fodder- Sole Crop (₹/Acre)	3000.00
34	Field requirement for Fodder Cultivation - Sole Crop (Katha/Animal)	2
35	No. of Days in a Year	360.00
36	Repayment Period (Years)	5.00

B. Lactation Chart

Particular	Year-I	Year-II	Year-III	Year-IV	Year-V
First Batch					
Lactation Days	240	270	270	270	270
Dry Days	120	90	90	90	90
Days in Last 60 days of Pregnancy	60	30	30	60	60
Second Batch					
Lactation Days	180	240	240	240	240
Dry Days	0	120	120	120	120
Days in Last 60 days of Pregnancy	0	60	60	60	60
Both Batch					
Lactation Days	420	510	510	510	510
Dry Days	120	210	210	210	210
Days in Last 60 days of Pregnancy	60	90	90	120	120

C. Income, Expenditure and Gross Surplus

Income	Year-I	Year-II	Year-III	Year-IV	Year-V
Sale of Milk	84000	102000	102000	102000	102000
Sale of Manure	5000	5000	5000	5000	5000
Salvage value					10000
Total Income	89000	107000	107000	107000	117000
Expenditure					
Feed Cost					
Green Fodder	2700	3600	3600	3600	3600
Dry Fodder	6750	9000	9000	9000	9000
Concentrate - Maintenance	1125	2250	2250	1688	1688
Concentrate - Production	25200	30600	30600	30600	30600
Concentrate - Last 60 Days of Pregnancy	1575	2363	2363	3150	3150
Breeding Expenses	400	400	400	400	400
Veterinary & other Expenses	2000	2000	2000	2000	2000
Insurance	4000	0	0	4000	0
Total Expenditure	43750	50213	50213	54438	50438
Less Capitalised Expenditure	5900				
Total Expenditure after netting Capitalised expenditure	37850	50213	50213	54438	50438
Gross Surplus	51150	56788	56788	52563	66563

D. BCR & IRR

Particular	Year - I	Year - II	Year - III	Year - IV	Year - V
Capital Costs	143000	0	0	0	0
Recurring Cost	37850	50213	50213	54438	50438
Total Costs	180850	50213	50213	54438	50438
Benefit	89000	107000	107000	107000	117000
Net Benefit	-91850	56788	56788	52563	66563

PW Costs @ 15%	284445
PW Benefits @ 15%	348000
NPW	63555
B.C. Ratio	1.22
I.R.R. (%)	50%

E. Loan Repayment Schedule

Particular	Year - I	Year - II	Year - III	Year - IV	Year - V
Loan outstanding at the beginning of the year	122000	105733	84586	62030	41353
Gross Surplus	51150	56788	56788	52563	66563
Payment of Interest	14640	12688	10150	7444	4962
Repayment of Principal	16267	21147	22556	20677	41353
Loan O/S at the end of the year	105733	84586	62030	41353	0
Total Outgoing	30907	33835	32706	28121	46315
Net Surplus	20243	22953	24081	24442	20247

