

A large graphic of a compass rose with a green ring and blue points, centered behind the title text.

Challenges to Profitable Growth in Dairy Farming

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What is Milk?

- #Fat?
- #SNF?
- #True Protein?
- #Water?

Bacteriological Standards		
Grade	MBR Test Time (Hours)	Plate Count (CFU / ml)
Very Good	5 and Above	Less Than 0.2 million
Good	3 to 4	0.2 – 1.0 million
Fair	1 to 2	1.0 – 5.0 million
Poor	½	Over 5.0 million

CoB Test +ve / Titrable Acidity >0.15%

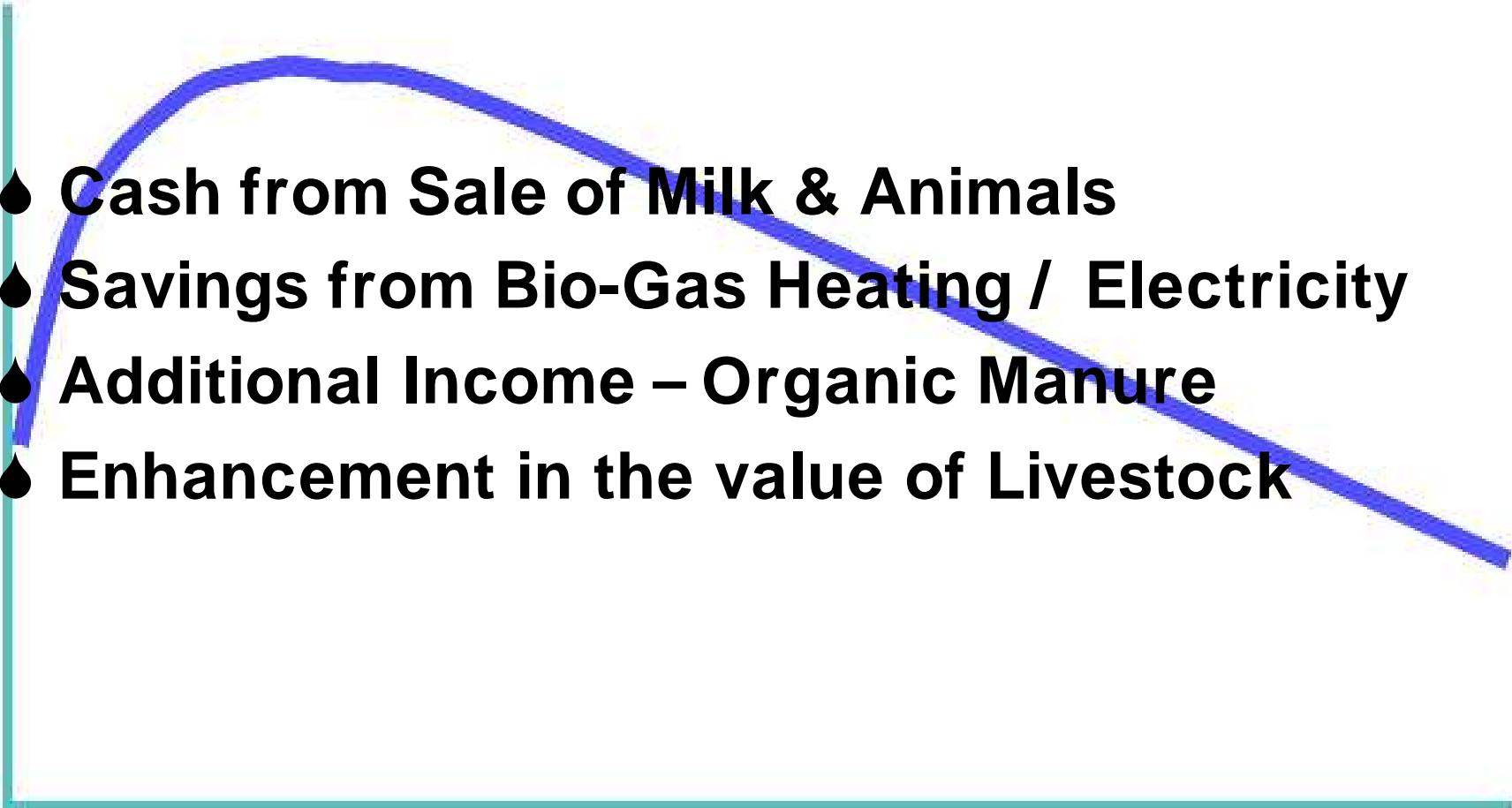
Organized Dairy Farm



- ◆ **Highly Productive Dairy Animals**
- ◆ **Housing**
 - ◆ Productive Group Based
 - ◆ Relief from Heat Stress
- ◆ **Cost Effective – Balanced Nutrition**
 - ◆ Least Cost Formulation
 - ◆ Challenge Ration, Total Mixed Rations
- ◆ **Science Based Breeding**
 - ◆ Genetically Superior Progeny
 - ◆ Productivity – Calf Every Year
- ◆ **Utilization of farm waste**
 - ◆ Bio-Gas for Heating / Electricity Generation
 - ◆ Organic Manure from Bio-Gas Plant Slurry
- ◆ **Premium Quality of Milk**

Returns in Dairy Farm



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- ◆ **Cash from Sale of Milk & Animals**
 - ◆ **Savings from Bio-Gas Heating / Electricity**
 - ◆ **Additional Income – Organic Manure**
 - ◆ **Enhancement in the value of Livestock**



Expenses (Rs.)	1 Cow for 5 Years		Receipts (Rs.)
1. Landed Cost of Cow	50,000	6. Milk Production of 1 CB-HF Cow for 5 Years – 24,500 Kg.s, @ Rs.300 / Kg. Fat (Rs.13.50)	3,30,750
2. Feeding Cost of 1 Cow for 5 Years @ Rs.90 / day.	1,64,250	7. Increase in the value of livestock due to 2½ Farm Born Heifers coming into production in 3 years.	1,25,000
3. Feeding Cost of 2½ Farm Born Heifers for 3 years – up to milk production stage.	99,900	8. Salvage value of 1 culled cow at the end of 5 years production period.	20,000
4. Feeding Cost of 2½ Farm Born Heifers from 3 – 5 years of age.	1,64,250	9. Approximate Value / Savings due to 4,562.5 Electrical Units produced from dung of 1 cow for 5 years @ Rs.5 / EU.	22,810
5. Feeding Cost of ½ Female Calf for 2 Years & ½ Female Calf (Born to Farm Born Heifers) for 1 Year.	6,330	10. Approximate Value of 10,950 Kg.s of Organic Manure produced from the dung of 1 Cow in 5 Years @ Rs.3 per Kg.	32,850
		11. Milk Production of 1¼ Farm Born Heifers for 2 Lactations and 1¼ heifer for 1 Lactation – 19,375 Kg.s @ Rs.300 per Kg. Fat (Rs.13.50 / Kg.)	2,61,563
		12. Approximate Value of 1,368 Electrical Units produced from the dung of 2½ Farm Born Heifers in 2 years @ Rs.5 / EU	6,840
Total	4,84,730	13. Approximate value of 8,200 Kg.s of Organic Manure produced from the dung of 2½ Farm Born Heifers in 5 years @ Rs.3 / Kg.	24,600
Overheads @ 40% of the feeding expenses	1,93,892	14. Value of skins of 2½ Male Calves born in 5 Years.	500
Total Expenses	6,78,622	Total Receipts	8,24,913

Surplus of Receipts Over Expenses = Rs.1,46,291 (21.56%)



Expenses (Rs.)	1 Buffalo for 5 Years		Receipts (Rs.)
1. Landed Cost of Buffalo	50,000	6. Milk Production of 1 Murrah Buffalo for 5 Years – 17,000 Kg.s, @ Rs.300 / Kg. Fat (Rs.22.50)	3,82,500
2. Feeding Cost of 1 Cow for 5 Years @ Rs.90 / day.	1,64,250	7. Increase in the value of livestock due to 2½ Farm Born Heifers coming into production in 3 years.	1,25,000
3. Feeding Cost of 2½ Farm Born Heifers for 3 years – up to milk production stage.	99,900	8. Salvage value of 1 culled buffalo at the end of 5 years production period.	20,000
4. Feeding Cost of 2½ Farm Born Heifers from 3 – 5 years of age.	1,64,250	9. Approximate Value / Savings due to 4,562.5 Electrical Units produced from dung of 1 buffalo for 5 years @ Rs.5 / EU.	22,810
5. Feeding Cost of ½ Female Calf for 2 Years & ½ Female Calf (Born to Farm Born Heifers) for 1 Year.	6,330	10. Approximate Value of 10,950 Kg.s of Organic Manure produced from the dung of 1 buffalo in 5 Years @ Rs.3 per Kg.	32,850
		11. Milk Production of 1¼ Farm Born Heifers for 2 Lactations and 1¼ heifer for 1 Lactation – 13,750 Kg.s @ Rs.300 per Kg. Fat (Rs.22.50 / Kg.)	3,09,375
		12. Approximate Value of 1,368 Electrical Units produced from the dung of 2½ Farm Born Heifers in 2 years @ Rs.5 / EU	6,840
Total	4,84,730	13. Approximate value of 8,200 Kg.s of Organic Manure produced from the dung of 2½ Farm Born Heifers in 5 years @ Rs.3 / Kg.	24,600
Overheads @ 40% of the feeding expenses	1,93,892	14. Value of skins of 2½ Male Calves born in 5 Years.	500
Total Expenses	6,78,622	Total Receipts	9,24,475

Surplus of Receipts Over Expenses = Rs.2,45,853 (36.23%)

Economic Effect of Using Sexed Semen



Operational Years>>	1	2	3	4	5	6	7	8	9	10
Estimated Receipts (Rs. In Lakhs)										
1. Sale of Milk (Rs.13.50/Kg.)	243.00	261.90	279.45	279.45	532.11	619.48	663.17	663.17	664.51	488.59
2. Savings-Electrical Units (Rs.5/EU)	12.78	12.78	25.55	25.55	38.33	51.10	51.10	51.10	51.10	51.10
3. Sale-Organic Manure (Rs.3,000/MT)	31.46	44.12	62.57	75.05	96.22	111.57	121.58	121.58	121.58	121.58
4. Sale-Surplus Cows/Heifers	0.00	0.00	0.00	0.00	19.98	57.33	205.28	356.13	356.13	356.13
5. Enhancement in Value of Farm Stock	-6.00	-5.82	85.62	133.07	29.96	13.17	0.00	0.00	0.00	0.00
Total Anticipated Receipts	281.24	312.97	453.19	590.98	716.59	852.64	1,041.13	1,180.52	1,193.32	1,017.40
Estimated Expenses (Rs. In Lakhs)										
1. Feeding Expenses	152.84	184.12	222.04	315.11	414.44	453.93	479.93	479.93	479.93	479.93
2. Breeding Expenses	2.30	2.23	3.25	5.05	6.16	6.99	7.98	7.98	7.98	7.98
3. Overheads @ 30% of Expenses	46.54	55.91	67.59	96.05	126.18	138.28	146.37	146.37	146.37	146.37
Total Anticipated Expenses	201.69	242.26	292.89	416.20	546.77	599.20	634.27	634.27	634.27	634.27
(+) Surplus / (-) Deficit	+9.55	+70.71	+160.31	+174.79	+169.82	+253.44	+406.86	+546.24	+559.05	+383.13

Surplus of Receipts Over Expenses in 5 Years = Rs.655.18 Lakhs (38.54%)

in 10 Years = Rs.2,803.89 Lakhs (57.98%)

Induction 400 Cows < > Peak Strength 750 Cows < > Cumulative Investment Rs.10.69 Crores





Path & Challenges Become Visible When We Know What to Achieve!

- ◆ **Highly Productive Dairy Animals**
- ◆ **Productivity Enhancing Management Practices**
- ◆ **Scale of Operation**
- ◆ **Skilled Professionals**
- ◆ **Willingness to Invest in Growth**



Thank You!