

Cattle Farm with 10 crossbred cows: Project

Assumptions

1. The cost of land for the project is not considered.
2. Inter-calving period of 390 days (300 lactating days and 90 dry days)
3. Provision for silage bunker & mister set
4. Change in market price of the animals assumed in following manner
 1. Animals in 1st lactation: No change
 2. Animals in 2nd lactation: +5%
 3. Animals in 3rd lactation: -5%
 4. Animals in 4th lactation: -10%
 5. Animals in 5th lactation: -30%
 6. Animals in 6th lactation: -50%
 7. Animals in 7th lactation: -70%
5. Once the young animal, reared within the herd that is ready to calve, would replace the oldest animal.
6. The animals apart from 1st, 2nd or 3rd lactations are assumed to be sold off to maintain constant herd size.
7. Required land is available for cultivating green fodder for animals.
8. For lactating animals, total dry matter of feed and fodder is assumed to be in the range of 3.5-4 kg per 100 kg body weight.
9. For dry animals, total dry matter of feed and fodder is assumed to be around 2.5 kg per 100 kg body weight.
10. The project is considered as on-going and therefore, terminal values of assets are not considered.
11. Male calves are assumed to be sold off.

12.Price assumptions are on average basis and would vary region to region

13.Provision for any taxation has not been made

14.Of total 10 cows purchased

- 5 cows are of 1st lactation having yield of 15 litres/ day, costing ₹ 60,000/ animal
- 3 cows are of 2nd lactation having yield of 18 litres/ day, costing ₹ 63,000/ animal
- 2 cows are of 3rd lactation having yield of 17 litres/ day, costing ₹ 60,000/ animal

15.Of 10 animals, 5 are assumed to be purchased at the beginning of the project and rest after 6 months

16.Provision for manual chaff cutter

17.No milking machine

Project Details (Indicative) for 10 Cow Farm

Land requirement for cattle shed, storage and silage	2325 sq.f
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Project cost

Item	Amount (₹)
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Electricity & water charges	15,000	15,000	15,000	15,000	15,000	15,000	15,000
Transportation cost for milk sale	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Minor repair of building/ equipment	5,000	5,000	5,000	5,000	5,000	5,000	5,000
Interest on working capital	6,866	7,331	7,520	7,710	7,710	7,710	7,710
Total variable cost	506,148	647,831	705,690	763,550	763,550	763,550	763,550
Income (₹)							
Item	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Milk	854,120	1,200,420	1,109,160	1,031,940	1,067,040	1,165,320	1,165,320
Gunny bags	2,460	3,440	3,730	4,020	4,020	4,020	4,020
Sale of animals	2,000	2,000	2,000	62,000	134,000	122,000	224,000
Sale of dung/ manure	12,600	16,800	16,800	16,800	16,800	16,800	16,800
Total receipt	871,180	1,222,660	1,131,690	1,114,760	1,221,860	1,308,140	1,410,140

PBDIT (Operating Profit) (₹)	365,032	574,829	426,000	351,210	458,310	544,590	646,590
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Net Profit (₹)	58,701	322,498	125,669	17,879	70,979	229,259	331,259
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IRR	18.4%
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ROI	21.9%
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