

**DAIRY**  
**UNIT COST OF REARING TWO CROSSBRED COWS**  
**(AV. DAIRY MILK YIELD-6 LITRES/COW)**

(Amount in Rs.)

**A. CAPITAL COST**

1. Cost of 2 cows with calves at foot in early stages of 1 <sup>st</sup> or 2 <sup>nd</sup> lactation @ Rs.10,000/- each	...		20,000.00
2. Housing	...		4,000.00
3. Transportation cost per unit	...		2,000.00
4. Equipment	...		<u>500.00</u>
		<b>TOTAL</b>	<b>26,500.00</b>
- 'A'	...		<b>26,500.00</b>

**B. RECURRING COST**

1. cost of concentrate feed @ 4 kg. Per day per cost for 30 days @ Rs.6.30 per kg.	...		756.00
2. Insurance @ 5% of the cost of cows	...		1,000.00
3. Miscellaneous (Medicine, electricity, dry fodder etc.)	...		<u>200.00</u>
		<b>TOTAL - 'B'</b>	<b>1,756.00</b>

<b>TOTAL - 'A' + 'B'</b>	...		<b>28,256.00</b>
<b>UNIT COST</b>	...		<b>28,300.00</b>
<b>BANK LOAN (90%)</b>	...		<b>25,500.00</b>

**ASSUMPTIONS**

**A. Technical parameters**

1. Crossbred (Jersey/H.F.) cows are purchased with calves at foot in early stages of 1<sup>st</sup> or 2<sup>nd</sup> lactation at an interval of 5 – 6 months.
2. a) Peak daily milk yield (litres) : 9      b) Average daily milk yield (litres) : 6
3. Feeding schedule

	(Rs. per day)			
	During lactation (in kgs.)	During dry period (in kgs.)	Cost of feeding during lactation	Cost of feeding during dry period
a. Green fodder	20	20	10.00	10.00
b. Dry fodder	3	4	3.90	5.20
c. Conc. Mixture	4	1	<u>25.20</u>	<u>6.30</u>
			<b>39.10</b>	<b>21.50</b>

4. Lactation and dry days :

	1 <sup>st</sup> yr.	2 <sup>nd</sup> yr.	3 <sup>rd</sup> yr.	4 <sup>th</sup> yr.	5 <sup>th</sup> yr.
Lactation days	420	510	510	510	510
Dry days	120	210	210	210	210

5. Gunny bags available for sale (No.):

	1 <sup>st</sup> yr.	2 <sup>nd</sup> yr.	3 <sup>rd</sup> yr.	4 <sup>th</sup> yr.	5 <sup>th</sup> yr.
	16	20	20	20	20

**B. Financial parameters**

1. Cost of green fodder (Rs. per kg.)	...	0.50
2. Cost of dry fodder (Rs. per kg.)	...	1.30
3. Cost of conc. Mix. (Rs. per kg.)	...	6.30
4. Medicines, vaccines & breeding expenses (Rs.per cow per year)	...	200
5. Insurance of cows ( per year)	...	5%
6. Sale price of milk (Rs. per litre)	...	11.00
7. Sale price of gunny bags (Rs.)	...	10.00
8. Value of manure (Rs. per cost per year) expenses (Rs. per cow per year)	...	400.00

**ECONOMICS OF A 2 C.B. COW UNIT (6 LITRES PER DAY)**

(Amount in Rs.)

INCOME	1 <sup>st</sup> yr.	2 <sup>nd</sup> yr.	3 <sup>rd</sup> yr.	4 <sup>th</sup> yr.	5 <sup>th</sup> yr.
1. Sale of milk	27720	33660	33660	33660	33660
2. sale of gunny bags	160	200	200	200	200
3. Sale of manure	600	800	800	800	800
<b>TOTAL</b>	<b>28480</b>	<b>34660</b>	<b>34660</b>	<b>34660</b>	<b>34660</b>

<b>EXPENDITURE</b>	<b>1<sup>st</sup> yr.</b>	<b>2<sup>nd</sup> yr.</b>	<b>3<sup>rd</sup> yr.</b>	<b>4<sup>th</sup> yr.</b>	<b>5<sup>th</sup> yr.</b>
1. Cost of feeding					
a. during lactation	16422	19941	19941	19941	19941
b. during dry period	2580	4515	4515	4515	4515
2. Medicines, vaccines and breeding expenses	300	400	400	400	400
3. Insurance of cows	1000	1000	1000	1000	1000
<b>TOTAL</b>	<b>20302</b>	<b>25856</b>	<b>25856</b>	<b>25856</b>	<b>25856</b>
<b>GROSS SURPLUS</b>	<b>8178</b>	<b>8804</b>	<b>8804</b>	<b>8804</b>	<b>8804</b>

## **FINANCIAL ANALYSIS**

	<b>1<sup>st</sup> yr.</b>	<b>2<sup>nd</sup> yr.</b>	<b>3<sup>rd</sup> yr.</b>	<b>4<sup>th</sup> yr.</b>	<b>5<sup>th</sup> yr.</b>
Capital cost	26500	--	--	--	--
Recurring cost	20302	25856	25856	25856	25856
<b>Total cost</b>	<b>46802</b>	<b>25856</b>	<b>25856</b>	<b>25856</b>	<b>25856</b>
<b>BENEFIT</b>	<b>28480</b>	<b>34660</b>	<b>34660</b>	<b>34660</b>	<b>34660</b>
<b>NET BENEFIT</b>	<b>-18322</b>	<b>8804</b>	<b>8804</b>	<b>8804</b>	<b>8804</b>

*NPW @ 15% D.F.*      ...    5925 (+)  
*BCR @ 15% D.F.*      ...    1.06 : 1.00  
*IRR*                      ...    32.43%

***REPAYMENT PERIOD : 5 YEARS WITHOUT GRACE PERIOD***

(SOURCE - NABARD)

**DAIRY**  
**UNIT COST OF REARING TWO CROSSBRED COWS**  
**(AV. DAILY MILK YIELD – 8 LITRES / COW)**

(Amount in Rs.)

**A. CAPITAL COST**

1. Cost of 2 cows with calves at foot in early stages 1 <sup>st</sup> or 2 <sup>nd</sup> lactation @ Rs.15,000/- each	...	30,000.00
2. Housing	...	4,000.00
3. Transportation cost per unit	...	2,000.00
4. Equipment @ Rs.250/- per cow	...	<u>500.00</u>
<b>TOTAL – ‘A’</b>	...	<b>36,500.00</b>

**B. RECURRING COST**

1. Cost of concentrate feed @ 5 kg. Per day per cow for 1 <sup>st</sup> cow for 30 days @ Rs.6.30 per kg.	...	945.00
2. Insurance @ 5% of the cost of cows	...	1,500.00
3. Miscellaneous (Medicine, electricity, dry fodder etc.)	...	<u>200.00</u>
<b>TOTAL - ‘B’</b>	...	<b>2,645.00</b>

<b>TOTAL - ‘A’ + ‘B’</b>	...	...	<b>39,145.00</b>
<b>UNIT COST</b>	...	...	<b>39,150.00</b>
<b>BANK LOAN (90%)</b>	...	...	<b>35,200.00</b>

**ASSUMPTIONS**

**A. Technical parameters**

1. Crossbred (Jersey/H.F.) cows are purchased with calves at foot in early stages of 1<sup>st</sup> or 2<sup>nd</sup> lactation at an interval of 5 – 6 months.
2. a) Peak daily milk yield (litres) : 13      b) Average daily milk yield (litres) : 8
3. Feeding schedule

	During lactation (in kgs.)	During dry period (in kgs.)	Cost of feeding during lactation	Cost of feeding during dry period
a. Green fodder	20	20	10.00	10.00
b. Dry fodder	3	4	3.90	5.20
c. Conc. Mixture	4	1	<u>31.50</u>	<u>6.30</u>
			<b>45.40</b>	<b>21.50</b>

4. Lactation and dry days (for 2 animals):

	1 <sup>st</sup> yr.	2 <sup>nd</sup> yr.	3 <sup>rd</sup> yr.	4 <sup>th</sup> yr.	5 <sup>th</sup> yr.
Lactation days	420	510	510	510	510
Dry days	120	210	210	210	210

5. Gunny bags available for sale :

	1 <sup>st</sup> yr.	2 <sup>nd</sup> yr.	3 <sup>rd</sup> yr.	4 <sup>th</sup> yr.	5 <sup>th</sup> yr.
	22	28	28	28	28

### B. Financial parameters

1. Cost of green fodder (Rs. per kg.)	...	0.50
2. Cost of dry fodder (Rs. per kg.)	...	1.30
3. Cost of conc. Mix. (Rs. per kg.)	...	6.30
4. Medicines, vaccines & breeding expenses (Rs.per cow per year)	...	200
5. Insurance of cows ( per year)	...	5%
6. Sale price of milk (Rs. per litre)	...	11.00
7. Sale price of gunny bags (Rs.)	...	10.00
8. Value of manure (Rs. per cost per year) expenses (Rs. per cow per year)	...	400.00

### ECONOMICS OF A 2 C.B. COW UNIT (8 LITRES PER DAY)

(Amount in Rs.)

INCOME	1 <sup>st</sup> yr.	2 <sup>nd</sup> yr.	3 <sup>rd</sup> yr.	4 <sup>th</sup> yr.	5 <sup>th</sup> yr.
1. Sale of milk	36960	44880	44880	44880	44880
2. Sale of gunny bags	220	280	280	280	280
3. Sale of manure	600	800	800	800	800
<b>TOTAL</b>	<b>37780</b>	<b>45960</b>	<b>45960</b>	<b>45960</b>	<b>45960</b>

<b>EXPENDITURE</b>	<b>1<sup>st</sup> yr.</b>	<b>2<sup>nd</sup> yr.</b>	<b>3<sup>rd</sup> yr.</b>	<b>4<sup>th</sup> yr.</b>	<b>5<sup>th</sup> yr.</b>
1. Cost of feeding					
a. during lactation	19068	23154	23154	23154	23154
b. during dry period	2580	4515	4515	4515	4515
2. Medicines, vaccines and breeding expenses	300	400	400	400	400
3. Insurance of cows	1500	1500	1500	1500	1500
<b>TOTAL</b>	<b>23448</b>	<b>29569</b>	<b>29569</b>	<b>29569</b>	<b>29569</b>
<b>GROSS SURPLUS</b>	<b>14332</b>	<b>16391</b>	<b>16391</b>	<b>16391</b>	<b>16391</b>

### **FINANCIAL ANALYSIS**

	<b>1<sup>st</sup> yr.</b>	<b>2<sup>nd</sup> yr.</b>	<b>3<sup>rd</sup> yr.</b>	<b>4<sup>th</sup> yr.</b>	<b>5<sup>th</sup> yr.</b>
Capital cost	36500	--	--	--	--
Recurring cost	23448	29569	29569	29569	29569
<b>Total cost</b>	<b>59948</b>	<b>29569</b>	<b>29569</b>	<b>29569</b>	<b>29569</b>
<b>BENEFIT</b>	<b>37780</b>	<b>45960</b>	<b>45960</b>	<b>45960</b>	<b>45960</b>
<b>NET BENEFIT</b>	<b>-22168</b>	<b>16391</b>	<b>16391</b>	<b>16391</b>	<b>16391</b>

*NPW @ 15% D.F.*      ...    *21416 (+)*  
*BCR @ 15% D.F.*      ...    *1.17 : 1.00*  
*IRR*                      ...    *>50 %*

***REPAYMENT PERIOD : 5 YEARS WITHOUT GRACE PERIOD***

(SOURCE - NABARD)