

*Dairy*

MARKET MILK PRODUCTION IN SAN JOAQUIN COUNTY  
COST ANALYSIS WORK SHEET 1980

Granville A. Hutton, San Joaquin County Farm Advisor

Costs are based on a herd of 500 cows weighing 1,400 lbs. each and producing an average of 16,600 lbs. milk, 600 lbs. fat, and testing 3.75%.

Cows are fed daily: 305 days = 45 lbs. corn silage, 10 lbs. alfalfa hay, and 25 lbs. concentrate; 45 days = 30 lbs. alfalfa hay or equivalent; 15 days = 10 lbs. concentrate and 30 lbs. alfalfa hay. The total amount fed per cow per year is 7.2 tons corn silage, 2.5 tons alfalfa hay or equivalent, and 4.1 tons concentrate including 5% waste. The dairy is a modern facility fully equipped with milking barn, holding corral, and free-stall housing.

Replacements are purchased at \$1,500, culls sold at \$600, and calves sold at \$100. The herd is replaced on the basis of 28% cull and 2% death loss each year.

Two milkers, a feeder, and a relief man receive wages and benefits totaling \$1,700 per month. The herdsman receives \$2,400 and the owner is calculated at half time the herdsman's wages.

The dairy is built on 20 acres with additional acreage for waste disposal and for the production of forage crops used to feed the dairy cows.

|   | SAMPLE COST        |                |                |           |
|---|--------------------|----------------|----------------|-----------|
|   | Total              | Per Cow        | Per Cwt        | Your Cost |
| <b>Gross Receipts:</b>  |                    |                |                |           |
| Milk  |                    |                |                |           |
| 83,000 cwt @ \$13.90-.40 haul   | \$1,120,500        | \$2,241        | \$13.50        | \$        |
| Calves - 500 @ \$100  | 50,000             | 100            | .60            |           |
| <b>TOTAL GROSS RECEIPTS</b>   | <b>\$1,170,500</b> | <b>\$2,341</b> | <b>\$14.10</b> | <b>\$</b> |
| <b>Feed Costs:</b>  |                    |                |                |           |
| Alfalfa Hay - 1,250 T @ \$120/T   | \$ 150,000         | \$ 300         | \$ 1.81        | \$        |
| Corn Silage - 3,600 T @ \$30/T  | 108,000            | 216            | 1.30           |           |
| Concentrate - 2,050 T @ \$170/T   | 348,500            | 697            | 4.20           |           |
| <b>Total Feed Costs</b>   | <b>\$ 606,500</b>  | <b>\$1,213</b> | <b>\$ 7.31</b> | <b>\$</b> |
| <b>Labor Costs</b>  | <b>\$ 124,800</b>  | <b>\$ 250</b>  | <b>\$ 1.50</b> | <b>\$</b> |
| <b>Other Costs:</b>   |                    |                |                |           |
| Replacements - net cost/cow   | \$ 141,000         | \$ 282         | \$ 1.70        | \$        |
| Breeding Costs  | 12,500             | 25             | .15            |           |
| DHIA  | 4,500              | 9              | .05            |           |
| Veterinary & Medicine   | 20,000             | 40             | .24            |           |
| Supplies  | 20,000             | 40             | .24            |           |
| Taxes & Insurance   | 7,500              | 15             | .09            |           |
| Manure Hauling = Fertilizer Value   | 0                  | 0              | 0              |           |
| Tractor, Machinery, Equipment<br>(fuel, lube, repairs)  | 12,000             | 24             | .14            |           |
| Miscellaneous: Business telephone,<br>power, butane, repair, mainten-<br>ance, clipping, trimming, incid-<br>ental cash costs, interest on<br>operating capital, dues, assess-<br>ments | 30,000             | 60             | .36            |           |
| <b>Total Other Costs</b>  | <b>\$ 247,500</b>  | <b>\$ 495</b>  | <b>\$ 2.97</b> | <b>\$</b> |
| <b>TOTAL CASH COSTS</b>   | <b>\$ 978,800</b>  | <b>\$1,958</b> | <b>\$11.78</b> | <b>\$</b> |

|  | SAMPLE COST        |                |                |           |
|--|--------------------|----------------|----------------|-----------|
|  | Total              | Per Cow        | Per Cwt        | Your Cost |
| <b>Depreciation:</b>   |                    |                |                |           |
| Milking barn, freestall, manure pit, bulk tank, hay barn, silage pit, dry cow corral, maternity pens, well, tractors, pickup, self-unloading wagon, shop - Estimated @ \$2,000/cow |                    |                |                |           |
| Buildings -  |                    |                |                |           |
| \$800,000 - 25 yr. life  | \$ 32,000          | \$ 64          | \$ .39         | \$        |
| Equipment -  |                    |                |                |           |
| \$200,000 - 10 yr. life  | 20,000             | 40             | .24            |           |
| <b>Total Depreciation</b>  | <b>\$ 52,000</b>   | <b>\$ 104</b>  | <b>\$ .63</b>  | <b>\$</b> |
| <b>Interest on Investment @ 12%:</b>   |                    |                |                |           |
| Land - 20 A @ \$6,000 =  |                    |                |                |           |
| \$120,000 @ 12%  | \$ 14,400          | \$ 29          | \$ .17         | \$        |
| Bldgs & Equipment -  |                    |                |                |           |
| 50% of \$1,000,000 @ 12%   | 60,000             | 120            | .72            |           |
| Cows - Based on \$1,050/cow  | 63,000             | 126            | .76            |           |
| Quota - Based on \$750/cow   | 45,000             | 90             | .54            |           |
| <b>Total Interest</b>  | <b>\$ 182,400</b>  | <b>\$ 365</b>  | <b>\$ 2.19</b> | <b>\$</b> |
| <b>TOTAL ALL COSTS</b>   | <b>\$1,213,200</b> | <b>\$2,427</b> | <b>\$14.60</b> | <b>\$</b> |

INCOME ABOVE ALL COSTS WHEN PRICE OF MILK RANGES FROM \$12.50-\$15.30/GWT., THE YEARLY PRODUCTION PER COW VARIES FROM 15,000-17,800 LBS, AND ALL OTHER EXPENSES REMAIN THE SAME.

|        | PRICE    |          |          |          |          |
|--------|----------|----------|----------|----------|----------|
|        | 12.50    | 13.20    | 13.90    | 14.60    | 15.30    |
| 15,400 | -231,500 | 177,600  | -123,700 | - 69,800 | - 15,900 |
| 16,000 | -195,200 | -139,200 | - 83,200 | - 27,200 | - 28,800 |
| 16,600 | -158,900 | -100,800 | - 42,700 | 15,400   | 73,500   |
| 17,200 | -122,600 | - 62,400 | - 2,200  | 58,000   | 118,200  |
| 17,800 | - 36,300 | - 24,000 | 38,300   | 100,600  | 162,900  |

PRODUCTION