

Milk Production Costs in Oregon

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Milk production costs vary between farms and over time. Feed and other prices, labor wages, herd size, milk production per cow, butterfat percentage, and the location of the dairy farm all affect production costs.

Oregon State University, in cooperation with the State Department of Agriculture, recently conducted a study of the costs of producing Grade A milk in Oregon Milk Marketing Area One for the years 1966 through 1968. This area includes nearly all the commercial dairy farms in Oregon, plus a few in southern Washington and northern California which sell milk in Oregon.

Structural Changes in Dairy Farming

One of the important changes occurring in Oregon and nationally has been the decline in the number of dairy farms. In Oregon, a total of 83 commercial dairy farms went out of business between 1966 and 1968 (Table 1). This amounts to an annual decrease of about 4 percent per year.

Table 1. Number of Commercial Dairy Farms in Oregon Milk Marketing Area One^a

Region	1966	1967	1968
(Number of farms)			
Coastal	248	242	236
Valley	515	497	468
Southern	86	78	80
Eastern	132	125	114
Total	981	942	898

^a Only the dairy farms selling more than 200,000 pounds of milk annually are included.

For purposes of comparison, Oregon Milk Marketing Area One was divided into four geographical regions. Region 1 includes the coastal counties; Region 2, the Willamette Valley and adjacent counties in southwestern Washington; Region 3, Douglas, Josephine, and Jackson counties in southern Oregon; and Region 4, those counties in Oregon, southern Washington, and northern California east of the Cascade Mountains.

Each of these four regions showed a decline in the number of commercial dairy farms between 1966 and 1968. Southern Oregon, however, gained two farms between 1967 and 1968. The Willamette Valley is the most important dairy region, with 52% of the farms. Southern Oregon is the least important, with only 9% of the farms.

Even though the number of dairy farms declined over these three years, the total milk sold has increased. In 1966, 640 million pounds of milk were marketed, and by 1968 this figure had increased to 713 million pounds. Fewer farms are selling more milk.

The milk production per cow on these commercial farms has increased from 10,560 pounds in 1966 to 11,420 pounds in 1968. The butterfat test of the milk has tended to decline slightly; in 1967 and 1968 the test was about 4%.

Milk Production Costs By Years

For 1966 through 1968, the cost of producing 100 pounds of milk was lowest in 1967 and highest in 1966 (Table 2). The relative importance of the labor cost, as

Table 2. Estimated Average Costs of Producing Milk in Oregon Milk Marketing Area One^a

Cost	1966	1967	1968
(Dollars per cwt. of milk)			
Roughage	1.41	1.23	1.27
Concentrate	1.07	1.06	1.05
Labor	1.20	1.19	1.19
Net misc.	1.86	1.86	1.88
Total	5.54	5.34	5.39

^a The average butterfat tests for the three years were 4.07, 4.01, and 3.98 percent, respectively.

compared to other costs, remained relatively constant. Farm labor wages increased during these years, however, implying a decrease in the quantity of labor re-



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quired to produce 100 pounds of milk. Net miscellaneous costs increased slightly in relative importance.

Roughage and concentrate costs fluctuated. This is mostly explained by the variations in prices (Table 3). Roughage prices decreased from 1966 to 1967 and then increased in 1968. Concentrate prices decreased over these three years, while wages and other prices increased.

Table 3. Prices and Wages Paid by Dairy Farmers in Oregon Milk Marketing Area One

Year	Roughage	Concentrate	Wages	Index of prices paid ^a
	(\$/ton)	(\$/ton)	(\$/mo.)	(1910-14 =100)
1966	27.00	72.50	311	334
1967	24.00	72.30	325	342
1968	25.50	70.30	343	355

^a This index reflects changes in the net miscellaneous cost component.

Herd size and milk production per cow increased steadily. The net result was an increase in efficiency, which had a decreasing effect on costs per hundredweight. The percentage of butterfat decreased also, contributing to the lowering of production costs. There were no substantial shifts in the location of production in Oregon, so this factor did not influence cost changes.

Milk Production Costs By Region

The cost of producing one hundred pounds of milk varies between farms within a region and between regions. This is evidenced by the cost differences between the four regions (Table 4). In 1968 the dairy farms in the Willamette Valley region produced milk for the lowest cost per hundredweight. The farms in southern Oregon had the highest cost per hundredweight of milk.

Table 4. Estimated Average Costs of Producing Milk in Oregon Milk Marketing Area One, 1968

Cost	Costal region	Valley region	Southern region	Eastern region
	(Dollars per cwt. of milk)			
Roughage	1.35	1.17	1.45	1.41
Concentrate94	1.11	1.03	.99
Labor	1.30	1.14	1.16	1.22
Net misc.	1.96	1.82	2.02	1.86
Total	5.55	5.24	5.66	5.48

The location of the dairy farms affects the production practices, the prices, and wages paid. Herd size, milk production per cow, and butterfat test also vary between regions. For example, milk producers in the coastal counties typically have smaller herds, less milk per cow, and higher butterfat tests, which all contribute to higher costs per hundredweight of milk (Table 5). The eastern Oregon farms had the largest herd size in 1968, while the farms in the Willamette Valley had the highest milk production per cow.

Table 5. Factors Affecting Milk Production Costs in Oregon Milk Marketing Area One, 1968

Factor	Coastal region	Valley region	Southern region	Eastern region
Cows in herd (no.)	66.6	69.0	77.3	82.1
Milk per cow (cwt.) ..	107.2	119.8	108.9	108.5
Butterfat test (%)	4.25	3.88	4.00	3.93

The cost per hundredweight of milk is an important factor determining the profitability of the dairy farm. However, cost is not the only factor. The price received for milk and the volume sold are also critical considerations.