The Growth of California's Dairy Industry
Will It Continue

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In 1950, in California, 19,418 farms milked an average of 40 cows producing 7,710 pounds of milk per cow per year. By 1996, there were just 2,340 dairies milk an average of 540 cows producing 20,258 pounds of milk per cow per year. California went from producing 5.6 billion pounds of milk in 1950, to producing 25.8 billion pounds in 1996, an average annual growth rate of 3.4 percent per year. The annual change in milk production from year to year ranged from a decline in production of 1.24 percent in 1959 to a 10 percent increase in 1994.

There are a number of reasons why California achieved this type of phenomenal growth which should continue at a slightly lesser rate well into the next century.

Demand

Following World War II, the population of California expanded rapidly. Because of the great distance between the Golden State and major areas of milk production, it was simple demand for milk that drove the dramatic increases in production.

Of the 5.6 billion pounds of milk produced in 1950, 2.9 billion pounds was Grade A and only 0.8 billion pounds did not go to fluid use. Obviously, 2.6 billion pounds of milk was manufacturing grade. In 1996, 24.7 billion pounds of the total 25.8 billion pounds produced was fluid grade (Grade A). However, fluid use had dropped to just 25 percent of that number. Over 18 billion pounds of milk went into manufactured dairy products.

Conditions

The majority of the milk production in California in the 1950s and 60s, took place in Southern California. One would be hard pressed to find better weather for producing milk. Feed was relatively plentiful locally, including alfalfa, and the market was right there.

As the population of Southern California expanded, dairies were pushed farther and farther away from where they started. There are a number of dairies in Southern California that are at their third location. Each move resulted in additional funds available for expansion -- a necessity thanks to capital gains taxes.

In the 1970s, dairies began to move from Southern California into the South and Central valley's of Northern California. Land was plentiful and cheap. Again, other than a couple of wet months, conditions are very good for dairying.

Unlike most states with the history in dairying like California, the number of Grade A dairies stopped dropping significantly in 1988 and has leveled off at around 2160, the majority of which are located in the Central Valley.
The San Joaquin Valley produces 17.8 billion pounds of milk in 1996 with Tulare County leading the way at 5.3 billion pounds. Merced County is next at 3.2 billion pounds. Southern California produced 5.8 billion pounds of milk with San Bernardino County at 3.3 billion pounds and Riverside County at 2.3 billion.

Economics

California has been one of the lowest cost of milk production places in the United States. The climate requires a relatively low investment in buildings compared to traditional dairy areas like the Midwest. Feed costs, until recently, have been fairly reasonable. However, utilities and labor tend to be higher than in traditional areas.

The key to the relative low cost of production has been production per cow. In 1996, the average production per cow nationally, including California, was 16,833 pounds per cow per year. California's production per cow was 20,458 pounds. Compare that to a state like Wisconsin, now the number two milk producer, at 15,442 pounds.

Another major factor in the grow of California milk production was the increase in the dairy support price in 1977. Following the presidential election in 1976, the government support price was changed from a variable to a mandated upward adjustment every six months. From 1977 to 1980, the government purchase price rose from a little over $8 to $13.10. From 1977 to 1985, milk production in California grew an average of 4.55 percent per year. It rose from 11.5 billion pounds to 16.7 billion. Since then it has grow about 4.2 percent per year on average. However, in only three of the last 10 years has the rate of annual percentage change been over four percent.

The growth of the last ten years has been fueled by the expansion of the cheese business in California. Since 1987, cheese production in California has risen from 492 million pounds to 1.047 billion pounds. It takes 10 pounds of milk to make one pound of cheese, so nearly six billion pounds of the 8 billion pound increase in milk production has gone into cheese.

The Future

Milk production in California is expected to continue to grow an average of about three percent per year. Most of this growth will come through production per cow. However, it should be noted that this growth is subject to several caveats:

<u>Water.</u> As the population of California continues to grow, water for cows and for alfalfa will continue to be challenged. The dairy industry has been working hard to raise the awareness that alfalfa is a value crop because of its importance to milk production. People usually win over cows and crops when it comes to water.

<u>Environment.</u> Waste or nutrient management as we prefer to call it is coming under a great deal of scrutiny. Run off from dairies and ground water degradation because of large animal operations has moved onto center stage in recent months. How we respond to this challenge will impact growth potential.

<u>Net Income.</u> There are technologies available today, that can create a new paradigm in the dairy industry. Typically, milk has been produced close to its market. Ultrafiltration and reverse osmosis, two technologies that concentrate milk, could change that. For example, milk produced in New Mexico is being concentrated and sold to a cheese plant in Minnesota and to fluid bottlers in North Carolina. Dairymen have the option, with this technology, of building dairies where feed is the cheapest and most abundant, then concentrate the milk and haul it to a distant market for processing.

<u>Market expansion.</u> On January 1, 2000, the government support program for milk ends. This means that the government will no longer be a guaranteed market for all milk produced. With domestic consumption projected to grow at a slower rate than milk production, the California dairy industry will have to expand sales in the world marketplace.

A major factor in whether or not this can be done will be the next round of world trade negotiations starting in 1999. Unless the playing field is leveled significantly more than it was during the last round of negotiations, expansion into the world market will be extremely difficult.

The key to the continued growth and well-being of the California dairy industry ultimately is in the hands of milk producers and the cooperatives they own. We are aware of all the challenges we face and we are working together to address them to ensure a healthy California dairy future.