

## Considerations in the Dairy Relocation Decision

Brian K. Herbst  
Agricultural and Food Policy Center  
Department of Agricultural Economics  
2124 TAMUS  
Texas A&M University  
College Station, TX 77843-2124  
[herbst@tamu.edu](mailto:herbst@tamu.edu)

Joe L. Outlaw  
Agricultural and Food Policy Center  
Department of Agricultural Economics  
2124 TAMUS  
Texas A&M University  
College Station, TX 77843-2124  
[joutlaw@tamu.edu](mailto:joutlaw@tamu.edu)

David P. Anderson  
Agricultural and Food Policy Center  
Department of Agricultural Economics  
2124 TAMUS  
Texas A&M University  
College Station, TX 77843-2124  
[danderson@tamu.edu](mailto:danderson@tamu.edu)

Henry L. Bryant  
Agricultural and Food Policy Center  
Department of Agricultural Economics  
2124 TAMUS  
Texas A&M University  
College Station, TX 77843-2124  
[h-bryant@tamu.edu](mailto:h-bryant@tamu.edu)

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### **Abstract**

Historically, U.S. dairymen have been thought to move to a new location to seek better economic opportunities or to leave an area that has become disadvantaged due to regulation or economics. Recently, there again have been major shifts in dairy production across the United States.

**Keywords:** *Dairy, relocation, decision making*

**JEL Codes:** *Q12, Q14, R32*

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## **Considerations in the Dairy Relocation Decision**

You hear about it more and more ... dairy farmers packing up and moving the operation to a new location to start up again. Often it involves milking more cows and building a big efficient parlor, and, generally, is seen as a positive.

Anecdotally, you hear a lot more about dairy farmers relocating than other types of agricultural operations. Are dairy farmers more open to the challenge and opportunity of moving to a new location than other farmers and ranchers?

Let's look at many of the reasons cited by people as reasons to relocate their dairy. When the reasons are put together, they begin to provide a pattern of what a good place to dairy might look like. In addition, let's look at trends in dairy herd size regionally and some implications of those trends.

### **Objectives**

The primary objective of this work is to determine 1) where milk production is moving to and 2) what factors are causing dairy production to move across the country.

### **Background**

Urban sprawl probably is the most cited reason for a dairy farm to move; at least, that's the perception. This particularly is true in the western U.S. Often, the process involves selling the land that makes up the dairy to someone else for development. The money from the sale enables the owner to move the operation farther out, to build a new, often much larger dairy, and one with all the latest efficiencies. Then, with any luck, that family might get to do it again when the next generation takes over.

Not only has the cash from these sales fueled movement "farther out", but it also has fueled movement to other states. Many have argued that the growth in central Texas 25 years ago began just with several families and extended families moving from California.

But dairy producers also have moved due to obtain greater margins. Every area where growth has occurred has done so because of production and economic considerations. Low land costs, inexpensive feed, good weather (for cows and people), as well as attractive class I prices and fluid utilization have driven movement. The emergence of a national cheese market, as well as other national product markets, has enabled producers to move almost anywhere.

*The permitting issue ...*

A location that is environmentally friendly to concentrated livestock operations increasingly cited as a reason to relocate. Recently, some dairies have begun to move from central Texas to the Texas Panhandle. This move is due, in part, to demanding environmental regulations and a wetter climate in central Texas.

The Texas Panhandle offers an area that is friendly to concentrated livestock operations. It is the largest cattle feeding area in the U.S. The area also has one-third to one-half as much rainfall as central Texas, making nutrient and water issues easier to deal with.

Yet, environmental advantages by themselves have not been enough to support the move being made in Texas. For example, the Texas Panhandle has had the usual economic factors to support growth. Land has been relatively inexpensive. There is low cost feed and reasonable transportation distances for alfalfa.

There are disadvantages, as well. It is further to milk markets, like Dallas and Houston, and this results in higher hauling costs. The area also has lower milk prices than Central Texas.

The Class I location adjustment in the Panhandle is 40 cents per hundredweights below that of central Texas. It is some 200 miles farther from Dallas.

As in other areas of the country, starting a new operation presents the opportunity to expand. Expansion can enable owners to capture economies of size and reduce per hundredweight costs. In addition, it enables the producer to get out of obsolete facilities and adopt new technologies in milking, feeding, and manure handling. These changes have happened across the country.

*There have been incentives ...*

To sweeten the deal, many communities have offered economic incentive packages to dairies. The movement of a dairy from a community or state is much more than the direct impact of the milk and livestock income and related revenue for the operation. There's new business for related industries, such as input suppliers (feed, equipment, and supplies), service providers (consulting nutritionists, veterinarians, and marketing consultants), output markets (cooperatives, dairy processors, livestock auction markets), and, of course, labor.

The lure of economic development can be strong. Research has indicated that the dairy industry has a gross state product (GSP) contribution multiplier of 1.87. GSP is the value added in production through the use of land, labor, capital, and management resources of the state.

GSP is a value-added concept. It is receipts minus the input costs.

New dairies bring jobs, related service industries, and infrastructure to the community. In that way, they are like other businesses. So tax breaks and other incentives have been offered to move dairies into an area.

Stories abound about dairies moving to new locations. The trend is closely tied towards fewer, larger dairies. But, many dairy operations have quit the business over the years. As a

result, the total number of operations may decline even while significant dairy relocations to the area are occurring. So, it is difficult to measure these changes.

## **Methodology**

Milk production data will be analyzed to determine the states where milk production is increasing and decreasing over time. The results will then be incorporated into an econometric model of milk production movements in the United States. A Probit model is then used to determine which variables are important in dairy and milk production relocation. The USDA regional cost of production data will be used as explanatory variables. Possible factors include, feed costs, labor costs, environmental costs, and indices of location characteristics.

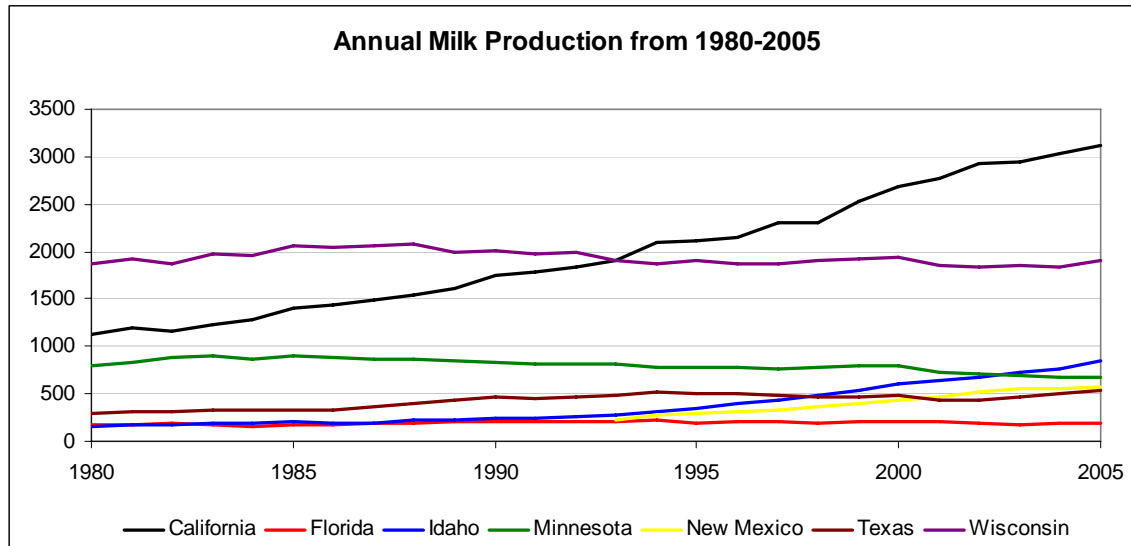
## **Results**

However, with that in mind it is perhaps useful to look at changes in the number of operations in selected states. We will start with the assumption that new dairies are not people who have never dairied before but are experienced operators. So, new operations will represent both growth of existing dairies and new, larger ones moving in from outside.

Since USDA began reporting the number of dairy operations over 500 cows in 1997, the number of dairies in that size category has grown by 674 to 3,010. Examining states where growth has occurred is particularly interesting.

The number of dairies with more than 500 cows in Idaho has grown by 60 to 190. Michigan and Indiana dairies in the same size category increased by 50 and 20 operations, to a total of 85 and 30, respectively. In Wisconsin, the number of dairies over 500 cows has shot up from 50 to 200.

While some of this is homegrown, in some states much of it is from outside. Kansas had no 500-cow plus dairies reported until 20 were identified in 2003. But Kansas was one of the few states that showed a growing number of dairies having 100 to 499 cows from 2003 to 2004.



The Annual Milk Production graph shows what areas have seen big increases and what areas have seen the big decreases. Even when the trend of milk per cow is increasing, some large milk states like Wisconsin and Minnesota are seeing decreases in total milk production. States that see the largest increases are California, Idaho, and New Mexico.

## Summary

The movement of dairy production (mostly dairy families) from one region to another has been one of the interesting trends in the dairy industry. This appears to be much more common than what is happening in other segments of production agriculture.

Many reasons for dairy relocation have been cited, including lower production costs, higher milk prices, drier climate, and more friendly environmental regulations. Closely tied to this movement has been the desire and ability to have a larger herd. New dairies almost always are built larger to spread investments in milking parlors and other facilities over more cows. It

appears we will see more dairy relocations and that people always will be looking for the next big place to dairy.

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