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**FUTURE PROSPECTS FOR THE MIDWEST DAIRY INDUSTRY**

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**I. Introduction**

Good morning! Thank you for the opportunity to participate in this conference and address a topic that is of great interest to me. Let me say right from the start that I will be discussing the subject of Midwest competitiveness in the U.S. dairy industry from a personal point of view. Rather than using published studies and data sets to make my points, I will be drawing from my own personal experiences working individually with dairy farmers from the state of Missouri. I will make the assumption that the lessons I've learned in Missouri will be applicable to the rest of the Midwest.

There are a great number of individuals that are concerned with the future competitiveness of the Midwest dairy industry given the rapid growth of large and efficient production units in the Western and Southwestern regions of the U.S. (hereafter referred to as the West). These units are unlike the traditional dairy farms of the Midwest in that they are large, highly specialized, and well financed. Given an outlook of less government intervention and a greater reliance on market forces, the concern is that the smaller size dairy farms in the Midwest are at a competitive disadvantage and will continue to lose market share to the West.

This topic is of great concern to me. I was hired as part of a multidisciplinary extension team whose sole purpose was to increase the competitive position of the Missouri dairy industry. Our team is funded by an annual grant of \$250,000 from the Missouri General Assembly. We have just completed a 2-year study in which we designed 500 and 300 cow units for Missouri that we feel are competitive with the large dairies in the West. We call this study the Missouri Dairy Plan. In this study we evaluated all aspects of dairy production: housing and equipment, waste management, herd health, nutrition, and economics.

Our conclusion, which we believe is applicable to the rest of the Midwest, is that we can compete with the West if we adopt more modern business principles and exploit our

comparative advantages. But the bigger question, however, is how will we move from traditional size units of 50-80 cows to larger, more efficient units. That will require working with Midwest dairy farm families that are willing to acknowledge market realities, embrace profit-enhancing technologies, adopt modern business and management principles, and take on greater risk. Our Commercial Agriculture Extension Program focuses specifically on those producers willing to meet the challenges of the future and make the necessary changes.

## II. Why Aren't We Competitive?

When trying to assess our competitive position it's easy to start finger pointing and to be critical of the folks that our markets rely on so heavily: our dairy producers. That's unproductive and is not what I want to do here. A better approach is to do some real soul searching to identify our strengths and weaknesses, and to look where we can do better. Once those opportunities are identified, many dairy producers will make the necessary changes.

But before we get to specific recommendations, let's identify some of the Midwestern customs and traditions that I believe adversely affect our competitive position:

- 1) having diversified enterprises in order to be more self-sufficiency
- 2) small production units that have an investment per cow greater than \$5,000
- 3) labor limited to what can be provided by the family
- 4) viewing the farm as a way of life, and/or as a hobby, not as a business
- 5) lack of adequate production and financial record keeping and interpretation

Now I call the above 5 points traditions because they are prevalent production practices that in my view are not well grounded in basic business principles. One tradition that needs changing is the idea that each dairy farm must be self-sufficient in forage and grain production. The idea is that we're in the Midwest, right, so why not produce the forage and grain needed by the dairy enterprise. Why not make money on a cropping enterprise too! That way, you aren't dependent on the market to provide these necessary inputs. But there are two major short comings to this tradition.

First, cropping enterprises draw management, labor, and capital away from the dairy enterprise (often the more profitable enterprise). Midwest dairies could be much more profitable if they would specialize and focus more of their resources on milk production. We have excellent dairy producers that could be even better if they didn't have to spend so much of their time and talents also being crop farmers.

Second, the quality of the forage that is raised on a dairy farm is often of lesser quality than what can be purchased from the market. If you are dairying in a corn producing region, why not contract with local growers to have your silos filled instead of raising it yourself. A



market for high quality silage as well as haylage can develop if there is a demand. Also, premium quality hay can be purchased already from the market (the current year is an exception).

The problem with raising average to poor quality forage on the dairy farm is that this feed greatly reduces feed intake and therefore milk production. The single most important objective of any dairy farm should be **PRODUCTION, PRODUCTION, PRODUCTION**. If you aren't making 20,000 pounds of milk per cow, then you can be doing better. Higher production per cow should be the number one goal of every dairy farm.

Another tradition in the Midwest is the small size of our production units. The smaller the unit, the larger the investment per cow. The problem here is that if you have a debt per cow greater than \$2,000, you will have problems cash flowing the operation. The other problem of course is that there is a limited opportunity to negotiate lower hauling charges and to purchase inputs in volume at discounted prices. Also, it's difficult to justify investments in feeding systems that take advantage of lower-priced alternative feeds without a larger cow population.

A final tradition that limits our competitiveness is the view that the farm represents a way of life that should be protected from market forces. This is the most difficult attitude to deal with but must be met head on. The reality is that the government is getting out of the business of protecting small and high cost farms. My guess is that we will not have a return to higher support prices and we won't have a two-tier pricing policy. Both of these policies cost the government and/or consumers too much money. Instead, we will have a domestic market that will decide who will prosper and who will fail. In this market place is the consumer who only cares about quality and low prices. Consumers don't care if their milk is supplied locally, or if it comes from 2,000 miles away. What does this mean for the small Midwest dairy producer? It means that we will have to learn to compete, or be forced out of the market. Today's market is very unforgiving to high cost producers.

### III. Can We Compete?

Now there are many that will disagree vehemently with my assertions that we are not competitive. They will argue that the Midwest doesn't have a level playing field. Others will say that the West has weather conditions that are more conducive to milk production, higher milk prices, more available capital, etc. As with most arguments, there are some truths and some half truths.

The Midwest does have a competitive disadvantage in weather. Cold winters and humid summers require greater investments in housing and waste management systems when compared to the West. The per cow costs of a paddock system with shades can't compare with that of freestall housing in the Midwest. But the argument that the Midwest has lower

milk prices than other regions of the U.S. and that this explains regional production shifts is a poor one. Milk prices so far this year in California and New Mexico--two rapidly growing dairy states--have been well below prices in Wisconsin (see Figure 1).

But the Midwest has many advantages that can be successfully exploited in the future. These include:

- 1) availability of water
- 2) availability of a good labor supply
- 3) proximity to grain and forage supplies
- 4) rural space and a rural population amenable to large-scale dairies
- 5) low cost land

These are just a few of the reasons why Premium Standard and Murphy Farms are relocating large-scale hog operations to northern Missouri. I believe the Midwest has tremendous untapped resources available to the dairy industry.

Table 1 illustrates an economic comparison between the 500 cow unit developed in the Missouri Dairy Plan, and data from the accounting firm of Genske, Mulder & Company for dairy farms in California, Idaho, Washington, and Central Texas. The cost and returns are calculated on a per hundredweight basis. Some of the estimates from the Missouri Dairy Plan don't directly compare item for item with that of the data from Genske, Mulder & Company. We calculated herd replacement costs differently and included cost and returns for some minor cropping enterprises. But the net income figures are comparable and indicate that the 500 cow unit in Missouri is competitive with larger production units in the West. The point is, **WE HAVE THE POTENTIAL TO COMPETE!**

You see, if production is an important measure of competitiveness, then there are already dairies in the Midwest competing very effectively with the West. The economic model that we developed for the Missouri Dairy Plan showed over and over again that production was the key to financial growth. Even with our higher investments for housing and lagoons, returns on assets were 10.5% for the 300 cow unit and 14.5% for the 500 cow unit. That's pretty good returns! In addition, the model also showed that a 2,000 pound increase in milk production per cow had the same financial implications on net cash flow as a \$1.20 increase in the milk price. Dairy farmers can control production per cow, but as an individual, they have no effect on milk prices.

#### **IV. A Recipe for Change**

Nothing makes Midwest dairy farmers madder than to hear an ag economist from a university say that the key to better financial returns is simple: just get bigger! Such statements assume that our dairy farmers aren't smart enough to figure this out on their own.



But it really suggests that the person making such statements is spending way too much time behind the computer. Well the fact is, dairy farmers already know that they need to get bigger. The real challenge is to tell them how much bigger they need to be, and how to get there.

Some of my recommendations in this regard are as follows:

- (1) **Keep better records!** Too many farms I visit don't have the kind of records needed to make basic management decisions. The shoe box will no longer work! By records I mean financial and production records. Sign up with DHIA and have them keep records for you. As for financial records, there are many choices available today ranging from hiring an accountant, to buying affordable financial software packages. The point is, it's almost impossible to improve your business without records.
- (2) **Focus resources on the dairy enterprise.** For many dairy producers, this may entail selling off land and equipment and reinvesting the proceeds into the dairy enterprise. This will result in a more profitable business if the added capital will help you to improve your rolling herd average.
- (3) **Look at the farm as a business.** If you get bigger and run out of family labor, hire more labor. Scrutinize every investment and ask yourself what the returns will be. You may be better off, for example, putting your money into more commercial grade cows and better feeding systems than in investing in, say, expensive semen and pure bred cows. My point is, think like a business person!
- (4) **Embrace new and profitable technologies.** New technologies like BST afford producers an opportunity to expand milk production without expensive investments in housing and waste handling systems. Other technologies to look at include total mixed rations, freestall housing, modern waste handling systems, artificial insemination, etc.

But my best recommendation is:

### **Accept the market as it is!**

This represents the biggest obstacle to a better standard of living for our Midwest dairy farm families. Accepting this is the first step toward revitalizing yourself and your farm to better meet the market challenges ahead. A major restructuring must take place in the Midwestern dairy industry and that must start with the individual dairy producer. The Midwest must accept the changes that have taken place in the U.S. dairy industry and change accordingly.

## V. Which Way Will We Go?

I have been asked to predict how the Midwest will respond to the restructuring that has taken place in the U.S. dairy industry. As I see it, the Midwest is at a defining moment and must choose its' fate now. I will hypothesize two scenarios.

**Worst case scenario.** Under this scenario, the Midwest rejects the notion that the market has changed. Producers will continue current traditions and production practices. Exits of high cost producers will continue as people retire or are forced off the farm. Milk production from these farms will not be offset with higher production from other units. As a result, the market share of the Midwest will continue to erode.

**Best case scenario.** Midwest producers will accept the fact that the market has changed and will take progressive steps to meet the challenge. Producers will demand better management training and education from University Extension and the private sector. The Midwest will essentially "retool" and "reinvest" not only in cows, buildings and equipments, but also in people. Good managers, not hard workers, will decide the future of our industry. Dairy producers will demand better goods and services at a lower cost from those private sector industries that service the dairy industry. The future of these allying industries is dependent on the prosperity of the Midwest dairy industry.

If I were to gamble which option was most likely, I would guess that the Midwest dairy industry will accept the challenge and begin a major restructuring. Such restructuring will take time though, perhaps as much as 5-15 years. But in some cases, it has already begun. There are many examples of competitive Midwestern dairy producers that should act as role models for the future of our industry. The key will be to develop educational programs that will provide our producers with the management skills required to take the quantum leap to a more profitable size.



**Table 1. Comparison of the Missouri Dairy Plan to Actual Farm Data**

	California <sup>a</sup>	Idaho <sup>a</sup>	Washington <sup>a</sup>	Central Texas <sup>a</sup>	Missouri Dairy Plan <sup>b</sup>
<b>Average Dairy Data</b>					
Number milking cows (hd.)	1,130	911	870	977	500
Daily production/cow (lbs.)	60	58	65	65	58 <sup>c</sup>
Herd turnover rate (%)	34	35	27	34	35
<b>Income (\$/cwt.)</b>					
Milk	\$11.47	\$12.02	\$12.07	\$13.29	\$12.52 <sup>d</sup>
Calves	.15	.15	.30	.48	.66
Other	<u>.15</u>	<u>.02</u>	<u>.20</u>	<u>.02</u>	<u>1.55<sup>e</sup></u>
Total Income	\$11.77	\$12.19	\$12.57	\$13.79	\$14.73
<b>Expenses (\$/cwt.)</b>					
Feed	\$ 5.37	\$ 4.40	\$ 5.08	\$ 5.82	\$ 5.64
Other variable costs	2.08	2.92	2.86	2.72	4.69 <sup>f</sup>
Herd replacement costs	.96	1.10	.86	1.62	.91
Other fixed costs	<u>2.17</u>	<u>2.45</u>	<u>2.01</u>	<u>2.55</u>	<u>2.21</u>
Total Costs	\$10.58	\$10.87	\$10.81	\$12.71	\$13.45
Net Income (\$/cwt.)	\$1.19	\$1.32	\$1.76	\$1.08	\$1.28

<sup>a</sup>Source: **Dairy Income and Expense Averages**, Genske, Mulder & Company, June 30, 1993.

<sup>b</sup>Source: **Missouri Dairy Plan**, Commercial Agriculture Program, Extension Manual 155, 1993.

<sup>c</sup>20,000 lb. RHA with 345 days in milk.

<sup>d</sup>Average Missouri all-milk price for the months January-June, 1993.

<sup>e</sup>Includes 58 cents for the value of crop production and 97 cents for cull income.

<sup>f</sup>Includes some cropping expenses.

# Figure 1. 1993 All-Milk Prices

