Maryland's Dairy Industry: 2011

A Report

To

Governor Martin O'Malley

From

The Maryland Dairy Industry Oversight and Advisory Council



December 2011

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Executive Summary

Dairy Advisory Council Focuses on Federal Policy as feed costs threaten industry

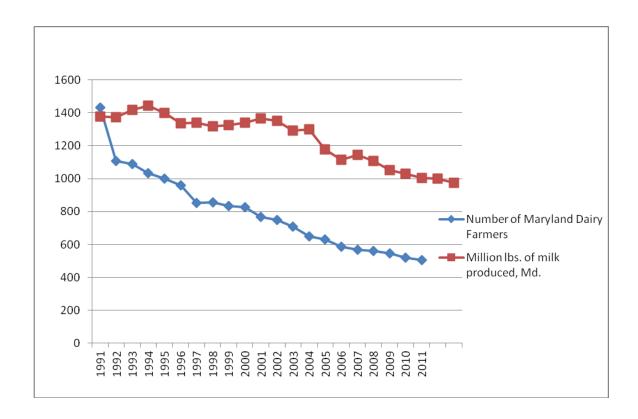
In 2011, the Governor's Dairy Advisory Council turned its attention to federal policy concerning the dairy industry. At the time of this report, the Council had agreed to support conceptually the National Milk Producers Federation proposal. That proposal is now embodied in the Dairy Security Act of 2011 (H.R. 3062). The Council also supports the proposal of U.S. Senator Kirsten Gillibrand (N.Y.) to ensure payments for 90 percent of milk production when the margin between feed and market prices is less than \$6, up to 2.985 million pounds of milk. This proposal would more substantially provide financial support to smaller dairy farms, like the majority of Maryland farms.

Two members of the Council, milk processors, are opposed to this legislation, stating it continues an overly complex federally-controlled milk pricing program.

In a report given to the committee on the committee by University of Maryland economist Howard Leathers, the industry in the state is described as being under increasing financial stress as feed costs remain too high to be supported by higher milk prices.

As of 2011, the number of dairy farms in Maryland has fallen by 126 farms since that first report of the Governor's Dairy Advisory Council in 2007. There are now 505 dairy farms in the State of Maryland. By county, the breakdown is: Allegany 3, Baltimore 9, Caroline 9, Carroll 56, Cecil 30, Frederick 106, Garrett 69, Harford 25, Howard 2, Kent 15, Montgomery 6, Prince George's 2, Queen Anne's 8, St. Mary's 22, Talbot 5, Washington 136, Wicomico 1 and Worcester 1. Comparing the second quarter (April-June) of 2011 to the second quarter of 2009, farm numbers have dropped by 9%, but dairy cow numbers have dropped by 7%, and milk production has dropped by 4%.

Number of Maryland Dairy Farms, Production of Milk in State



2011 Recommendations

In 2011, the Advisory Council has five recommendations to Governor Martin O'Malley that would be beneficial to the goal of retaining and encouraging a healthy dairy industry:

Recommendation 1:

This Council urges the Governor to make preserving the State's dairy industry a priority with the Maryland Congressional delegation. The Governor and the Maryland Delegation should support the Dairy Security Act of 2011 (H.R. 3062) with amendments proposed by Senator Kirsten Gillibrand of New York.

The national policy discussion over fundamental reform of the federal milk pricing and safety net system will begin in earnest as the 2012 Farm Bill is developed and debated. At the time this report is being written, the Council supports the Dairy Security Act of 2011 as its features will support the financial underpinnings of the dairy industry. However, the Council believes that smaller dairy farmers will not be adequately protected in that proposal. As Maryland's dairy farmers are relatively smaller, proposals from New York Senator Kristen Gillibrand to protect a \$6 margin over feeds costs appears to help smaller farmers. Larger producers are also helped, to a lesser level under the Gillibrand recommendations: \$4 margin over feed costs when production is more than 2.985 million pounds (160 cow herd). As this legislation evolves in the Farm Bill, the Council will update the Maryland Department of Agriculture and the Governor on their concerns.

Recommendation 2:

As soon as it is fiscally possible, this Council recommends full funding for the Maryland Dairy Farmer Emergency Trust Fund (Subtitle 14. Agriculture Article, Annotated Code of Maryland).

This program, passed in 2008, would help maintain a local dairy industry and help protect the 250,000 acres of land associated with dairy farming. The Emergency Fund would

support farmers during times of economic crisis, helping to prevent borrowing against the farm to remain in business, and/or the sale of farmland. As proposed originally, this fund would be maintained at \$15 million and be distributed by the Secretary of Agriculture. It would partially defray losses not covered by the current federal Milk Income Loss Contract safety net system, supplementing its shortcomings.

Recommendation 3:

Maryland state and federal leaders should work with their counterparts in the Mid-Atlantic and Northeast region to establish uniform gross weight limit rules for raw milk haulers on state and federal highways. Gross weight limits in excess of 80,000 pounds should be allowed where reasonable precautions can be taken to address safety concerns. Allowing haulers to transport more milk will reduce truck traffic, fuel consumption, and transportation costs that are ultimately borne by dairy farmers and consumers.

As discussed in the 2008 report to Governor O'Malley, and repeated in 2009, Maryland's dairy farmers, milk processors and consumers rely upon the ability of milk haulers in the State to transport milk from farms to processing plants. The efficiency of this process is hampered by laws which prevent trucks from carrying more than 80,000 pounds. This problem has become more acute as diesel fuel prices have risen. There is a patchwork of varying milk truck hauling weight limitations on highways and state and federal roads throughout the Northeast. A number of Northeastern states allow milk haulers to run up to 95,000 pounds on designated state roads. Meanwhile, New York and Maine allow for gross weight limits up to 99,000 pounds on some Interstate highways. In Maryland, haulers may run up to 88,000 pounds but only in certain areas of the state. Elsewhere in the region, milk haulers are limited to 80,000 pound gross weight limits on interstate highways.

Because of the regional nature of the milk market, milk trucks have to cross state lines as they pick up milk at farms along their routes and transport to processing facilities. Thus the various rules and Maryland's lighter load limits, create inefficiencies for milk haulers on their routes to the State's 505 dairy farms. Further complicating this issue is the seasonality of milk production, with large swings in production volume varying depending upon the season, heat, feed quality and other factors. This can make it hard to predict the volume of milk (and thereby the truck's weight) that will be picked up at each farm. Working to create uniform standards can help address transportation inefficiencies, whose costs are passed on to dairy farmers and consumers.

Recommendation 4:

The Governor and the General Assembly should not allow the sale of raw milk in the State of Maryland. This is currently the law in our State and this Council believes that it should remain the law.

As discussed in the 2009 report to Governor O'Malley, there is a push from some quarters for the sale of raw milk in the State. The Council however, strongly believes that the health concerns associated with raw milk sales are well documented, and repeats its recommendation against allowing the sale of raw milk. Milk that is processed and pasteurized is a healthy, wholesome food product. However, in its raw form, there are potential health risks. Attachment C to this report, prepared by the Maryland Department of Health and Mental Hygiene, is provided in support of this recommendation.

Recommendation 5:

New environmental regulations have the potential to drastically impact farm profitability in a negative way. The Governor and the General Assembly should work to ensure that any new regulations are reasonable, equitable, achievable, and based on sound science.

Maryland farmers want to be a part of the solution in improving environmental quality. We commend Governor O'Malley for treating farmers fairly in the first phase of the Watershed Implementation Plan for the State's Total Maximum Daily Load for the Chesapeake Bay. At a time when farmers are being asked to do more to protect water quality, we are concerned that the State has reduced the assistance it offers farmers to

help in this area. The standard nutrient management plantagement			
not cripple our ability to utilize manure in our operations in a manner that does not harm water quality.			

Attachment 1

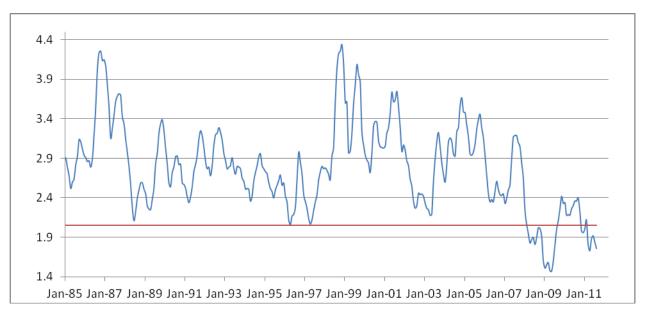
Dairy Situation and Outlook, October 2011

Howard Leathers University of Maryland, College Park, Md.

The financial situation of America's dairy farmers has made a modest turnaround from the historically difficult months of 2008 and 2009. However, the price situation is still far from comfortable, and is still worse than "normal."

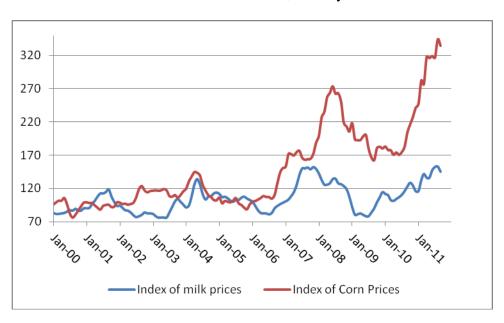
One commonly used measure of economic health of the dairy industry is the milk-feed price ratio which shows the ratio of milk price to the price of a feed cost ration. A high ratio means that milk prices are high relative to feed prices, and therefore times are good for dairy farmers. A low ratio means times are bad. In the 22 years from January 1985 to March 2008, the milk-feed price ratio had never fallen below 2.06. But in the 18 months from April 2008 to September 2009, the milk feed price ratio was never above 2.02. In the year that followed, from October 2009 to November 2010, the milk feed price ratio moved back above the 2.06 level, but stayed in a tight range between 2.11 and 2.42. Since December 2010, the milk-feed price ratio has been below 2 for every month except 1 – again in a range that is very low by historical standards.

Milk Feed Price Ratio by month 1985-2011



For the previous year, milk prices have been high: the all-milk monthly price reached an all-time record high in July of 2011, and broke that record in August 2011. But feed prices have shot up faster than the milk price. For example, in summer and fall of 2007, when milk price was also in the \$21 range, corn prices averaged about \$3.40 per bushel. In recent months, again with milk in the \$21 range, corn prices averaged about \$6.50 per bushel.

Indexes of Milk and Corn Prices, January 2006 = 100.



The financial stress caused by high feed prices has continued the trend toward fewer and fewer dairy farms in the state. The 2007 Governor's report contained a prediction that 100-220 Maryland dairy farmers would exit the industry between 2006 and 2015. Now, six years into that 10-year projection, we find that the number of farms registered with the state Department of Health and Mental Hygiene as licensed to sell milk has fallen by 126, from 631 in 2006 to 505 in 2011.

Year	Number of dairy
	farms in Maryland
2002	750
2003	710
2004	667
2005	649
2006	631
2007	582

2008	561
2009	555
2010	524
2011	505

As expected, the reduction in numbers of farms comes primarily from consolidation of existing herds: Comparing the second quarter (April-June) of 2011 to the second quarter of 2009 we see that farm numbers have dropped by 9%, but dairy cow numbers have dropped by 7%, and milk production has dropped by only 4%. (Source Maryland Agrifacts.)

The short term outlook is for even worse times in the coming year. Milk prices in mid-to late- 2012 are expected to be lower than current prices by about 20%. Feed prices are also expected to lower, but by only 10% or so. Therefore the financial squeeze on dairy farmers by next summer is expected to be extreme.

The federal Milk Income Loss Contract (MILC) program is designed to provide a safety net payment to dairy farmers in periods when milk prices are low relative to feed prices, using a specific formula. This program has made no payments in the past 12 months, but is expected to make small payments (25 cents per hundredweight, or less) in early spring to mid summer of 2012.

In 2009, the Risk Management Agency of USDA announced the availability of Gross Margin (LGM) insurance for dairy farmers. This insurance pays policy holders an indemnity if their gross revenue (milk revenue minus feed costs) falls below the insured level for the insurance period. In the face of lack of farmer interest in this insurance product, RMA has recently announced that insurance premiums will be subsidized for contracts issued after December 17, 2010. The premium subsidies may result in an uptick in interest among Maryland's dairy farmers, giving them an additional source of protection against economic hard times. So far, the interest among Maryland's dairy farmers in this program has been limited. During the period July 2010 to March 2011, 48 insurance contracts were sold, covering less than 6% of the milk produced in the state during that period, and despite the fact that premiums are subsidized at a 33% rate (meaning farmers bear 2/3s the cost of the insurance contracts).

Attachment 2

Extension Education Needs for Maryland Dairy Producers

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Background

Dr. Howard Leathers has indicated in his report this year that "The financial situation of America's dairy farmers has made a modest turnaround from the historically difficult months of 2008 and 2009." Making a profit during that time has never been so difficult. To appreciate the depth of this economic downturn, Dr. Ed Jesse (1), University of Wisconsin dairy economist, reported that "...prices (deflated using the CPI [Consumer Price Index]-U all city, all item average) for Jan. through June (2009) were, in each month, the lowest recorded since the CPI was first published in 1913." The effect of these low prices was devastating to dairy farm equity positions. For example, it was reported by Purdue University News Service (2) that "Typical dairy farms in 2009 lost \$350 to \$1,000 per cow in equity." As a result, nearly all dairy farmers have had to change their management strategies to recover and remain viable in current times.

Due to record highs in milk price in July and August this year, dairy producers have been granted temporary relief. But as Dr. Leathers has pointed out, now ..." feed prices have shot up faster than the milk price". In understanding the actual cost that feed currently represents, Joe Horner (3), Extension dairy economist at the University of Missouri, reports that "...the total feed cost of producing a hundred weight of milk on many Missouri dairy farms is running from \$10.00 to \$13.00 per hundred weight." Furthermore, Horner (3) indicates that feed cost to produce a hundred weight of milk have increased \$3.09 from 2005 to 2011. Thus, the trend of having to manage milk price minus cost margins with higher feed input costs will likely be with dairy producers well into the future.

To understand how Maryland producers were managing their dairy herds as consequence of the 2008 and 2009 collapse of milk prices, I visited 6 commercial dairy herds in October and conducted a personal interview with the owner. These herds were located in Washington, Frederick, and Kent Counties. Of the 6 farms, 4 of these were conventional, one was an organic producer, and one was an intensively managed grazing herd. Two questions that I asked each producer was: 1) What did you do to keep your business viable? and 2) What are you doing to rebuild your business? For most of the producers, the majority of answers pertained to crop and feed management. Many different practices were mentioned to reduce costs of feeding. The range was from changing from purchase of a custom delivered feed to feeding commodity ingredients, use of byproducts to replace corn, discontinuing feed additives to the ration, close monitoring of milk components for percentage of fat and protein, focus on forage quality and harvest,

maximum production of farm raised forages, and use of cover crops. These producers also emphasized close monitoring of business expenses and knowing costs of production.

It was of no surprise that these producers identified crop and feed management as the top priority for reducing costs of production. It is well known in the dairy industry that feed represents approximately 50% of the cost of production, and hence the greatest opportunity to reduce costs. The most effective strategy for reducing costs of production is to maximize the intake of forages in the diet because as ruminants, cows are designed to digest fiber in plants. Fibrous material from plants is an economical source of energy. Thus, with optimal forage consumption, producers are able to reduce the purchased inputs of the ration such as grain and starches. Dairy nutritionists have traditionally recommended that diets fed to lactating cows contain 50% forages and 50% concentrates. Due to several technical advances in forage production and the interest in reducing feed cost, dairy nutritionists are now recommending that forage should comprise 60 to 70% of the lactating cow diet. Dr. Larry Chase at Cornell University, for example, in a recent Hoard's Dairyman article (4) reported that not only does the increased forage significantly increase income over feed cost, but that higher forage rations also had higher milk components, fewer lame cows, lower involuntary culling, and enhanced longevity in their herds.

Interestingly, one of the conventional dairy herds that I interviewed in October was already following the current guideline of feeding 70% forage and in addition, their ration consisted of 90% homegrown feed. As a result, this producer did not need to make any fundamental change in their ration. Nevertheless, they continue to study and experiment with strategically using cover crop production and forage sorghum to reduce feed costs. In addition, this producer was enrolled in the Dairy Farm Business Summary that Dale Johnson, Extension Farm Management Specialist at the Western Regional Research and Education Center, Keedysville, offers to approximately 30 dairy producers each year. Mr. Johnson reports that this producer is very attentive to the business aspect of the financial records and it is one of the most profitable farms in the business summary.

In regards to University of Maryland Extension expertise that is available to Maryland dairy producers, no one at the College Park Campus currently has responsibility for the area of forage production. Formerly, Dr. Les Vough, an agronomist and plant scientist, was employed in this capacity and provided educational programs in this area until his retirement several years ago. This is a key position for Maryland dairy producers improving access to technical advice on forage production, harvest, and storage and for increasing profitability. Currently, there is a faculty search underway for a ruminant nutritionist with forage/pasture expertise in the Department of Animal and Avian Sciences. This person's expertise would focus specifically on the nutritional value and digestion of forages and would complement a person in the vacant position that was formerly occupied by Dr. Les Vough.

References

1) Ed Jesse, Dept. of Agricultural and Applied Economics,

- Univ. of Wisc.-Madison. Dairy Situation FAQs. Aug. 2009.
- 2) http://www.purdue.edu/newsroom/general/2010/101206OlynkDairy.html Dairy prices on their way up as industry begins to improve. Writer: Jeanne Gibson, 765-496-2384, jegibson@purdue.edu
- 3) http://agebb.missouri.edu/commag/news/archives/v20n4/commag.pdf Joe Horner. Let's get real about dairy feed cost inflation. p. 6
- 4) Chase, L.E., Maximize your forage potential. Hoard's Dairyman. September 25, 2011. p. 601.