Framework for Dairy Industry Stabilization

Introduction

New Jersey's dairy farmers are in crisis because they are paid significantly less for their milk than it costs them to produce it. While this has been the case nationwide for much of the past two years, it is exacerbated in New Jersey by the relatively higher cost of doing business here.

One hundred and thirty-eight New Jersey dairy farms have gone out of business in the past 10 years. Without some intervention, many more, if not all, will perish, leading to a further crisis for New Jersey's milk processors, who employ thousands of people, as they would lose the critical milk supply closest to their plants.

The value of New Jersey's dairy farms does not rest solely in their production of milk. They provide valuable open space, protecting against further development in what is already the most densely populated state in the nation. Simply put, an approach that keeps our dairy farms viable is a benefit to all our residents by maintaining their quality of life and staving off the need for additional school and municipal services that lead to higher property taxes.

Stabilizing the economics of New Jersey's dairy industry has been the goal of ongoing work by the New Jersey Department of Agriculture. This purpose was made clear from the outset of the work sessions that began in October 2009.

The Department sees no benefit in a program that unfairly penalizes out-of-state producers or dealers. New Jersey is home to more than 8 million people. Its remaining 87 dairy farms, by themselves, cannot possibly provide enough milk to the rest of the marketing chain to satisfy a population that large.

The state's unavoidable growing reliance on out-of-state milk has resulted in an economic model that might ultimately only further decrease, if not entirely eliminate, the number of New Jersey dairy farms.

New Jersey is currently part of the Northeast Federal Milk Marketing Order; Federal Order One. This system was established by the federal government to equalize milk payments received by dairy producers nationwide. However, the Federal Milk Marketing Order system has failed to adequately protect New Jersey producers. The federal market minimum price is a weighted figure that takes into consideration the prices for Class III and Class IV milk, butterfat, nonfat solids, and protein, and provides for calculation of advanced pricing for Class I and II fluid milk.

The system, however, fails to take into consideration the variation of production costs based on location. New Jersey has extremely high costs of living, including high labor prices and high property taxes. One processor has said that "perhaps decoupling the Class

I price from the other three classes would help stabilize 40 percent of the farm price." Dealers have told the Department that the real problem exists with the Federal Order system because if the Federal Order was "doing its job, and (producers) were getting enough money at the farm level to sustain them," there would not be a need for state action.

States may establish their own, additional, rules regarding pricing of milk and the conditions under which milk is to be sold. In New Jersey, the Milk Control Act provides the authority for the Director to control the milk industry regulatory scheme within the state. The goal of the Act is to preserve the state's interests, as well as those of the consumer, at all levels of the industry. The fundamental purpose of the Milk Control Act is to serve the public interest in the milk industry by preserving agricultural interests engaged in the production of milk.

With this in mind, Department staff has put together options for consideration involving federal action, industry action, state action taken singly or together to accomplish the potential of bringing stability back to our milk market without unfairly burdening producers, processors, dealers or out-of-state members of this marketing chain.

The options involving industry and state action(s) recognize that balancing the needs of dairy farmers with the rest of the chain requires an understanding across the industry of farmers' costs of production. Unless payment received by farmers for their milk exceeds the cost of production, the continued erosion of the family dairy farm has no way to stop.

These options are the result of more than a year's worth of research, work sessions and hearings involving industry experts and additional research after those meetings. In all, it involves thousands of hours of effort by Department personnel. It is a testament to the complexity of the dairy industry that the Department feels it must receive informal comment from the entire industry to move ahead with economic stability and capacity for adjustment as options are considered.

The crisis facing New Jersey dairy farmers and the related milk industry is of such magnitude that it requires different thinking than was commonplace in the past. Clearly, those past ideas have not worked. All of the elements of the industry are urged to offer both constructive comment on the options here identified, but also, if no approach is viewed as acceptable, to suggest a serious alternative or elements that can succeed. Following is a review of options and the data that helped create it.

The options are deliberately malleable, so as to afford the greatest input from members of the industry. Ideally, the various segments of the marketing chain can find common ground on which to finalize an approach that is agreeable to all.

Products Covered

The following products would be covered under any of the options:

Fluid milks:
Whole, 2%, 1%, skim, fortified milks, flavored milks, Butter Milk, flavored drinks, milk drinks (milk portion only).

Creams:
Fluid cream mixes greater than 9% BF (includes fluid ice cream mixes)
Half and Half (10 – 18% BF)
Light Cream (18 – 27% BF)
Heavy Cream (over 27% BF)
Aerated Cream

Producer Participation

Producers' participation in any of the options may be affected by their:

- ✓ Enrollment in programs designed for continuing improvement of milk quality
- ✓ Meeting certain quality standards
- ✓ Limiting annual growth in production as needed

*Out-of-state producers will be reviewed for enrollment in appropriate state-funded programs for risk management (Center for Dairy Excellence in Pennsylvania and the New York Center for Dairy Excellence, for example).

Dairy Cost of Production

In order to best define what approaches to take in helping struggling dairy producers, it is necessary to first determine their costs of production. It is impossible to determine the level of help dairy farmers need without first establishing what their costs are. In relationship to creating a framework to help dairy producers, it is necessary to do a short-term calculation of average costs to develop a framework for assistance, as well as identify a long-term approach for evaluation of dairy costs of production going forward.

It is important to note that the same elements of production cost are used in determining both short-term and long-term producer costs. Short-term costs are being estimated based on the responses to surveys by producers already received by the Department. Long-term production costs would be determined by collecting that data from all those seeking to participate in any option initiative at issue. (Note: Options which support action at the Federal level would be expected to be further evaluated, if such action is taken, at the State level.)

Cost of Production Data – Present Time

The current cost of production is based on information submitted via surveys returned and averaged. The fiscal staff of the Department performed the review and averaging of the submitted producer surveys, and the averaged data will be provided upon request.

The above established New Jersey cost of production can be compared to the two sets of information placed into the record, to be known as PMMB cost of production survey (placed in testimony by GNEMA), and Northeast Farm Credit's, NE Dairy Farm Summary, also placed on the record in testimony, updated with the 2009 information published since the previous hearing.

Additional benchmarks from USDA-AMS, ERS, and NASS data can also be used to compare the final number established from the financial data voluntarily submitted by producers. All individual producer financial data will remain confidential and will only be used as part of final averages when sufficient data is present to protect the respondents from exposure of their operation.

The following approach has been used to establish the Dairy Cost of Production. The same categories are used in the cost of production going forward, in order to represent the most consistent methods of showing costs associated with milk production in New Jersey.

Total Operating Expense

1) Labor cost

Labor and labor payment programs on a dairy farm range from individually owned farms, who in some cases receive only a payment for their labors when a profit is generated, to those of corporate structure, where labor must be paid directly from the Partnership, LLC or Corporation. In order to establish a balanced approach to the cost of production, the Department would use a standardized calculation for labor on all sets of data submitted in this study.

Efficiencies for labor also would be taken into consideration when calculating the labor offset for the cost of production of the New Jersey Dairy Farm. The offset would be based on useful measures of labor efficiency of the number of cows and pounds of milk sold per "full time employee" (FTE) (Dairy Excel, OSU 2008). According to data published by The Ohio State University, Dairy Excel publication, FTE workers operating a tie-stall barn or stanchion system should be able to handle 30 – 35 cows, while free-stall parlor systems should be able to handle 40 – 50 cows per FTE.

A second labor efficiency used to evaluate dairy operations is based on the pounds of milk sold per FTE. Standards used for stanchion/tie-stall systems are published as 450,000 pounds for small-breed herds to 600,000 pounds for large-breed herds per FTE, and free-stall operations with parlors 750,000 pounds for small-breed herds – 1,000,000 pounds for large-breed herds per FTE.

New Jersey farms vary greatly in housing practices, from stanchion/tie-stall barns in Northern Jersey to free-stall operations mainly located in Southern Jersey. New Jersey farms also differ as to the type of cows representing each herd, ranging from small-breed based herds to large-breed based herds, as well as those herds that are a mix of small and large breeds. Since complete data is not available of this breakdown, Department staff

would average the cost of labor using the productivity efficiency number of 750,000 pounds per FTE as a standardized labor unit.

Rate of farm labor compensation per FTE would be based on USDA-NASS Farm Labor statistical data (May 2010) for the Northeast II area, with the combined rate for field and livestock workers. Based on the combined average of January 10-16, 2010 and April 10 – 16, 2010, the rate would be $10.41 per hour, for a 40-hour week, 52 weeks per year payment, which would include any paid vacation.

Farm Management rate: Not all labor on a farm is base labor. Management labor, which normally garners a higher rate in almost every industry, must also be accounted for as well. A rate of 5 percent of gross dairy income would be used as surcharge to the cost of production. This standard offset (Dairy Excel, OSU 2008) equalizes management charges among the respondents and would be calculated on each summary submitted and used in the weighted average cost of production.

A payroll tax offset should also be included into the cost of production labor. FICA (6.2%) and Medicare (1.45%), which are required employer payments.

(The formula devised for calculating labor costs is in Appendix A)

2) Feed Expenses
Items included in purchased feed costs include any carbohydrates (grains, grain byproducts, sugars,) concentrate proteins, vitamins, minerals, additives, binders, animal health additives commercially added into blended ration portions, complete feeds, forage and forage extenders.

3) Livestock Expenses
Includes breeding fees, veterinary medicine and medical services, animal health supplies, bedding, livestock insurance, DHIA or other production management tools.

4) Crop and Pasture
Includes seeds, chemicals (herbicides, insecticides, fungicides), fertilizer, lime, paid application services.

5) Maintenance and Equipment expense
Includes fuel (gas, diesel, propane, bio-fuels), oils all types, repairs and maintenance of all machinery and equipment dedicated to the dairy operation 80-percent of the time.

6) Deduction Charges
Includes milk marketing charges: milk marketing dues, hauling, stop charges (if milk receipts are mailbox reported payments, do not deduct from this section.)

7) Operating Expense
Includes deduction of interest payments on the total operating loan, other miscellaneous operating expense not included above.

Overhead Expense

Property taxes, farm insurance, professional association dues and professional fees, utilities, miscellaneous.

Depreciation and Interest Expense

Interest on property and land, building, machinery and equipment depreciation.

Return On Investment

For purposes of evaluation of production costs, consideration was given to the need for Return On Investment (ROI) in order to maintain herd health, milk quality and milk production per cow.

Under the framework, the approach utilizes the standard investment of efficiency value of $7,000 per cow. This efficiency equalizes those inputs of value of land, number of cows per unit, value of equipment, value of dairy facilities (OSU, Dairy Excel 2008) as an offset for ROI. The rate of return will be based on the average of three FDIC insured institutions, yielding the highest interest rate obtainable for a $10,000 12-month CD; July 2010.

The formula is:
$7,000 per cow times number of cows in the survey = total investment
Total investment times averaged 12-month CD interest rate = total ROI
Total ROI / total cwt in the survey = ROI assigned per cwt to the cost of production.

Cost of Production Data – Going Forward

Beyond the establishment of a short-term cost-of-production average based on information supplied in surveys, the Department needs to periodically revisit where producers stand with cost-of-production in order to adjust any assistance to farmers (up or down) as costs change.

A standardized financial program (OSU Dairy Excel, 2008; University of MN, Dairy Economics) would be used to establish the long-term New Jersey producer cost of production, with all herds entered into this program and all data analyzed on the same basis to determine the average cost of production for the previous year (starting with 2010 data). The labor rate as established in the short-term establishment cost of production would be used to assign a number to the labor portion of the cost.

This adjustment would utilize the change in U.S. cost of living index from the base cost of living on record as of April 1 of each year. The Cost of Production will be calculated

each year from the previous year's financial data collected and analyzed by the standardized financial program and published each April 1.

OPTIONS TOWARD A FRAMEWORK FOR DAIRY STABILITY

Producer Conditions

Producers may be asked to take specific steps to better manage milk production in the current economy. Without that involvement, producers would not be positioned to take advantage of the options. Two major factors to be considered for producer business models are supply management and constant quality improvement.

Production Balance/Supply Management

The Department recognizes that a historical pattern has emerged in which an increase in the base price of milk has resulted in increased production as dairy producers attempt to recoup some of the losses they have experienced during times of lower prices. This unfortunately has the effect of once again depressing prices as an over-supply of milk overwhelms demand.

This pattern suggests that a controlled rebuilding of the dairy sector is ultimately in the best interests of all segments of the milk marketing chain, as well as the state in general, as it will provide better long-term stability for producers. Therefore, consideration of elements of supply management may offer one way to prevent production expansion from being counterproductive to any assistance to farmers.

Constant Milk Quality Improvement

For producers to receive the maximum payments for the milk their operations produce, their milk must be at a higher quality standard. Two quality measures that could be used are Somatic Cell Count (SCC) and Standard Plate Count (SPC). To aid in ensuring quality, the Garden State Dairy Alliance (or similar program) for Risk Management on dairy farms could be revived. The minimum enrollment by a farm in the self-help program could consist of the Milk Quality Program, Herd Health Program (NJCHAP), and Financial Management Program (FINPACK).

Framework Options for Stability

- **Federal-Level Option**

In the past year, some non-farmers have urged that there be no specific state-level action to address low prices being paid to producers, saying the market would eventually rebound from prices in the $10 to $12 per hundredweight range being paid to farmers during this period. Farmers countered that they could not continue doing business while losing anywhere from $7 to $10 per hundredweight. Although recently the price pendulum has swung higher (to touch prices at $17 per hundredweight) the lesson has long been that it will swing back.

In November 2009, New Jersey had 103 milk producers. Today, New Jersey has 87. In November 2009, New Jersey's milk industry, both commercial and institutional farming operations, produced close to 1.4 million hundredweight of milk pooled within the Federal Order. At the same time, approximately 20 million hundredweight of fluid milk is distributed by 298 licensed New Jersey milk dealers, and consumed annually by New Jersey's 8.6 million residents.

Those urging the Department to take no action seemed to share the common theme that only through change in the Federal Milk Marketing Order can there be meaningful results. They contend that an individual state attempting to influence the market within its own borders may be hampered by the Commerce Clause if state action relates to milk being imported from other states, at least when there is no federal authorization in place allowing for an interstate compact. This was said to be especially problematic in New Jersey since the state's dairy producers only provide approximately 10 percent of the milk entering New Jersey's four Class One processing plants.

Those urging that action was needed at the Federal level identified aspects of the federal milk marketing system, including the tying of prices for fluid milk intended to be processed for drinking to the prices for milk intended to make cheese and other commodities. A "de-coupling" of those prices, they said, would eliminate the volatility that comes from tying the prices for a higher percentage of milk (that to be processed for drinking) to the prices for a smaller percentage of milk (that to make cheese and other items) that are set through a "thinly traded" commodities-trading system.

One option is that New Jersey take a strong position with surrounding states, combining efforts to push for a change in the Federal Order.

This option identifies the root cause of the problem as the need to modernize the Federal Order. This option includes stronger efforts toward a regional recommendation to the Northeast Federal Order.

It is not possible to speculate how changes in the Federal Order would impact each segment of the milk marketing chain in New Jersey since no specific plan for reforming the federal system has been proposed.

What is known is that significant time would pass before any federal reform would be proposed, passed and enacted in order to bring relief to dairy farmers. The last of the USDA/DOJ hearings is to be held in early-December, thus any proposal for relief would not be offered at the federal level until the first quarter of 2011, at the earliest.

- **State Support of Federal Investigative Initiative Option**

In further support of solutions at the Federal level, there is Federal debate about what seems to be the growing consolidation of milk marketing into fewer hands. The United States Department of Justice is paying particular attention to the issue of consolidation to determine if it has reached the level of a monopoly in some areas.

On that basis, there is another area where changes at the Federal level may be needed that would impact milk markets on a state and local level. In New Jersey, Class One milk can be sold to one of a limited number of entities, known collectively as the "milk procurement" segment of the marketing chain; however, most of these entities are affiliated, thus limiting farmer options to sell their milk.

In a normal business setting it is possible to get a price from three or four vendors who bid the job through proposals. In the New Jersey market for milk this vendor/bid proposal is essentially not available. There are only a limited number of players in this marketplace -- effectively, seeming to be a monopoly. Another option is to call upon the State capability to form a task force in the State to work aggressively with the Justice Department and uncover the facts of this market, its limits and possible monopolistic direction, if it so operates.

- **Stepped-up Enforcement Option**

Another option directs the focus to the marketing of milk. Some milk dealers, for example, have urged that the Department put its energies into more aggressively enforcing the laws already in existence governing the selling of milk below variable cost. The increased enforcement emphasis "levels the playing field" through enforcement and greater use of presumptive pricing to affect the unobstructed shipment from dealers in surrounding dairy-surplus states of lower-priced packaged milk into New Jersey. The shipment would be more aggressively and more quickly held to its ability to meet in real time the variable cost regulation requirements.

- **Critical Milk Supply Zone and Stabilization Pool Option**

If there is recognition of the critical supply zone for New Jersey, there can be a stabilization pool from which payments could be made to producers in this zone. New Jersey is currently part of the Northeast Federal Milk Marketing Order; Federal Order One. Federal milk marketing orders are not a dairy price-support program. The Order requires that milk prices be established at a level that will assure a sufficient quantity of pure and wholesome milk to meet current needs within each order, and to assure a level of farm income adequate to maintain capacity sufficient to meet anticipated future needs.

A "Critical Supply Zone" could be determined based on

1) quality of milk;
2) seasonal availability of milk; and
3) location of raw milk supply.

The Department has determined such a zone to be essential to maintain the critical supply of milk for consumers, especially during weather events or other emergencies that might arise. A 50-mile zone could be established around each Class One plant located in New Jersey. Such would allow milk to be picked up and transported to each plant within 1 to 1½ hours. This distance can be considered to be needed for the maintenance of a minimal supply to be available to the consumer.

In considering an approach to use the marketing chain as a source of assistance, the current existing competitive quality, quantity, hauling, and voluntary premium payment structures that exist in the market today would not be considered in the calculation of stabilization pool payment amounts.

A stabilization pool could consist of funds that would come from within the marketing chain of milk. The "stabilization pool" of funds for the producers of milk would result from handling costs paid by the dealers who place milk and milk products into licensed and unlicensed stores. (Unlicensed stores are locations which do not sell retail packaged milk but use milk in the end products to the consumer, i.e. bakeries, coffee shops, etc.)

Payment to a stabilization pool would only be triggered when there is a shortfall between the dairy cost of production and the milk payment to the farmer.

Schools and institutions would receive credit for the stabilization so that the stabilization would not affect the price of the milk used in schools and institutions.

Producers' production capability would be stabilized by payments from the handling costs essentially paid for access to the market by those entering and earning form the market. This stabilization approach touches each segment of the milk marketing chain in varying ways.

Processors make up the first level after the farm of the product in the distribution chain, and the segment contains the widest variance in volumes, ranging from processors supplying very small packaged milk distributors to packaged milk dealers handling quantities greater than some processors.

The approach would maintain a revised Variable Cost definition in order to balance the market, but allow this segment of the market the ability to control or fix itself when selling to distributors. Those out-of-state processors licensed as New Jersey dealers and delivering as wholesale dealers would be treated as such in the following area of the proposal.

There may be a need for a revised Variable Cost definition, which could include, for example, other variable costs associated with the business of the dealer including the cost of material; all labor, including executives and office staff, bonuses; labor taxes and insurance. These and other costs ought to be considered by members of the industry.

A presumptive cost could be developed based on information obtained from the market by direct survey, cost of processing analysis or by review of existing pricing in similar marketing areas. This presumptive price could be the initial start of the wholesale and retail build-out of wholesale and retail presumptive pricing.

Distributors can be an arm of the processors themselves, a separate and distinct company or an individual distributing milk processed and packaged by licensed New Jersey

processors, or those distributing milk brought into New Jersey already packaged in other states. Here again, based on a survey of the industry, a presumptive wholesale price can be determined including the handling costs to participate in the market provided for the stabilization pool.

Retailers are those stores, markets, or other locations selling milk and milk products directly to the public, but do not, under this framework, include locations where milk products are sold as part of another product (such as coffee creamers).

A presumptive retail price would be established, through Department surveys and summaries, as the lowest price at which fluid milk and milk products would be sold to the general public, unless lower variable cost could be shown. This price is at least the price into the store plus the survey costs of the store. In consideration of the stabilization process, the idea is for the presumptive retail price to be the presumptive wholesale price (which includes the handling costs for access to the market) plus the survey costs of the store to retail a unit of milk.

Conclusion

The Department invites discussion, suggestions and alternatives at work sessions to be held on August 26 and 27 and September 2 and 14, 2010.

The Department welcomes robust debate on the elements of this framework in order to arrive at a program of assistance to farmers, when they need it, which will be acceptable to all segments of the milk-marketing chain.