

Massachusetts Dairy Farm Revitalization Task Force

Report to the Legislature

Executive Summary

The dairy industry is a cornerstone of the agricultural community as well as an important and integral part of the Massachusetts economy that also benefits Massachusetts residents through the availability of fresh local milk supplies. As a function of the acreage requirements of dairy operations, the Commonwealth's dairy farms serve as working landscapes that also protect valuable open space and support vibrant rural communities. For a variety of reasons, however, the number of Massachusetts dairy farms has dwindled from nearly 5,000 in 1950 to its current number of 180. As a result of converging factors that included high feed and fuel costs, adverse weather and historically low milk prices, which are established by the Federal government and out of the control of the farmer, the Massachusetts dairy industry faced unprecedented economic hardship that led to a declaration of crisis by the Massachusetts Department of Agricultural Resources. In recognition of the 2006 crisis conditions that threatened the viability of the remaining dairy farms in the Commonwealth, the Governor proposed and the Legislature approved (Chapter 42 of the Acts of 2007) \$3.6 million in emergency relief for dairy farmers and created the Dairy Farm Revitalization Task Force. Importantly, since the distribution of those funds no dairy farms have been lost. This report includes a detailed record of the information presented to the Task Force at its meetings, the findings of the Task Force, recommendations from subcommittees that were established to further review specific topics, and the final recommendations of the Task Force members.

With a primary goal of determining long term solutions to preserving and strengthening the Massachusetts dairy farm industry, key findings and recommendations of the Task Force include:

- The long-term revitalization of the Massachusetts dairy industry will require actions and support across a broad base of support including farmers, processors, retailers, consumers, and government;
- Milk prices, established by the federal government and out of the control of the farmer, and costs of production will continue to fluctuate, and, during extended periods when the farm price of milk is below the cost of production, dairy farms will require financial support to remain viable;
- The Task Force recommends establishment of an income tax credit similar to that employed by South Carolina, with an anticipated impact of \$0 - \$4 million in any given year, as a mechanism for providing assistance when milk prices are below the cost of production;
- The Task Force recommends establishment of a number of programs and policies to reduce costs of production for dairy farmers, such as use of alternative and renewable energy sources, and programs to promote Massachusetts dairy products, in order to reduce the impact of fluctuations in milk prices and costs of production.

Background

The dairy industry, including both fluid milk processing and manufactured dairy products such as ice cream and butter, generates over \$500,000,000 for the Massachusetts economy. Milk receipts rank third in value of agricultural production behind cranberry receipts and nursery and greenhouse production. Massachusetts 180 remaining dairy farms generate nearly \$50 million in sales and generate an estimated \$120 to \$150 million in economic activity through the purchase of goods and services. This economic activity provides vital support to the working agricultural economy of Massachusetts and our rural communities.

Massachusetts dairy farms directly maintain approximately 92,000 acres of land in active agricultural production, representing about 20% of land in farms in the Commonwealth. Dairy farms support additional farm land production and ancillary businesses through the purchase of haylage, feed and other products. Much of the land that was actively farmed when Massachusetts had 5,000 dairy farms has been lost to development, and the pressure of increasing land values makes it harder to maintain actively working dairy farms. In fact, for more than a decade, Massachusetts has ranked among the top three states in the country with the highest land values. Obviously, once that open space and working agricultural land is developed it is lost forever.

In 2006 what has been referred to as “the perfect storm” for the dairy farming community, threatened to accelerate the loss of dairy farms in Massachusetts. Dairy farmers in Massachusetts and throughout the country suffered from a steep drop in milk prices, which are established by the federal government, severely adverse weather conditions, and a dramatic increase in production costs. Various legislative efforts to address the problem began in July of 2006, including proposals for fee and subsidy programs, revenue insurance programs and emergency relief. In response to a petition for relief from the industry and subsequent hearings, the Commissioner of the Massachusetts Department of Agricultural Resources declared a crisis in the dairy industry in spring 2007.

As a result of the crisis conditions, Gubernatorial and Legislative action yielded Chapter 42 of the Acts of 2007, which provided \$3.6 million in emergency relief for dairy farmers to assist them in recovering from the events of 2006 and established the Dairy Farm Revitalization Task Force (Task Force). The Task Force consists of 17 members including three dairy farmers, six legislators, a representative of milk processors, and (7) various members of the Executive Branch. The Task Force was co-chaired by the Commissioner of the Department of Agricultural Resources and the Secretary’s designee the Undersecretary of the Executive Office of Energy and Environmental Affairs (EEA). The purpose of the Task Force was to:

“...investigate short and long-term solutions to preserving and strengthening the dairy farm industry in the Commonwealth. Said investigation shall include methods to promote the innovation in, and the revitalization of, the Massachusetts dairy farming community, including without limitation, investigating the impact of increased fixed costs borne by the dairy farming community including, but not limited to, fuel prices, healthcare and insurance; promoting locally produced milk; and promoting alternative and renewable energy uses for farmers.”

Findings

1. With the circumstances, characteristics and broad array of interests within the Massachusetts dairy industry, sustainability of the industry will depend upon a variety of measures and support from consumers, dairy farmers, processors, retailers, and government.
2. Dairy farms offer substantial benefit to the citizens of the Commonwealth of Massachusetts not only in terms of the local supply of fresh milk and their contribution to the economic vitality of rural communities, but also as quoted in Article 97 of the Constitution of the Commonwealth of Massachusetts, for the "...natural, scenic, historic, and esthetic qualities of their environment; and the protection of the people in their right to the conservation, development and utilization of the agricultural, mineral, forest, water, air and other natural resources is hereby declared to be a public purpose.";
3. The financial stress on dairy farms in 2006, when farm milk prices were \$1.12 per gallon and costs of production were at \$1.61 per gallon, threatened the short term viability of the industry as well as its long term stability and jeopardized the benefits the industry offers to the citizens of the Commonwealth in the conservation, development, and utilization of agricultural resources and the protection of open space. The short and long term stabilization of the industry, through the establishment of mechanisms that strengthen and preserve dairy farms and the greater dairy industry is critical to the protection of open space, agricultural diversity and conservation in the Commonwealth and to the viable future and growth of the dairy farms of Massachusetts;
4. In 2007 the economic situation of the Massachusetts dairy farm industry has stabilized from the crisis of 2006. Although the cost of milk production has risen to \$1.85 per gallon for many dairy farms, farm price paid for milk has also increased from \$1.12 per gallon to over \$1.98 per gallon, which has offset the increase in costs. While milk prices and costs of production fluctuate, as they are primarily dictated by national and international market forces and federal controls, dairy industry analysts expect milk production costs to remain at these high levels for the foreseeable future, and expect the price paid to farmers to drop substantially in the future based on identified cyclical dip patterns occurring every three to five years;
5. National solutions, such as The Federal Milk Marketing Orders, while offering certain benefits, are inadequate to address the challenges facing Massachusetts dairy farmers;
6. A safety-net type of mechanism, while not the only solution, needs to be established to help dairy farmers remain economically viable for the periods of cyclical down turns when costs of production exceed milk prices; such a mechanism will provide financial security to dairy farms and ultimately protect working agricultural resources and preserve open space;

7. Energy conservation, collaborative purchasing and selling of energy along with energy saving technologies, offer additional opportunities for cost savings in milk production and creates additional revenue generation possibilities for dairy farms;
8. Statutory and regulatory issues create road blocks to technological adoption and increases costs to dairy farms;
9. The revitalization and sustainability of the dairy farm industry will require technical and financial assistance to maintain the Commonwealth's dairy farmers on the right path and to offer alternative options for sustainability and growth such as, but not limited to, on-farm processing and other direct marketing options.

Recommendations

The Task Force divided its recommendations into four categories that were developed based upon the various presentations and topical areas studied:

1. Alternative and Renewable Energy;
2. Marketing and Promotion of Massachusetts Dairy Products;
3. Technical and Financial Assistance to Dairy Farmers;
4. Financial Safety Net Measures

1. Alternative and Renewable Energy

A number of alternative/renewable energy options have potential for helping Massachusetts dairy farmers reduce their energy costs and/or contribute to their revenue stream. The Massachusetts Technology Collaborative (MTC) is a quasi-public agency that administers the Renewable Energy Trust. The Renewable Energy Trust has a number of existing programs that most of the state's dairy farmers are eligible to take advantage of, such as:

- ***The Small Renewables Initiative:*** provides homeowners rebates for design and construction of solar electric, wind, or hydroelectric energy projects that are up to 10 kilowatts in size. Rebates depend on the characteristics of each project.
- ***Large Onsite Renewables Initiative:*** provides grant funding to assist with feasibility studies and design and construction of renewable energy projects, including wind energy, solar photovoltaics, hydroelectric, and biomass energy.
- ***Out Reach:*** the Massachusetts Department of Agricultural Resources (MDAR) will work with MTC to develop strategies for improving their outreach to the agricultural community, and dairy farmers in particular, to make them aware of the opportunities that exist for installing renewable energy technologies at their farms particularly through the Farm Energy Program.

Furthermore the task force further recommends the following specific activities be pursued:

- ***Methane Digesters:*** Anaerobic methane digesters have the potential for mitigating environmental pollution and create a marketable energy product at the same time. We should pursue the feasibility of developing a cooperative similar to those that have emerged in other parts of the country designed to aggregate a critical mass of manure and other organic wastes from proximate dairy farms and generate methane gas that can then be distributed through existing natural gas pipelines or used to generate on-site heat and power. The study should include the economics of selling carbon credits through the Chicago Carbon Exchange or as offset allowances in the Regional Greenhouse Gas Initiative.
- ***Bio-crops and Biofuels:*** The Massachusetts agricultural community should seek to develop cooperative arrangements with the state's expanding biotechnology sector to explore ways of working together to advance ethanol research and development.

- While our farms are not of sufficient scale to support the commercial production of crops suitable for conversion to ethanol, dairy farmers could provide sites for field trials of crops and microorganisms that are being developed specifically for this purpose. Representatives from MDAR should meet with representatives from the Massachusetts Biotechnology Council to explore opportunities.
- **Wind Energy:** In order to determine which, if any Massachusetts dairy farms have the potential for hosting utility-scale wind projects, a comprehensive detailed mapping exercise that identifies Massachusetts dairy farms and overlays them with wind resource maps should be undertaken and analyzed. The Massachusetts Technology Collaborative should support the erection of wind measurement towers on farms that match up well with suitable wind resources and farmers who are interested in hosting wind projects. Moreover, MTC (in coordination with the MDAR Energy Program) should make a special effort to encourage farmers to explore the feasibility of constructing kW-scale wind turbines to generate electricity that would be used onsite.
 - **On-Site Renewable Energy Projects:** To reduce the large capital cost associated with renewable energy projects, the Task Force recommends that the MTC Renewable Energy Trust and MDAR explore market opportunities for third-party ownership of on-site renewable energy projects. Under such a structure, a dairy farm would host a project and purchase the energy generated at a small cost savings until the owner is reasonably paid back. After that period, the project ownership can switch to the farm owner, providing substantial energy cost savings. To attract third-party owners of solar and small wind projects, aggregating dairy farms to offer numerous installation opportunities would be beneficial.
 - **Aggregation:** The Task Force recommends that MDAR, with the assistance of the MA Division of Energy Resources, explore the practicality and potential benefits of aggregating electric loads across dairy farms (and more broadly in the agricultural sector) to enable farmers an opportunity to competitively procure their electricity supplies.
 - **Net Metering:** Statutory and Regulatory environment should be modified to allow for annual net metering.
 - **Massachusetts Technology Collaborative/Renewable Energy Trust:** Finally, the Task Force recommends that the Massachusetts Technology Collaborative/Renewable Energy Trust consider making a pool of consultants available to dairy farmers who could assist them in developing proposals in response to the agencies program solicitations.

2. Marketing and Promotion of Massachusetts Dairy Products

- ***Establishment of a Massachusetts Dairy Promotion Board:*** The Task Force recommends enacting legislation for the establishment of a Massachusetts Dairy Promotion Board to develop promotional, research, and nutrition programs in Massachusetts using funds that farmers already contribute;
- ***Expansion of Agricultural Tourism:*** The Massachusetts Office of Travel and Tourism has agreed to work with dairy farmers in order to expand and increase agri-tourism options for the dairy farmers of the Commonwealth, through the development of marketing plans and the organization of events that would network industry experts from the agri-tourism, travel and culinary sectors to hi-light the availability and advantages of working more closely with Massachusetts dairy farms.
- ***International Trade and Foreign Investment Opportunities:*** The Task Force recommends that the Massachusetts Office of International Trade and Investment (MOITI) ought to explore and assist in the identification of foreign opportunities for Massachusetts dairy products and has committed to continue working with the dairy farmers of the Commonwealth to further these initiatives.

3. Technical Assistance and Financial Assistance to Dairy Farmers

- The Task Force recommends the establishment of a commission consisting of members of the staffs of the MDAR and DEP to review statutory and regulatory issues that create road blocks to technological adoption and increases costs to dairy farms;
- The Task Force recommends inclusion of language to an appropriate legislative action for that will allow Agricultural Preservation Restriction (APR) and Farm Viability Programs to provide APR farms access to Farm Viability type funds;
- Establish a Farm Link Loan Program via the State Treasurer to provide low interest loans to dairy farmers who wish to expand current operations or to seek alternative production and marketing operations;

4. Financial Safety Net Measures

- As a safety net measure, establish a Massachusetts Dairy Farm Tax Credit similar to that employed by the state of South Carolina that will be applicable to all eligible Massachusetts Dairy Farms. And further direct the Massachusetts Department of Agricultural Resources to develop appropriate regulations to implement the program based upon the conditions that there be a general fund liability of 0 - \$4 million in any given year the distribution of which will be based upon hundred weight production.
- Evaluate and improve through legislative and/or regulatory action several possible general fund revenue sources not limited to re-establishment of an appropriate retailer license fee and reasonable increases to processor licensing fees.
- Work with the federal government to evaluate and improve the federal milk marketing order system to eliminate such wild fluctuations in milk prices.