

2007 KENTUCKY DAIRY INDUSTRY REPORT
EVALUATION OF MARKET STRUCTURE AND PERFORMANCE
TEN-YEAR DEVELOPMENT PLAN 2007 - 2017

SUBMITTED TO THE KENTUCKY DAIRY DEVELOPMENT COUNCIL
AND THE KENTUCKY AGRICULTURAL DEVELOPMENT BOARD

EXECUTIVE SUMMARY

Summary Findings and Proposals for the Ten-Year Plan

This Report provides an evaluation and long-term plan intended to enhance the profitability and sustainability of the Kentucky dairy industry over the next ten years. The evaluation and plan are intended to promote three long-term goals:

- To ensure the capability of the in-state dairy industry to serve the essential fluid, or beverage milk, requirements of Kentucky consumers.
- To promote the sustainability and capability of Kentucky dairy farmers, in particular, to continue to serve the long-term demand of Kentucky's consumers for fresh milk.
- To improve the in-state industry's capability to compete effectively in the greater southeast dairy marketplace.

The industry evaluation pursues a comprehensive analysis of market structure and performance across the three key sectors – farm, processing and retail – of the state's dairy industry. Derived from this analysis, the Ten-Year Plan provides three proposals for improving the industry's performance and sustainability, consistent with the stated goals. In summary, the Plan is intended to improve the market's performance, over time, to yield to the dairy sector a more representative proportion of the return from the unique dynamic growth and profitability of the Kentucky dairy marketplace. The Plan combines direct market regulation to improve producer return with a comprehensive program to promote long-term modernization, enhanced profitability, and diversification across the dairy farm sector.

This long-term program would build on current efforts by the Kentucky Dairy Development Council (KDDC) to improve dairy farm profitability and take advantage of the unique opportunity in Kentucky to obtain working capital for infrastructure improvements made available through the Kentucky Agricultural Development Board.

Summary Findings

The Kentucky dairy industry is uniquely positioned as both a pivotal part of the lucrative fluid dairy marketplace of the south and a self-sustaining submarket of that larger regional market. This combined market positioning provides dynamic growth potential and tremendous promise for long-term profitability and sustainability.

The Kentucky dairy industry is principally featured by a robust, state-of-the-art, wholesale processing sector that provides a significant share of the region's processed fluid milk supply; and by substantial in-state consumer demand, attributable to the expanding population of Kentucky, of sufficient size to allow all three sectors of the in-state submarket – retail, wholesale and farm – to maximize economies of scale.

The annual output of the industry's fluid milk processing sector is approximately 2.5 billion pounds of raw milk, equivalent. This is about three times the in-state demand for fluid milk, meaning that Kentucky processing plants are also serving a substantial portion of the larger, regional demand for fluid milk. This capacity of the wholesale sector to serve the market beyond the borders of Kentucky is likely only to grow in the future, as the southern region continues to expand in population. The tremendous volume demand requirement for raw milk represents the long-term potential for a stable dairy farm sector in Kentucky, as well as the potential for a substantial increase in production from the current level.

Given the size of Kentucky's population, there is great, aggregate value in the retail sale of fluid dairy products to Kentuckians, alone. The annual value of the 800 million pounds of raw milk, or approximately 90 million gallons of packaged fluid milk, sold at retail as fluid or beverage milk in Kentucky is estimated at approximately \$320 million dollars for 2007. This valuation represents only the sale of the packaged milk product, and does not account for the additional, "multiplier effect" of these sales.

Price transmission analysis indicates that the national market supports a super-competitive return of \$0.30-\$0.40 per gallon, or an amount upwards of 10 percent of the retail price. This super-competitive return indicates the notably lucrative return available to marketers of fluid milk products.

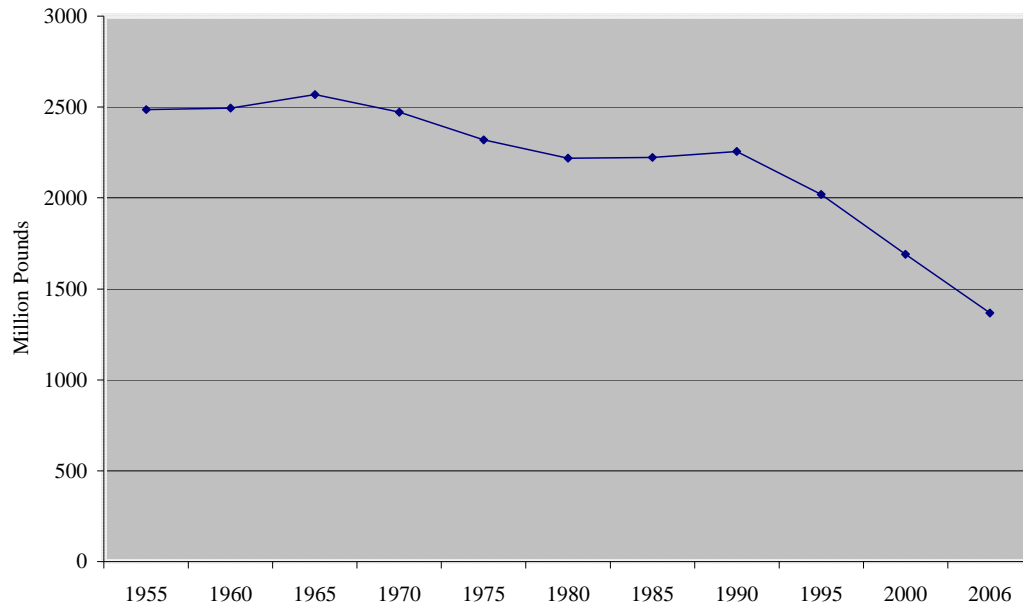
For the volume of fluid milk consumption in the Kentucky market, this would translate to approximately \$28 - \$37 million in total, annually, and approximately \$4.00 per hundredweight, annually.

Additional data reviewed in the Report indicates that retail prices in Kentucky may be somewhat dampened in comparison to the national trend. Nonetheless, the national pricing trends still serve to establish the tremendous value in the retail sale of fluid milk products in Kentucky.

Particularly in recent years, performance of the raw product farm sector has lagged far behind the robust performance of the industry's retail and processing sectors. Largely because of inadequate producer pay prices, dairy farms in Kentucky have not modernized, and a substantial number of dairy farms have ceased operation over the past twenty years. Between 1997 and 2006, the number of dairy farms primarily engaged in dairy cattle and milk production decreased from approximately 2,000 to approximately 1,200, a decrease of 40 percent.

Because of the lack of modernization across the farm sector, and in striking contrast to the national industry trend, there has been a precipitous drop in Kentucky milk production along with the attrition in the farm population. From 1950 to 1990, milk production in Kentucky remained relatively stable in the amount of 2.2 – 2.5 billion pounds. Today, the state's dairy sector produces only 1.3 billion pounds.

Graph 22. Kentucky Milk Production, 1955 - 2006



Having been delayed, profitable modernization of the dairy farm sector, even with the tremendous downstream wholesale and retail market opportunities, represents a great challenge for the Kentucky dairy industry, absent pay price enhancement and financial assistance with infrastructure improvement. KDDC has initiated a number of critical, cost-based programs to enhance dairy farm productivity and profitability, with great promise. Absent additional prompt and aggressive action to more comprehensively adjust market structure and improve performance – in particular the equitable enhancement of producer prices – it is likely that the trend of farm exits will continue unabated, if not worsen, despite KDDC’s promising work.

The farm sector’s productivity may be stabilized at the current decreased level as a result of KDDC’s work, but the sector’s full potential productive capability will go unrealized absent a reversal in the trend of farm exits. With aggressive action to recapture the market’s dynamic growth potential and profitability, including regulatory action to assure equitable producer prices and to modernize dairy operations so as to account for modern economies of scale and efficiencies, the Kentucky farm sector could recover its historic productive capacity of 2.5 billion pounds per year.

In addition to providing the potential for recovery of the farm sector’s historic productive capacity, the dynamic potential of the Kentucky dairy marketplace can

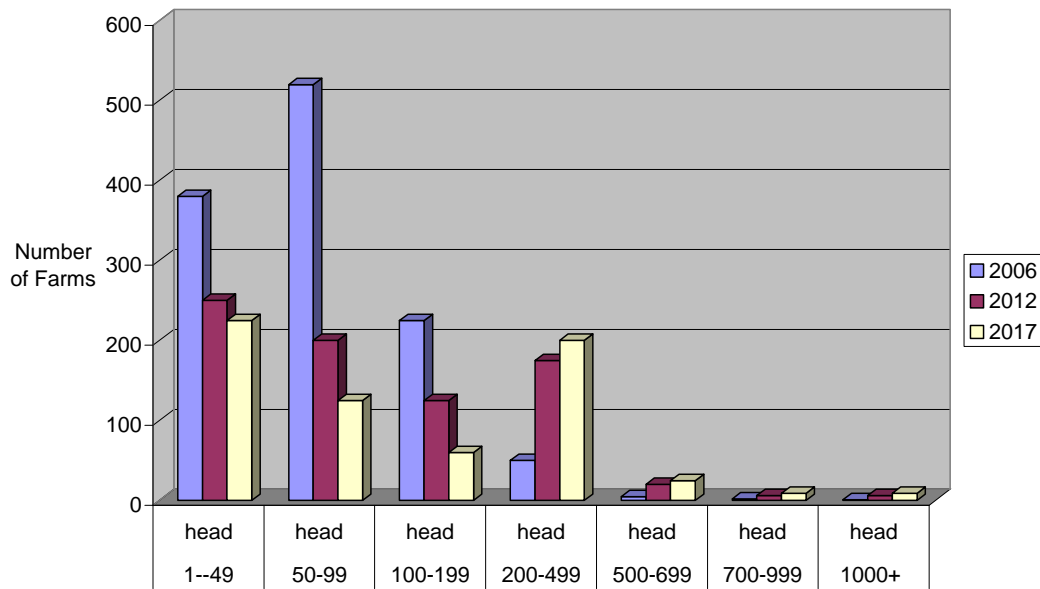
additionally support a variety of value added niche dairy products, fluid and manufactured, similar to those being developed in other state dairy submarkets across the country. The Kentucky marketplace, with its diverse demography and developing smaller urban markets, would appear to be a good fit for these newly emergent market ventures. These innovative, small-scale dairy operations would serve to diversify the largely monolithic fluid marketplace and provide greater consumer choice of dairy products for Kentuckians, and thereby enhance the potential long-term sustainability of the Kentucky dairy industry.

Summary Proposals for Improvement in Market Structure and Performance: The Ten-Year Plan

In order to promote the industry's long-term sustainability, the Report's Ten-Year Plan presents the following three proposals:

1. *Legislative establishment of a regulatory agency with legal authority over farm-gate prices (only), for the 800 million pounds of milk utilized for fluid consumption within Kentucky.* This agency would ensure that the market provides a reasonable and equitable return to Kentucky producers for their supply of this volume of the state's raw product supply. In exercising its regulatory authority, the state agency would account for all market considerations at issue, including in particular the assurance that individual state price regulation by Kentucky does not result in undue dislocation of the larger, surrounding market.
2. *A program to bring coordinated modernization to the farm sector as a whole, designed to assure stable transition and enduring profitability.* Working in complement with regulated state pricing action, this program would be devised to address the modernization requirements of the farm sector as a whole and over time, building on the existing KDDC programs aimed at enhancing profitability of individual farming operations. Here is one potential transition profile:

Graph 23. Farm Sector Transition, 2006 - 2017; Restoration of Historic Production of 2.5 Billion Pounds; Farms By Herd Size



3. *Establishment of a program to identify niche product opportunities for Kentucky dairy producers and processors.* This element of the Ten-Year Plan would capitalize on the capability for diversified new market entry represented by the dynamic strength of the overall Kentucky dairy industry, and the unusual availability of support from Kentucky state government for the expansion of the state’s agricultural markets. It is estimated that the market could support 20 – 30 of these small-scale niche ventures over the next ten years.