

Zwick Center for Food and Resource Policy
Outreach Report No. 6

**Milk Cost of Production Estimates
for January, February, and March 2012**

Prepared for the Connecticut Commissioner of Agriculture

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University of
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On August 28, 2012 it was discovered that the USDA ERS had issued a revised 2011 annual milk cost and return estimate. The revision was due to a discovery of an error in the purchased feed cost estimates. As a result, the 2011 milk COP estimate was revised down to \$32.61/cwt for Vermont and \$37.45/cwt for Maine. This report has also been updated to reflect the corrected USDA ERS 2011 annual milk cost and return estimates. The quarter 1 total cost of production in Vermont is \$1.07/cwt lower, on average than the previously released estimates. The Maine cost of production is \$2.00/cwt lower, on average. This results in a smaller sustainable cost shortfall than previously published.

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Summary

The cost of production for milk in Vermont for the first quarter of 2012 is estimated at an average of \$32.96/cwt, using the 2010 USDA ARMS benchmark. Based on this, the sustainable cost of production for Connecticut averages \$27.03. The Hartford-based average statistical uniform price for milk was \$18.27 for the same period. Thus, these figures suggest activating Connecticut Public Act 09-229 to assist Connecticut milk producers in covering the average \$8.76 sustainable cost shortfall, which is mainly due to sagging prices and skyrocketing feed costs. Efforts are underway to develop Connecticut-specific cost figures as the best practice for basing policy decisions.

I. Introduction

This report is a follow up on previous reports for 2011 quarters two, three, and four that use the current USDA methodology and continues the Vermont and Maine milk COP estimates previously calculated by the USDA's ERS.¹ The methodology used to estimate the milk COP for application of Public Act 09-229 relies upon the Agricultural Resource Management Survey (ARMS) to provide an annual milk COP for Vermont and Maine. This survey, updated every five years by the USDA, is used as a benchmark to estimate monthly and annual changes using National Agricultural Statistics Service (NASS) indices. ERS estimates the 2011 ARMS annual

¹ See background on Public Act 09-2009 and previous Zwick Center COP reports by Rabinowitz and Lopez (2011 and 2012) at http://zwickcenter.uconn.edu/outreach_reports.php.

milk COP for Vermont at \$32.61/cwt and for Maine at \$37.45/cwt. Following the USDA methodology, we estimate the monthly COP for quarter one of 2012 for both states.

II. Monthly Milk Cost of Production and Price for Quarter 1, 2012

The estimates for the January, February, and March 2012 milk COP for Vermont and Maine are shown in Table 1. Total operating costs in Vermont for January, February, and March 2012 are \$20.40, \$20.06, and \$21.20/cwt., respectively, with an average for the quarter of \$20.55. The major component of the total operating cost is the total feed costs of \$15.55, \$15.38, and \$16.35/cwt. for January, February, and March, respectively. With the exception of the feed cost categories, there is very little variation within cost categories from month to month. Including total allocated overhead, the total milk COP in Vermont is estimated at \$33.06 for January, \$32.19 for February, and \$33.64/cwt. for March, with an *average total COP for quarter one estimated at \$32.96/cwt.* The total milk COP in Maine is estimated at \$39.17 for January, \$36.03 for February, and \$40.71/cwt. for March, with an average at \$38.64/cwt for quarter one.

Table 1. Vermont and Maine monthly milk COP: January – March 2012						
Item 1/	Vermont			Maine		
	Jan	Feb	Mar	Jan	Feb	Mar
	Dollars per Hundredweight					
<i>Operating costs:</i>						
Total feed costs	15.55	15.38	16.35	17.77	16.60	19.10
--Purchased feed	8.26	8.18	8.75	10.86	10.17	11.76
--Homegrown harvested feed	7.07	6.97	7.36	6.76	6.30	7.19
--Grazed feed	0.23	0.23	0.24	0.15	0.14	0.16
Veterinary and medicine	0.77	0.74	0.76	1.10	1.00	1.10
Bedding and litter	0.45	0.43	0.44	0.91	0.83	0.92
Marketing	0.36	0.36	0.36	0.30	0.30	0.30
Custom services	1.01	0.97	0.99	0.73	0.66	0.73
Fuel, lube, and electricity	1.33	1.30	1.39	1.91	1.77	2.05
Repairs	0.90	0.86	0.89	1.35	1.22	1.35
Other operating costs	0.01	0.01	0.01	0.01	0.01	0.01
Interest on operating capital	0.01	0.01	0.01	0.01	0.01	0.01
Total operating costs	20.40	20.06	21.20	24.10	22.39	25.59
<i>Allocated overhead:</i>						
Hired labor	1.31	1.26	1.29	2.53	2.29	2.53
Opportunity cost of unpaid labor	4.41	4.22	4.32	4.78	4.32	4.78
Capital recovery of machinery and equipment	5.47	5.26	5.38	6.29	5.70	6.31
Opportunity cost of land (rental rate)	0.06	0.06	0.06	0.03	0.03	0.03
Taxes and insurance	0.41	0.40	0.41	0.46	0.42	0.46
General farm overhead	0.99	0.95	0.98	0.98	0.89	1.00
Total allocated overhead	12.66	12.13	12.43	15.08	13.64	15.12
Total All costs listed	33.06	32.19	33.64	39.17	36.03	40.71
1/ Estimates may be adjusted based on revisions in monthly agricultural price indices and milk production estimates as provided by the USDA.						
Source: Based on USDA's 2010 Agricultural Resource Management Survey of milk producers and updated using current USDA milk production per cow and production input indexes. See http://www.ers.usda.gov/Data/CostsAndReturns/monthlymilkcosts.htm for the methodology.						

Public Act 09-229 specifies the minimum sustainable monthly COP as 82% of the monthly average cost of production. In Table 2, 82% of the Vermont milk COP is \$27.11 for January, \$26.40 for February, and \$27.58/cwt for March. This yields an average minimum sustainable COP for Vermont of \$27.03/cwt for quarter one, 2012. Using Maine's COPs, the minimum sustainable COP are \$32.12 for January, \$29.54 for February, and \$33.38/cwt for March, with an average of \$31.68/cwt.

Table 2. New England Milk Cost of Production Estimates, Statistical Uniform Price, and Application of Public Act 09-229

	January	February	March	Quarter 1 Average
	Dollars per Hundredweight			
Total Cost of Production				
Vermont	\$33.06	\$32.19	\$33.64	\$32.96
Maine	\$39.17	\$36.03	\$40.71	\$38.64
Minimum Sustainable Cost of Production				
Vermont	\$27.11	\$26.40	\$27.58	\$27.03
Maine	\$32.12	\$29.54	\$33.38	\$31.68
Statistical Uniform Price				
Hartford, CT	\$19.27	\$17.99	\$17.54	\$18.27
Statistical Uniform Price Minus Minimum Sustainable Cost of Production				
Vermont	-\$7.84	-\$8.41	-\$10.04	-\$8.76
Maine	-\$12.85	-\$11.55	-\$15.84	-\$13.42

Source: Total Cost of Production from Tables 1 and 2. Statistical Uniform Price from the USDA Federal Milk Order No. 1 (<http://www.fmmone.com>).

Farm milk prices in Vermont, Maine and elsewhere in the United States, have been sagging since August 2011 and the downward price trend continues while COP remains stubborn at historically high levels. Table 2 also shows the statistical uniform prices (i.e., the blend price) for Hartford, CT for the first quarter of 2012. These are \$19.27 for January, \$17.99 for February, and \$17.54/cwt for March; all significantly lower than the minimum sustainable monthly COP calculated using Vermont or Maine data. Using Vermont estimates, the minimum sustainable milk COP exceeded the Hartford-based farm price by \$7.84 in January, \$8.41 in February, and \$10.04/cwt in March. The average Connecticut milk price is \$18.27/cwt. This represents an

average statistical uniform price that is \$8.76/cwt below the minimum sustainable monthly COP estimate for Vermont. Using Maine COP estimates, the average statistical uniform price is \$13.42/cwt below the minimum sustainable monthly cost of production in Maine.

III. Towards a Connecticut-Specific COP

The significant changes that occurred from the 2010 estimate to the 2011 estimate, both based on the 2010 ARMS, for two states in New England that likely have significantly different cost structures, underscores the importance of developing a Connecticut specific benchmark for milk COP. While significant increases in the annual USDA COP surveys have occurred, it remains an uncertain and certainly biased measure of the Connecticut specific COP, highlighting why a CT state specific COP is the best practice method for continued implementation of the law and policy decisions as well as for farm management.

To obtain a Connecticut based COP the Charles J. Zwick Center for Food and Resource Policy in the Department of Agricultural and Resource Economics (ARE), College of Agriculture and Natural Resources (CANR) at the University of Connecticut has initiated a plan of action based on the consensus recommendations from the Zwick Center-sponsored Dairy Summit of November 28, 2011, with the goal of having Connecticut specific estimates by the end of the year.

Using the Dairy Farm Business Summary (DFBS) methodology from Cornell University, Connecticut dairy farm data is currently being collected by CANR Extension educators and ARE graduate assistants under the supervision of Professor Boris Bravo-Ureta. Once the surveys are completed, the DFBS data will be processed and converted into a benchmark cost of production estimate for 2011. A calibration methodology, similarly to the one used by USDA with DFBS replacing ARMS, will be used for calibrating the benchmark estimate and will be designed to generate monthly CT-based COP estimates for periods after 2011;

However, until monthly CT-based COP estimates are developed we will continue to deploy the USDA-based cost estimates for a New England state and provide associated brief quarterly reports as needed. With the data collection stage currently underway we estimate about 60 CT dairy farms will participate in this process. Given the dramatic changes that continue in the USDA state level milk COP for Vermont and Maine, migrating to Connecticut numbers will be undoubtedly the best practice for policy decisions and farm management.