

CANADIAN DAIRY COMMISSION

COST OF PRODUCTION
FINAL RESULT BASED ON 2010 SURVEY DATA
INDEXED TO 3RD QUARTER OF 2011

November 2011

Policy and Economics Section

2010 COP Highlights

Results

- The cost of production for one hectolitre of milk in 2010 was \$73.71.
- Once indexed to the 3rd quarter, the estimated COP is \$76.19 per hectolitre.
- This represents an increase of 2.20% over the 2009 COP indexed to 3rd quarter of 2010 (figure used as a reference for the February 1, 2011 CDC support price adjustment).
- The main factors that explain this increase in the 2010 COP indexed to the 3rd quarter of 2011 are the costs of purchased feed and fuel & oil.

Methodology

Sample

- The sample is representative of the Canadian dairy farm population.
- Producers in the sample are randomly selected. For the year 2010, a total of 235 farms were sampled.

Calculation and efficiency measures

- Costs cover the milking herd plus replacement animals.
- Any farm with a COP that is outside of two standards deviation is considered an outlier and is, therefore, excluded from the final sample. For the year 2010, 11 farms were excluded. The data and information collected from the remaining 224 farms was used to calculate the national COP.
- The national COP calculation is based on production-weighted COP per province, weighted nationally based on shares of total production.

Indexation

Starting with the 2010 COP data, the following components are used to index the COP to the 3rd quarter of the following year:

- a) Cash costs are indexed to the 3rd quarter of the following year using Statistics Canada indexes (see Appendix 1);
- b) The interest component is indexed using the Farm Credit Canada five-year term loan (see Appendix 1);
- c) Producer labours and remaining components of the capital costs are not indexed.

Appendix

Appendix 1 contains the different indexes used to index cash costs and interest components to the 3rd quarter of 2011.

Appendix 2 shows for each province, the number of farms in the final sample and the total production share.

National Cost of Production Calculation

2010 Results

COST COMPONENTS:	2010 COP	2010 COP Indexed to Q3 2011	2009 COP Indexed to Q3 2010 ⁽²⁾	% change Q3 2011/Q3 2010
	\$/hl	\$/hl	\$/hl	
CASH COSTS				
Purchased feed	11.48	12.91	11.78	9.65%
Artificial insemination*	2.66	2.66	2.64	0.72%
Transportation, fees & promotion	4.65	4.80	4.63	3.51%
Machinery, equipment repairs	1.99	2.03	1.95	4.14%
Fuel & oil	1.37	1.77	1.43	23.42%
Custom work	1.73	1.78	1.93	-7.37%
Fertilizer & herbicides	1.25	1.57	1.52	3.07%
Seed & plants*	0.82	0.82	0.86	-4.85%
Other (Misc): Professional fees	0.65	0.68	0.76	-9.92%
Other (Misc): Animal costs	1.75	1.84	1.80	2.29%
Other (Misc): Crops costs	0.51	0.54	0.47	13.76%
Land & building repairs	1.70	1.74	1.91	-8.90%
Property taxes & insurance	1.62	1.66	1.58	5.42%
Hydro & telephone	1.44	1.50	1.48	1.09%
Hired labour	2.22	2.25	2.13	5.51%
Total Cash Cost	35.85	38.57	36.89	4.55%
CAPITAL COSTS				
Interest paid	2.70	2.46	2.85	-13.61%
Building depreciation*	1.90	1.90	1.86	1.86%
Machinery & equipment depr*	3.45	3.45	3.24	6.51%
Cow depreciation*	9.27	9.27	9.21	0.73%
Return on equity*	3.49	3.49	3.37	3.48%
Total Capital Costs	20.81	20.58	20.53	0.21%
PRODUCER LABOUR				
Direct labour*	13.28	13.28	13.19	0.67%
Return to management* ⁽¹⁾	4.10	4.10	4.20	-2.53%
Total Producer Labour	17.37	17.37	17.39	-0.10%
GOV'T REBATES & OTHERS*	-0.33	-0.33	-0.27	-22.07%
RESULT OF COP FORMULA	73.71	76.19	74.54	2.20%

* Not indexed

⁽¹⁾ The management labour cost was \$33.63 per hour for the 2010 COP calculations

⁽²⁾ COP used as a reference for the February 1, 2011 CDC support price adjustment

Appendix 1

Description of indexes used to update cash costs and interest component

COST COMPONENTS	2010	Q3 2011	% change Q3 2011 / 2010
Dairy Ration	125.6	141.4	12.5%
Transportation,fees & promotion	2.56	2.64	3.2%
Mach,Equip Repairs	103.5	105.8	2.2%
Fuel &Oil	175.7	226.8	29.1%
Custom Work	116.5	120.3	3.3%
Fertilizer & Herbicides	206.2	259.4	25.8%
Other (Misc)	109.5	114.7	4.8%
Land & Building Repairs	118.4	121.5	2.6%
Property Taxes & Insurance	130.5	133.9	2.6%
Hydro & Phone	118.8	123.4	3.9%
Hired Labour	31.0	31.4	1.2%
Interest	2.7	2.5	-8.8%

Dairy Ration	v53385296	Table 329-0059: IPI, meat, fish and dairy products, fruits, vegetables and feeds, beverages and tobacco; Canada; Complete feeds, dairy and beef cattle (index, 2002=100)
Transportation		P5 Transportation Pooling Figures/Chiffres du pooling P5 pour le transport
Mach,Equip Repairs	v53433976	Table 329-0064: IPI, machinery and equipment, motor vehicles and other transport equipment; Canada; Agricultural machinery (index, 2002=100)
Fuel &Oil	v53385172	Table 329-0058: IPI, by stage of processing; Canada; Gasoline and fuel oil, other (index, 2002=100)
Custom Work	v41690973	Table 326-0020 Consumer price index, 2005 basket; Canada; All-items (2002=100)
Fertilizer & Herbicides	v53385176	Table 329-0058: IPI, by stage of processing; Canada; Fertilizers, other (index, 2002=100)
Other (Misc)	v53384992	Table 329-0058: IPI, by stage of processing; Canada; Total, all commodities (index, 2002=100)
Land & Building Repairs	v41691060	Table 326-0020 Consumer price index (CPI), 2005 basket; Canada; Homeowners' maintenance and repairs (2002=100 unless otherwise noted)
Property Taxes & Insurance	v41691058	Table 326-0020: Consumer price index (CPI), 2005 basket, Property taxes (including special charges) , monthly (2002=100 unless otherwise noted)
Electricity	v41691063	Table 326-0020: Consumer price index (CPI), 2005 basket, Electricity, monthly (2002=100 unless otherwise noted)
Telephone	v41691070	Table 326-0020: Consumer price index (CPI), 2005 basket,Telephone services, monthly (2002=100 unless otherwise noted)
Hired Labour	v1602417	Table 281-0035: Average hourly earnings for salaried employees (paid a fixed salary) (SEPH); Canada; Industrial aggregate excluding unclassified (Dollars)
Interest		The interest component is indexed using the Farm Credit Canada five-year term loan.

Appendix 2

Farms number and total production share

	# of farms ⁽¹⁾	Total production ⁽²⁾ share (litres) 2010 calendar year
Prince Edward Island	6	1.34%
New Brunswick	7	1.76%
Nova Scotia	6	2.24%
Quebec	99	37.79%
Ontario	61	32.73%
Manitoba	6	4.07%
Saskatchewan	6	2.92%
Alberta	15	8.53%
British Columbia	18	8.64%
Canada	224	100.00%

⁽¹⁾ Excluding outliers

⁽²⁾ P10 production excluding food bank, contaminated milk and milk sold at fairs