

CANADIAN DAIRY COMMISSION

COST OF PRODUCTION
FINAL RESULT BASED ON 2011 SURVEY DATA
INDEXED TO 3RD QUARTER OF 2012

November 2012

Policy and Economics Section

2011 COP Highlights

Results

- The cost of production for one hectolitre of milk in 2011 was \$74.44.
- Once indexed to the 3rd quarter of 2012, the estimated COP is \$76.06 per hectolitre.
- This represents a decrease of -0.17% over the 2010 COP indexed to 3rd quarter of 2011 (figure used as a reference for the February 1, 2012 CDC support price adjustment).
- The main factors that explain this decrease in the 2011 COP indexed to the 3rd quarter of 2012 are a decrease in inventory and a gain in labour efficiency.

Methodology

Sample

- The sample is representative of the Canadian dairy farm population.
- Producers in the sample are randomly selected. For the year 2011, a total of 231 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 2011, 10 farms were excluded. The data and information collected from the remaining 221 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

The following components are used to index the 2011 COP to the 3rd quarter of 2012:

- a) Cash costs are indexed to the 3rd quarter of 2012 using Statistics Canada indices (see Appendix 1);
- b) The interest component is indexed using the Farm Credit Canada five-year term loan (see Appendix 1);
- c) Producer labour and remaining components of the capital costs are not indexed.

Appendix

Appendix 1 contains the different indices used to index cash costs and interest components to the 3rd quarter of 2012.

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

National Cost of Production Calculation

2011 Results

COST COMPONENTS:	2011 COP	2011 COP Indexed to Q3 2012	2010 COP Indexed to Q3 2011 ⁽²⁾	% change Q3 2012/Q3 2011
	\$/hl	\$/hl	\$/hl	
CASH COSTS				
Purchased feed	12.80	14.05	12.91	8.76%
Artificial insemination*	2.73	2.73	2.66	2.47%
Transportation, fees & promotion	4.77	4.70	4.80	-2.07%
Machinery, equipment repairs	2.07	2.14	2.03	5.17%
Fuel & oil	1.56	1.63	1.77	-8.01%
Custom work	1.66	1.69	1.78	-5.50%
Fertilizer & herbicides	1.20	1.22	1.57	-22.39%
Seed & plants*	0.88	0.88	0.82	6.87%
Other (Misc): Professionnal fees	0.69	0.69	0.68	0.83%
Other (Misc): Animal costs	1.72	1.72	1.84	-6.50%
Other (Misc): Crops costs	0.52	0.52	0.54	-3.37%
Land & building repairs	1.87	1.97	1.74	13.02%
Property taxes & insurance	1.70	1.73	1.66	3.70%
Hydro & telephone	1.42	1.49	1.50	-0.83%
Hired labour	2.32	2.40	2.25	6.64%
Total Cash Cost	37.91	39.53	38.57	2.49%
CAPITAL COSTS				
Interest paid	2.52	2.52	2.46	2.21%
Building depreciation*	1.87	1.87	1.90	-1.70%
Machinery & equipment depr*	3.31	3.31	3.45	-4.07%
Cow depreciation*	8.31	8.31	9.27	-10.42%
Return on equity*	3.76	3.76	3.49	7.85%
Total Capital Costs	19.77	19.77	20.58	-3.94%
PRODUCER LABOUR				
Direct labour*	12.93	12.93	13.28	-2.62%
Return to management* ⁽¹⁾	3.91	3.91	4.10	-4.60%
Total Producer Labour	16.84	16.84	17.37	-3.09%
GOV'T REBATES & OTHERS*	-0.07	-0.07	-0.33	78.31%
RESULT OF COP FORMULA	74.44	76.06	76.19	-0.17%

* Not indexed

⁽¹⁾ The management labour cost was \$33.63 per hour for the 2011 COP calculations

⁽²⁾ COP used as a reference for the February 1, 2012 CDC support price adjustment

Appendix 1

Description of indexes used to update cash costs and interest component

COST COMPONENTS	2011	Q3 2012	% change Q3 2012 / 2011
Dairy Ration	140.3	153.9	9.7%
Transportation, fees & promotion	2.65	2.61	-1.6%
Mach, Equip Repairs	105.7	109.1	3.3%
Fuel & Oil	220.7	229.8	4.2%
Custom Work	119.9	121.8	1.6%
Fertilizer & Herbicides	259.4	262.7	1.3%
Other (Misc)	114.6	114.7	0.2%
Land & Building Repairs	120.2	126.5	5.2%
Property Taxes & Insurance	134.6	136.8	1.6%
Hydro & Phone	121.9	128.1	5.1%
Hired Labour	31.6	32.7	3.3%
Interest	2.5	2.5	-0.3%

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⁾	P10 production share ⁽²⁾ (litres) 2011 production year
Prince Edward Island	5	1.30%
New Brunswick	7	1.73%
Nova Scotia	6	2.20%
Quebec	98	37.47%
Ontario	59	32.85%
Manitoba	6	4.16%
Saskatchewan	7	2.98%
Alberta	18	8.54%
British Columbia	15	8.76%
Canada	221	100.00%

⁽¹⁾ Excluding outliers

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