

Cost of Production or Gross Margin?

Choosing a financial vision for the poultry farm

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Goal of this Presentation

Compare the cost of production to the financial gross margin

Find out the real production gross margin on an annual basis or by flock, for an informed financial vision of the production

In 2017 - Canadian population 36M,
Québec 8.2M

End 2020 – Canada 38M, 5.5% Growth,
Québec 8.6M, 4.9% Growth,

2020: In Canada

Mortality rate 5.6% higher than in 2019

Direct and indirect effects of COVID-19



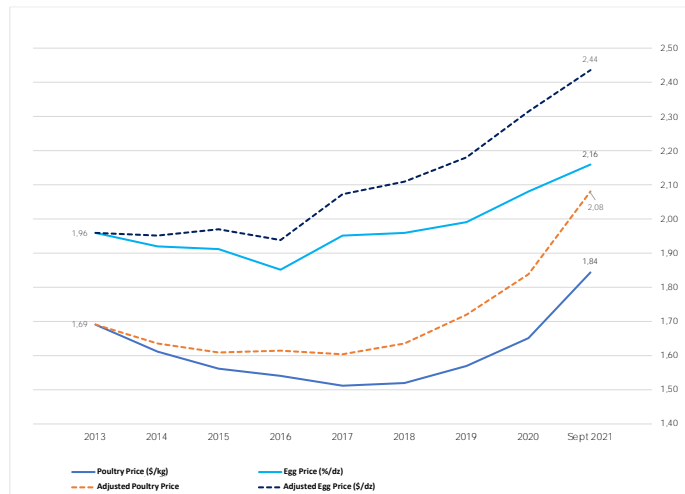
Broiler Sector	2016	2017	2018	2021
Québec	748	744	740	753
Canada	2,817	2,836	2,877	2,877
Price (\$/kg)	1.54	1.52	1.51	1.84
Consumption (kg)	30.47	32.67	34.62	35.06

Increased consumption of 4.5%/year

Allocation Variation



Market Price Variation



Cost of Production - General

- CECPA: *Centre études des coûts de productions*
- Defines the general principles, standards, and methodological rules associated with conducting agricultural product cost of production studies
- Goal: establish a sales price that includes the cost of production, producer remuneration and a return on equity

Cost of Production - Poultry

« Farm Gate Minimum Live » = FGMLP

Ontario minimum price at the farm

Formula:

FGMLP = feed cost + chick cost + producer margin

The Regulation helps update:

- Feed and chick costs every eight weeks
- Producer margin annually

FGMLP = Period A-172

QUOTA PERIOD	MINIMUM LIVE PRICE
A-172	\$1.835/kg
8:01 PM on September 25, 2021 - 8:00 PM on November 20, 2021	Bird weight category of 2.15kg - 2.45kg

$$\text{EVQ}^* = +\$0.02 - 0.012 = \$0.008$$

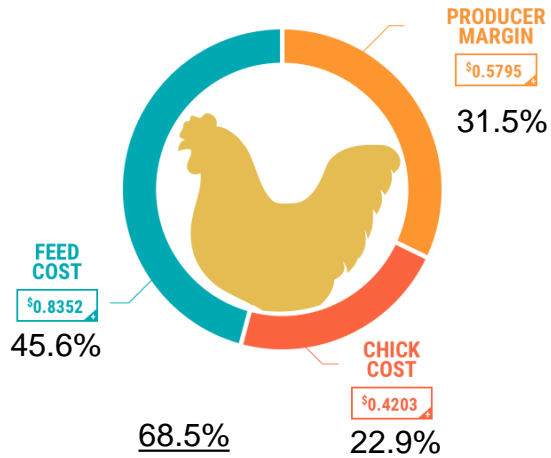
Allocation period A172 (September 26 to November 20, 2021)

1.843 \$/kg

birds of the reference category

*Éleveurs de volailles du Québec (Québec Poultry Producers)

FGMLP Formula



Feed and Chick Details

FEED COST PER/KG	COST
Feed Price (\$/tonne)	517.5
Feed Price (\$/kg)	0.5175
Feed Conversion Ratio	1.6140
Feed Price x Feed Conversion Ratio (\$/kg)	0.8352

CHICK COST PER/KG	COST
Chick Price (\$/chick)	0.9050
Chick Conversion Ratio (chicks per kg)	0.4644
Chick Price x Chick Conversion Ratio (\$/kg)	0.4203

Producer Margin Details

(\$/kg)

PRODUCER MARGIN ITEMS	A-148 (REG. 402)	A-169	CHANGE
Energy	0.0541	0.0538	-0.0003
Repair & Maintenance	0.0134	0.0138	0.0004
Property Taxes & Insurance	0.0132	0.0161	0.0029
Office & Overhead	0.0230	0.0254	0.0024
Contract Services	0.0932	0.1049	0.0117
Labour - General & Management	0.1220	0.1367	0.0147
Return on Capital	0.0886	0.0970	0.0084
Working Capital Interest	0.0009	0.0009	0.0000
Farm Vehicle	0.0085	0.0088	0.0003
Depreciation	0.0726	0.0813	0.0087
Non-feed Additives	0.0022	0.0023	0.0001
Operational and Capital Costs	0.4917	0.5411	0.0494

Levies and License Fees Before Recovery	0.0215	0.0217	0.0002
CFC Levy Accrual Recovery for Ontario		0.0012	0.0012
Avian Influenza Disease Insurance	0.0015	0.0015	0.0000
Modular Loading	0.0120	0.0120	0.0000
Total Producer Margin	0.5267	0.5775	0.0508

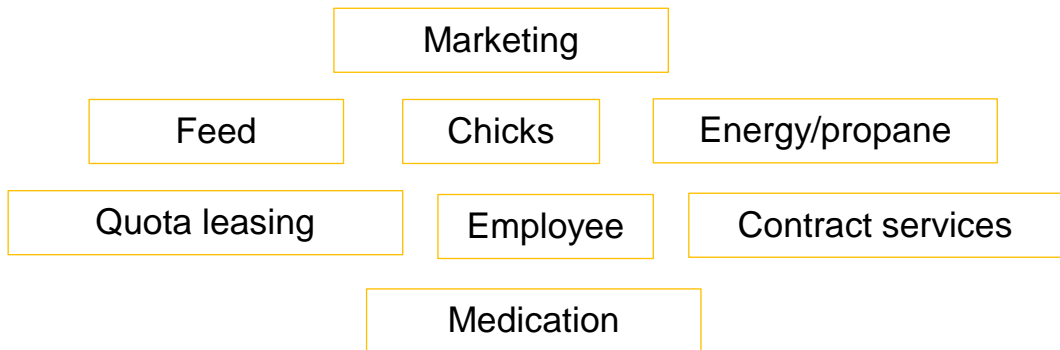
Income Statement Structure

- Sales
- Cost of production (cost of goods sold)
- Gross margin
- Earnings before interest, taxes, depreciation, and amortization (EBITDA)
- Net earnings

Cost of Production

Direct expenses to manufacture product/flock

Includes the following costs:





Income - Sales	\$1.8350
Cost of Goods Sold	
Feed	\$0.8352
Chicks	\$0.4203
<i>Total Feed and Chick</i>	\$1.256
%	68.4%
Producer Margin	\$0.5795
(%)	32%
<u>Production Expenses</u>	
Labour - employee	
Electricity/Propane/Energy	
Medication	
Contract services	
Quota leasing	
Marketing	
Stock variation	
<i>Total Production Expenses</i>	\$0.0000
%	0%
Cost of Goods Sold	\$1.2555
%	68%
Gross margin or Cost of production	\$0.5795
(%)	32%



Income - Sales	\$1.8350	\$1.8350
Cost of Goods Sold		
Feed	\$0.8352	\$0.8352
Chicks	\$0.4203	\$0.4203
<i>Total Feed and Chick</i>	\$1.256	\$1.256
%	68.4%	68.4%
Producer Margin	\$0.5795	\$0.5795
(%)	32%	32%
<u>Production Expenses</u>		
Labour - employee		\$0.0410
Electricity/Propane/Energy		\$0.0538
Medication		\$0.0038
Contract services		\$0.1049
Quota leasing		\$0.0000
Marketing		\$0.0217
Stock variation		\$0.0000
<i>Total Production Expenses</i>	\$0.0000	\$0.2252
%	0%	12%
Cost of Goods Sold	\$1.2555	\$1.4807
%	68%	81%
Gross margin or Cost of production	\$0.5795	\$0.3543
(%)	32%	19%



Gross margin or Cost of production (%)	\$0.3543 19%
Operational Costs	
Labour - Owner	\$0.0957
Maint. & rep. Equip. + tractor	\$0.0226
Operational Costs %	\$0.1183 6%
Fixed Costs	
Office expenses, insurances, taxes, etc.	\$0.0556
Total Expenses %	\$0.1739 9%
Earnings before interest, taxes, depreciation, and amortization (EBITDA)	\$0.1804 10%
<i>Net Margin (%)</i>	
Long-term interests	\$0.0009
Depreciation	\$0.0813
Taxes	\$0.0012
Net Earnings	\$0.0970 5%

Example

- Producer holding 4,000 M = 780,000 kg
- Leasing 1,000 M = 195,000 kg: Price of \$0.26/kg
- Production of 975,000 kg over 6.5 flocks
- 150% Allocation
- Conversion of 1.55 and feed price: \$517/t
- Feed = \$0.8021/kg and Chick=\$0.4203/kg



Income - Sales	\$1.8350	\$1,796,925	\$1.8430
Cost of Goods Sold			
Feed	\$0.8352	\$782,072	\$0.8021
Chicks	\$0.4203	\$409,793	\$0.4203
<i>Total Feed and Chick</i>	<i>\$1.256</i>	<i>\$1,191,864</i>	<i>\$1.222</i>
%	68.4%	66%	66.3%
Producer Margin	\$0.5795	\$605,061	\$0.6206
(%)	32%	34%	34%
Production Expenses			
Labour - employee	\$0.0410	\$52,000	\$0.0533
Electricity/Propane/Energy	\$0.0538	\$39,000	\$0.0400
Medication	\$0.0038	\$3,705	\$0.0038
Contract services	\$0.1049	\$51,139	\$0.0525
Quota leasing	\$0.0000	\$50,700	\$0.0520
Marketing	\$0.0217	\$21,158	\$0.0217
Stock variation	\$0.0000	\$0	\$0.0000
<i>Total Production Expenses</i>	<i>\$0.2252</i>	<i>\$217,701</i>	<i>\$0.2233</i>
%	12%	12%	12%
Cost of Goods Sold	\$1.4807	\$1,409,566	\$1.4457
%	81%	78%	78%
Gross margin or Cost of production	\$0.3543	\$387,359	\$0.3973
(%)	19%	22%	22%

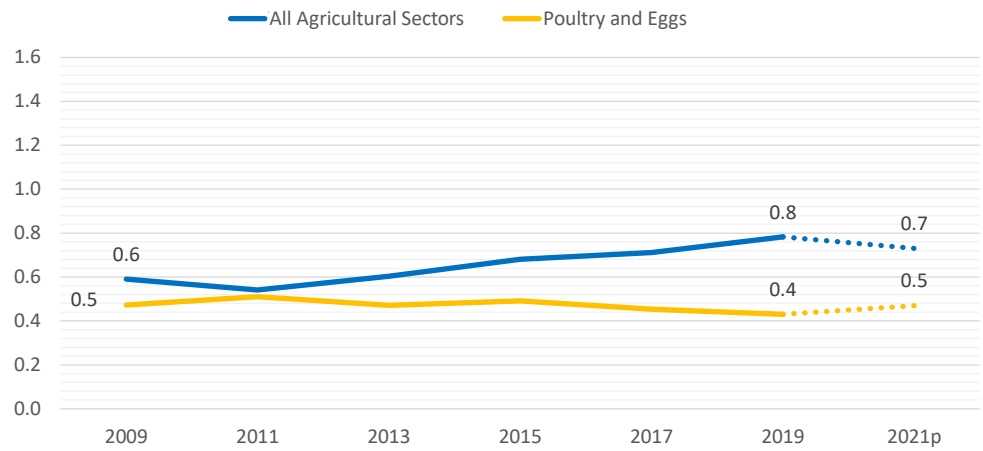
Gross margin or Cost of production (%)	\$0.3543 19%	\$387,359 22%	\$0.3973 22%
Operational Costs			
Labour - Owner	\$0.0957	\$0	\$0.0000
Maint. & rep. Equip. + tractor	\$0.0226	\$22,035	\$0.0226
Operational Costs %	\$0.1183 6%	\$22,035 1%	\$0.0226 1%
Fixed Costs			
Office expenses, insurances, taxes, etc.	\$0.0556	\$20,231	\$0.0208
Total Expenses %	\$0.1739 9%	\$42,266 2%	\$0.0434 2%
Earnings before interest, taxes, depreciation, and amortization (EBITDA) Net Margin (%)	\$0.1804 10%	\$345,093 19%	\$0.3539 19%

What is EBITDA?

- Measures the weight of the debt vs what the business is generating
- Debt: all the interest-bearing liabilities
- EBITDA: Earnings before interest, taxes, depreciation, and amortization

The higher the ratio, the more sensitive the business is to an interest rate hike

Liabilities/EBITDA Ratio, Farm - Québec



EBITDA – \$345,093

Debt of \$2,500,00 ratio: 6.7 for 1

15-year depreciation – 4% Interest rate

Payment = \$224,853



EBITDA	\$345,093
Payment	\$224,853
Owner salary	\$75,000
Surplus	\$45,240 - 2.5%

Conclusion

- Understanding the difference between the « cost of production » and the gross margin
- Learning about the net margin or EBITDA
- Applying this analysis in the form of gross net margin will help target and compare results for different flocks

Thank you!

