

CANADIAN BEEF CATTLE CHECK-OFF EVALUATION: 2022 UPDATE FACT SHEET

The Canadian Beef Cattle Check-Off provides industry funding for the Beef Cattle Research Council (BCRC) responsible for the industry's national research and extension program; Canada Beef tasked with market development and promotion in domestic and international markets; and Public and Stakeholder Engagement, which works to manage issues and build public trust in Canadian beef cattle production.

The Canadian Beef Cattle Check-Off is a mandatory levy of \$2.50 per head collected from beef cattle producers when they market their cattle, with the exception of Ontario, who remains at \$1 In 2020/21, \$17.2 million was generated by check-off and \$1.2 million in import levy for research, marketing and promotion activities on behalf of the entire industry.

A study evaluating the economic benefits from the Canadian Beef Cattle Check-Off was completed in March 2022 and marks the third comprehensive analysis of the value of the national check-off investments for all producers. Since the last study, there have been several structural changes within the industry.

- 1. The introduction of the import levy in 2014
- 2. The development of the Public and Stakeholder Engagement program in 2016
- 3. The increase in the national levy from \$1 to \$2.50 per head in 2018

This study reports that on a five-year average from 2015-21, national research, marketing and promotion activities resulted in the following benefit cost ratios (BCR):

- **Research had a BCR of \$63.2**, compared to \$34.5 and \$46 in the Rude (2011/12 to 2013/14) and Cranfield (2005 and 2008) studies respectively. Historical studies only evaluated carcass weight, while this study added more indicators (see details below).
- **Domestic Marketing (including the import levy) had a BCR of \$15.4,** compared to \$17 and \$8 in the Rude and Cranfield studies respectively.
- *Public and Stakeholder Engagement* had a BCR of \$16, no comparisons are available.

The average benefit cost ratio was expected to decline following the increase in the national levy from \$1 to \$2.50 per head in 2018. There is generally an inverse relationship between the amount of money spent on a promotion or research activity and its marginal BCR. This is due to what economists refer to as "diminishing marginal returns" which means as more money is spent on an activity, the marginal or incremental gains from it, increase at a decreasing rate. This concept helps explain why as investments increase that BCR's typically decline. The fact that the BCRs are still positive confirms there was under-investment in research, marketing, and promotion activities for the Canadian beef cattle industry. The increased investment is still providing a positive return to producers. Any BCR above one (1:1) indicates that an additional dollar in expenditures will increase benefits above a dollar and thus suggests increasing expenditures. It is clear with respect to research, marketing and PSE expenditures, far greater benefits have accrued than costs.

Marketing

The study estimated BCRs for export promotion expenditures by country for which the necessary data was available. The results clearly suggest that the export promotion expenditures across all categories of marketing have had far greater benefits than costs. No one category stands out as significantly better than the others nor does one category stand out as significantly worse than the others.

Country	Lower Cl	Median	Upper Cl	Program	Lower Cl	Median	Upper Cl
Japan	2.7:1	5.6:1	8.5:1	Market Development	1.9:1	5.6:1	9.4:1
Mexico	3.8:1	5.5:1	7.4:1	Consumer Marketing	5.4:1	9.2:1	13.0:1
EU +	0.02:1	0.1:1	0.4:1	Industry Education	3.5:1	7.3:1	11.2:1
Hong Kong	1.4:1	4.3:1	7.3:1	Market Intelligence	3.2:1	6.9:1	10.6:1
China	2.2:1	5.3:1	8.2:1	Stakeholder Communication	3.2:1	7.0:1	10.9:1

+ Volumes to EU are very small, more detail is provided in the full report

Research

There was interest to recover BCRs for a variety of research metrics not just carcass weights in this study. This significantly altered the way in which the analyses could be undertaken with metrics for both feedlots and cow-calf operations included. Given the fact that more metrics are considered, it is expected that the aggregate BCR will be higher than past studies. The results indicate that BCRs for research expenditures are 63:1. However, our estimated BCR for carcass weight is 16:1 which is lower than both the Cranfield and Rude study. Within the research metrics, none stand out as either performing significantly better or worse than other metrics (when the confidence intervals are taken into account).

Feedlot BCRs	Lower Cl	Median	Upper Cl	
Carcass weight	8.5:1	16.4:1	24.1:1	
Survival Rate	4.6:1	21.0:1	47.2:1	
Feed Efficiency	0.6:1	7.2:1	25.6:1	
Beef Quality	9.6:1	18.7:1	30.6:1	
Total Feedlot	23.3:1	63.2:1	127.4:1	
Cow-Calf BCRs	Lower Cl	Median	Upper Cl	
Reproductive Efficiency	2.0:1	6.9:1	13.6:1	
Survival Rate	1.5:1	11.7:1	34.1:1	
Tame Hay Yields	10.1:1	40.1:1	76.0:1	
Total Cow-Calf	13.7:1	58.7:1	123.8:1	

Similar to past studies the BCRs for research are roughly double to triple that of marketing BCRs. However, the very large confidence intervals for the estimated BCRs indicate that the benefits from research expenditures are not statistically higher than benefits from marketing expenditures.

Aggregating across marketing and research categories, the overall BCR is 33:1. This compares to 9:1 found by Cranfield and 14:1 found by Rude. The large increase is caused by the inclusion of benefits (i.e. survival rate, reproductive efficiency, and tame hay yields) from research expenditures that were excluded in the previous studies. Note: if these benefits were also excluded in the current study, we would find an overall BCR of 13:1. This is lower than the Rude study at 14:1, as expected given the increase in investment with the NCO moving from \$1/head to \$2.50/head.

This compares with recent reviews on beef cattle check-off returns in Australia (\$6.2) and the United States (\$11.9).¹ BCRs in Australia and the United States have both increased since their last study, indicating under-investment. The BCR for Canadian beef cattle check-off is on the high end of the range of values reported in previous studies for other regions and commodities.

In comparison to other countries Canada has a smaller beef check-off to invest in marketing and research at \$17.2 million in check-off and \$1.2 million in import levy in 2020/21.² Australia, New Zealand and the U.S. all have beef check-offs, none of which are refundable.

Country	Check-off levy	Applies to imports?	2020/21 Revenue (millions)
Canadian beef	CDN\$2.50 per head marketed	Yes	CDN\$18.4
Australia beef	A\$5 per head marketed	No	A\$65.6 +
New Zealand beef	NZ\$5.20 per head on cattle slaughtered	No	NZ\$15.4 t
U.S. beef	US\$1 per head marketed	Yes	US\$42.8*
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+ <u>About your levy</u> | <u>Meat & Livestock Australia (mla.com.au)</u> (\$52.8 grass-fed+\$12.8 grain-fed = \$65.6 M) see page 73 <u>https://www.mla.com.au/globalassets/mla-corporate/about-mla/documents/planning--reporting/2020-21-ar/2020-21</u> mla-annual-report.pdf

t https://beeflambnz.com/sites/default/files/content-pages/BLNZ-AR-2020.pdf for 2020 p 52

* States retain up to 50 cents on the dollar and forward the other 50 cents per head to the Cattlemen's Beef Promotion and Research Board, which administers <u>the national checkoff program</u>, subject to USDA approval.

While the Canadian Beef Cattle Check-Off provides the core industry funding for BCRC, Canada Beef and PSE it does not fully cover the costs of all programs and activities. Supplementary funding is obtained by leveraging the national check-off, attracting on average \$3 for every \$1 for research and \$1.20 for every \$1 for marketing. In the 2018-19 fiscal year, grant applications provided an additional \$90,000 in funds to Public and Stakeholder Engagement for consumer communication tools and resources.

Canada's National Beef Strategy promotes a united approach to position the Canadian beef industry for greater profitability, growth and continued production of a high-quality beef product of choice in the world. Within the strategy, are recommended provincial allocations to fully fund the strategy. The Canadian Beef Check-Off Agency encourages provincial cattle associations to allocate according to the recommendations, however each provincial beef cattle organizations determine how they want their national check-off allocated between marketing, promotion, and research. Each province submits their allocations to the Canadian Beef Check-Off Agency one year in advance of taking effect.

The ratio of investment in marketing, research, and PSE was 61:34:5³ (61 per cent to marketing, 34 per cent to research, and 5 per cent to PSE) over the current three-year average.

To learn more about the allocation percentages or see how each province allocates their check-off dollars, visit <u>cdnbeefcheckoff.ca/programs/allocations</u>.

The complete study *Evaluating the Economic Benefits from the Canadian Beef Cattle Check-Off* is available at <u>cdnbeefcheckoff.ca/value</u>.

¹ <u>https://www.beefboard.org/wp-content/uploads/2019/07/ROI-Report-Summary.pdf</u>

² page 12 - <u>2020-21-Check-Off-Annual-Report-Print-EN.pdf (cdnbeefcheckoff.ca)</u>

³ The *Evaluating the Economic Benefits from the Canadian Beef Cattle Check-Off* study excluded the analysis of provincial investment