

# **VALUE CHAIN ANALYSIS OF ONTARIO'S SHEEP INDUSTRY**

## **EXECUTIVE SUMMARY**

For full report please contact: [Ontario Sheep Farmers](#)

February 2017

# Table of Contents

1	Executive Summary .....	4
2	Purpose and Objectives.....	Error! Bookmark not defined.
3	Methodology .....	Error! Bookmark not defined.
3.1	Value Chain Analysis.....	Error! Bookmark not defined.
3.2	Research Activities .....	Error! Bookmark not defined.
3.2.1	Research Respondents: Interviews and Online.....	Error! Bookmark not defined.
3.2.2	Producer Workshops.....	Error! Bookmark not defined.
3.2.3	Data Analysis .....	Error! Bookmark not defined.
3.3	Benchmarking.....	Error! Bookmark not defined.
4	Research Findings — Lamb.....	Error! Bookmark not defined.
4.1	Lamb Industry Findings — Overview.....	Error! Bookmark not defined.
4.2	Consumers.....	Error! Bookmark not defined.
5	Production .....	Error! Bookmark not defined.
5.1	Need for Quality, Followed by Quantity .....	Error! Bookmark not defined.
5.1.1	Foundational Practices and Truisms .....	Error! Bookmark not defined.
5.1.2	Maternal vs. Terminal .....	Error! Bookmark not defined.
5.2	Comparative Performance .....	Error! Bookmark not defined.
5.3	Generating the Matrix.....	Error! Bookmark not defined.
5.3.1	Customer Requirements .....	Error! Bookmark not defined.
5.3.2	Supplier Processes.....	Error! Bookmark not defined.
5.4	Populating the Matrix.....	Error! Bookmark not defined.
5.5	Understanding the Completed Matrix .....	Error! Bookmark not defined.
5.6	Summary of Findings .....	Error! Bookmark not defined.
5.6.1	Observations .....	Error! Bookmark not defined.
5.6.2	Quick Win Opportunities.....	Error! Bookmark not defined.
5.6.3	Longer-Term Opportunities.....	Error! Bookmark not defined.
6	Marketing .....	Error! Bookmark not defined.
6.1.1	Payment Guarantee .....	Error! Bookmark not defined.
6.2	Market Orientation .....	Error! Bookmark not defined.
6.2.1	Futures.....	Error! Bookmark not defined.
6.2.2	Grading .....	Error! Bookmark not defined.
6.2.3	Compounding Factors .....	Error! Bookmark not defined.

6.2.4	Ontario vs. Canadian Lamb .....	<b>Error! Bookmark not defined.</b>
6.3	Pricing .....	<b>Error! Bookmark not defined.</b>
6.4	Factors Influencing Ontario Lamb Prices.....	<b>Error! Bookmark not defined.</b>
7	Processing.....	<b>Error! Bookmark not defined.</b>
7.1.1	Business Viability .....	<b>Error! Bookmark not defined.</b>
7.1.2	Changing Supplier/Customer Dynamics.....	<b>Error! Bookmark not defined.</b>
7.2	Slaughter Volumes and Inspection.....	<b>Error! Bookmark not defined.</b>
7.2.1	Provincial vs. Federal Slaughter .....	<b>Error! Bookmark not defined.</b>
7.3	Carcass Weights .....	<b>Error! Bookmark not defined.</b>
7.4	Comparative Performance .....	<b>Error! Bookmark not defined.</b>
7.4.1	Customer Requirements .....	<b>Error! Bookmark not defined.</b>
7.4.2	Supplier Processes.....	<b>Error! Bookmark not defined.</b>
7.5	Observations .....	<b>Error! Bookmark not defined.</b>
7.5.1	Quick Win Opportunities.....	<b>Error! Bookmark not defined.</b>
7.5.2	Long-Term Opportunities .....	<b>Error! Bookmark not defined.</b>
8	Distribution.....	<b>Error! Bookmark not defined.</b>
8.1.1	Margin = Velocity Minus Shrink .....	<b>Error! Bookmark not defined.</b>
8.1.2	Grading .....	<b>Error! Bookmark not defined.</b>
8.2	Comparative Performance .....	<b>Error! Bookmark not defined.</b>
8.2.1	Consumer Requirements.....	<b>Error! Bookmark not defined.</b>
8.2.2	Retail and Foodservice Processes .....	<b>Error! Bookmark not defined.</b>
8.3	Observations .....	<b>Error! Bookmark not defined.</b>
8.3.1	Quick Win Opportunities.....	<b>Error! Bookmark not defined.</b>
8.3.2	Longer-Term Opportunities.....	<b>Error! Bookmark not defined.</b>
9	Wool .....	<b>Error! Bookmark not defined.</b>
9.1.1	Quality Concerns .....	<b>Error! Bookmark not defined.</b>
9.1.2	Determinants of Wool Quality and Value .....	<b>Error! Bookmark not defined.</b>
9.2	Comparative Performance .....	<b>Error! Bookmark not defined.</b>
9.2.1	Consumer Requirements.....	<b>Error! Bookmark not defined.</b>
9.2.2	Production Processes .....	<b>Error! Bookmark not defined.</b>
9.3	Observations .....	<b>Error! Bookmark not defined.</b>
9.3.1	Quick Win Opportunities.....	<b>Error! Bookmark not defined.</b>
9.3.2	Longer-Term Opportunities.....	<b>Error! Bookmark not defined.</b>

10	Conclusions and Recommendations .....	<b>Error! Bookmark not defined.</b>
10.1	Conclusions.....	<b>Error! Bookmark not defined.</b>
10.2	Recommendations .....	<b>Error! Bookmark not defined.</b>
11	References.....	<b>Error! Bookmark not defined.</b>
12	Appendix A – Producer Survey Results .....	<b>Error! Bookmark not defined.</b>
13	Appendix B – Lamb Value Chain Map .....	<b>Error! Bookmark not defined.</b>
14	Appendix C – Wool Value Chain Map.....	<b>Error! Bookmark not defined.</b>
15	Appendix D – Sample Grading Sheet: Lamb.....	<b>Error! Bookmark not defined.</b>

## LIST OF FIGURES

Figure 4-1: The Five Blocks of Ontario’s Lamb Industry.....	<b>Error! Bookmark not defined.</b>
Figure 4-2: Determinants of Lamb Industry and Individual Value Chains’ Performance...	<b>Error! Bookmark not defined.</b>
Figure 5-1: Where industry needs to focus its effort to attain its potential .....	<b>Error! Bookmark not defined.</b>
Figure 5-2: Producer to Processor Association Matrix .....	<b>Error! Bookmark not defined.</b>
Figure 6-1: Ontario Monthly Slaughter Lamb Prices .....	<b>Error! Bookmark not defined.</b>
Figure 6-2: Ontario Lamb Pricing Monthly Seasonality 2011-2015 .....	<b>Error! Bookmark not defined.</b>
Figure 6-3: Standard Deviation of Ontario Livestock Pricing 2011-2015 .....	<b>Error! Bookmark not defined.</b>
Figure 6-4: U.S. Slaughter Lamb Prices vs Ontario Slaughter Lamb Prices .....	<b>Error! Bookmark not defined.</b>
Figure 6-5: International Lamb Prices (\$US proxy) vs Ontario Lamb Prices.....	<b>Error! Bookmark not defined.</b>
Figure 6-6: Canadian Lamb Import Volumes vs Slaughter Lamb Prices Quarterly 2011-2016	<b>Error! Bookmark not defined.</b>
Figure 7-1: Canadian Sheep and Lamb Slaughter (2010-2015) .....	<b>Error! Bookmark not defined.</b>
Figure 7-2: ON, AB, QC Sheep and Lamb Slaughter (2010-2015) .....	<b>Error! Bookmark not defined.</b>
Figure 7-3: Canadian Weekly Slaughter in Federal and Provincial Plants (2014-2015) .....	<b>Error! Bookmark not defined.</b>
Figure 7-4: Average Canadian Sheep and Lamb Carcass Weight (2011-2015)....	<b>Error! Bookmark not defined.</b>
Figure 7-5: Processor to Retail and Foodservice (FS) Association Matrix .....	<b>Error! Bookmark not defined.</b>
Figure 8-1: Retail / Foodservice and Consumer Association Matrix.....	<b>Error! Bookmark not defined.</b>
Figure 9-1: Importance of Quality to Respondents .....	<b>Error! Bookmark not defined.</b>
Figure 9-2: Wool Association Matrix .....	<b>Error! Bookmark not defined.</b>

## LIST OF TABLES

Table 3-1: Research Respondents .....	<b>Error! Bookmark not defined.</b>
Table 3-2: Online Survey Topics and Respondents.....	<b>Error! Bookmark not defined.</b>
Table 4-1: Factors Impacting Consumer Perceptions of Ontario Lamb .....	<b>Error! Bookmark not defined.</b>

Table 7-1: Current Estimates in Carcass Weights and Total Meat Produced.....**Error! Bookmark not defined.**  
Table 9-1: Factors Impacting Wool Value and Demand .....**Error! Bookmark not defined.**

## Executive Summary

Financial and economic performance is an outcome of individuals' motivation and ability to make then implement management decisions in a structured reiterating process. The project's purpose was to determine the knowledge, skills and capabilities required to enable the Ontario sheep industry to increase its competitiveness, and to propose a roadmap for how this could be achieved. The project focused primarily on lamb, with wool studied to a lesser extent. An accompanying report proposes a benchmarking process for guiding and monitoring industry growth.

The research utilized value chain analysis (VCA) techniques. VCA involves triangulating quantitative and qualitative data gathered from different sources to develop an objective picture of, in this case, the current state of the sheep industry, and to propose recommendations to address performance gaps by having identified root causes of current performance. Research activities included a review of literature pertaining to challenges, opportunities and trends occurring in the Canadian and international sheep industry; confidential interviews with industry experts in Canada and the US; two online producer surveys; four producer workshops; discussions with industry advocacy groups; and extensive data analysis. The team also reviewed programs used by the New Zealand, Australian and UK sheep industries to benchmark performance. To bring a greater global perspective to the project, four international sheep industry chain experts acted as project advisors. Detailed research findings are presented in the form of a value chain map for lamb (Appendix B) and a value chain map for wool (Appendix C).

The project identified that Ontario's sheep industry has enormous potential. Based on increasing demand Ontario's sheep industry could double current lamb production and still have room for growth — and that is without establishing a marketing program. With excess capacity, processing capabilities is not an immediate limitation to industry expansion. There are export opportunities in the US and elsewhere; for example, the Middle East, which is a large consumer of lamb and imports the majority of its food. However, the ability to supply the export market is impacted by 90 percent of Ontario lamb being processed in provincially inspected plants. With the misunderstandings that exist towards the segregation of meat from provincial versus federal plants, a predominantly provincial kill represents a barrier to market that has been identified by multiple stakeholders, including the Standing Senate Committee on Banking, Trade and Commerce.

The VCA identified that the lamb industry can be broken down into five distinct parts: production, marketing, processing, distribution and consumers. While primary consumer research was not part of the research, a review of previous lamb consumer research, combined with respondents' insights (most notably those from retail and foodservice) enabled the comparative impact of factors that influence lamb consumers' purchasing decisions to be assessed in relation to practices and processes performed by each of the chain's other four links. Different operating models exist at each point along the chain, particularly in production and marketing. This increases the complexity of an industry that is comparatively small in total and typically comprises largely uncoordinated constituents, who do not

possess the resources or motivation to innovate in line with market demands. The effect of a small industry, largely uncoordinated and resource deficient operations, combined with multiple operating models and ineffective reporting systems, produces outcomes that are symptomatic of an inherently inefficient emerging industry. Evidence of the ineffectiveness of current reporting systems (as described in Section 7.3) include the fact that three methods used to calculate the amount of lamb meat produced in Ontario differ markedly in their estimates, and that none of the calculation methods correlate to the processes used to monitor imports. Data from current programs, such as AgriStability and Farm Census, is collected, analyzed and reported ineffectively compared to what is possible.

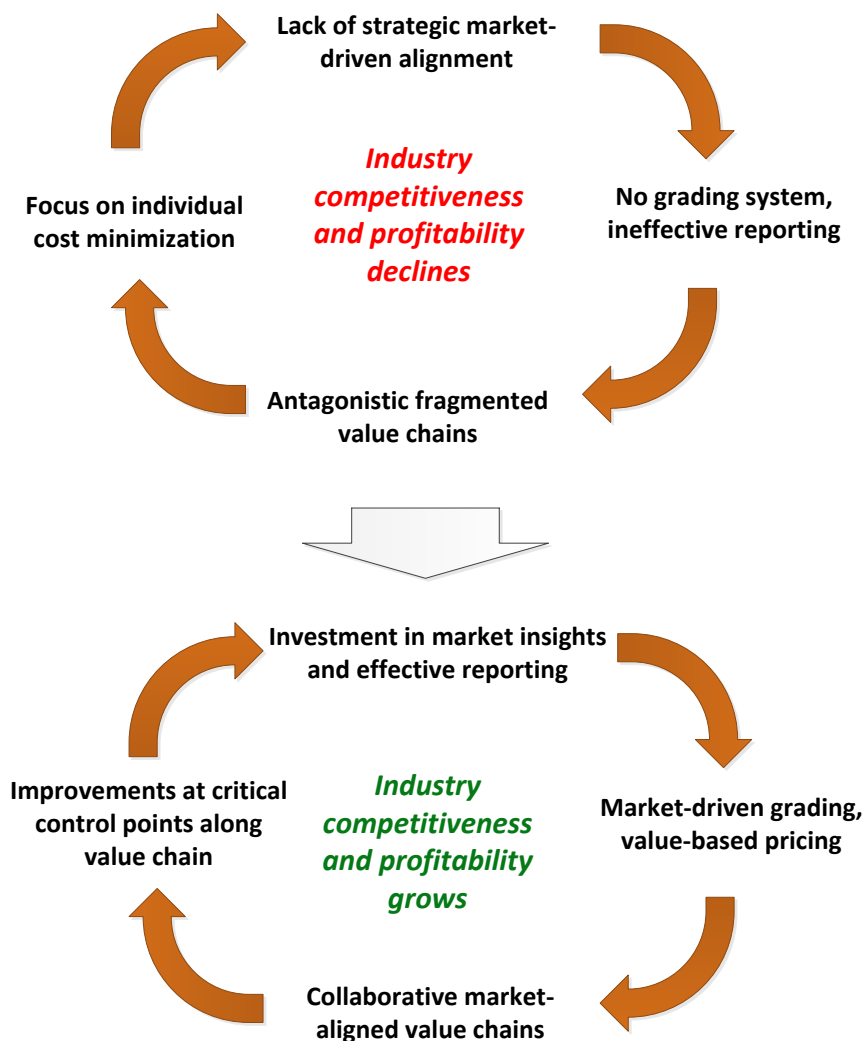
Industry efficiency is impacted by misalignments in production and demand. This leads to producers and downstream businesses primarily focused on minimizing their costs, not maximizing value through collaboration. This practice negatively impacts their collective competitiveness. The greatest misalignment exists between primary production and processing — resulting in a lack of confidence, unwillingness to invest and weak adversarial relationships. Imbalances in supply and demand drive buying behaviours that would otherwise not occur and are detrimental to the industry's long-term sustainability. The 2011 farm census found that only 26 (0.73%) out of 3,569 sheep producers owned flocks of 400 or more ewes. Respondents to the online producer surveys stated that they market an average of 50 lambs annually, with smaller flocks typically comprising a greater number of the ~52 breeds of sheep produced in Ontario than larger more specialized flocks. Smaller flocks often incur comparatively high marketing and handling costs, with transport and sales commission equating to 10 percent of prices paid for finished lambs.

Respondents stated that many breeds of sheep produced in Ontario are unsuited to producing meat. Breed negatively impacts efficiencies at multiple points along the value chain. Varying production and marketing practices result in the production of lambs differing in weight and carcass characteristics. Inconsistency in supply, yield, cutability and meat quality negatively impacts processing efficiencies. The same factors also negatively impact processors', retailers' and foodservices' ability to create value by satisfying customer and consumer expectations. Margins made from processing other livestock species subsidize lamb processing operations. Each key section of the report concludes with a scorecard that identifies short and longer opportunities for members of the value chain to benefit from by improving performance in relation to each other and target consumers.

While the lamb chain analysis identified that improved quality followed by increased quantity is critical to enabling the development and growth of an efficient and effective industry, the wool chain analysis identified improved quality as the most critical requirement. Producers typically view wool as a bi-product, expecting at best to sell wool at a price that covers the cost of shearing and handling. While some producers supply direct to spinners and weavers, most sell their wool to the Canadian Wool Cooperative. Purchasing wool directly from producers, say customers, is arduous, due to inconsistencies in flock production, shearing and wool handling practices. That the analysis identified considerable overlaps between factors impacting wool and lamb production suggests that instead of being perceived as a bi-product, producers should consider the production of wool as an important

aspect of overall good management practices. This would provide producers with considerably greater benefits than those attainable by solely seeking to reduce shearing and fleece handling costs to a minimum.

Encouraging for Ontario's sheep industry is that pork is a home grown example of how an industry can become a master of its own future by working more cohesively from a value chain perspective. The Ontario pork industry is an international leader in the production of fresh and processed pork; although in the 1990s it was in a similar situation to which the Ontario's sheep industry finds itself today. A roadmap to objectively address root causes impacting industry performance is important to the future of Ontario's sheep industry. This is particularly important given the fact that new, highly capable international competitors have recently begun supplying the market. Other potential competitors are also exploring opportunities. The diagram below portrays where the Ontario sheep industry currently stands and where it could be in the future.





The roadmap for Ontario's sheep industry is presented in the form of eight recommendations, presented in Section 10. The recommendations reflect the reiterating "Plan-Do-Check-Act" methodology for driving continuous improvement and are prioritized into three categories: 1) benchmarking, 2) meat quality improvement and 3) research and communication. Described in Section 10, the eight recommendations (grouped under three categories) are:

1) Benchmarking and related initiatives:

- Align industry
- Training
- Data accuracy

2) Meat quality improvement:

- Grading

3) Research and communication:

- OSMA board appointments
- Industry dialogue
- Inform relationships between provincial and federal inspection systems
- Dedicated sheep industry researcher

The most important category is benchmarking, composed of "just do it" activities that industry and government can begin implementing immediately. Benchmarking programs, designed to guide decisions on improving the performance of commercial scale flocks, play an important role in shaping the innovative, forward-thinking, solution-driven cultures that Ontario's sheep industry seeks to emulate. The subsequent two categories are recommendations to enable improvements to be sustained by developing increasingly sophisticated solutions. Given the overlaps identified in the determinants of profitable wool and lamb production, the recommendations can, by definition, increase the value producers' capture from wool.