

Updated Economic Impact Study of the Ontario Agri-Business Industry

Prepared for the Ontario Agri Business Association

October 2016



Prepared By:

MNP
LLP

TABLE OF CONTENTS

1. Executive Summary	2
2. Introduction	5
3. Definition of the Ontario Agri-Business Industry	6
4. Profile of the Ontario Agri-Business Industry	8
5. Key Factors and Trends Impacting the Agri-Business Industry	14
6. Economic Impacts of the Ontario Agri-Business Industry	24
Appendices	28
Appendix A – Data Sources	29
Appendix B – Data Gaps	30
Appendix C – Glossary of Economic Terms	32
Appendix D – Economic Impact Methodology and Assumptions	33
Appendix E – Economic Impacts by Sub-Industry	35
Appendix F – About MNP	37

1. EXECUTIVE SUMMARY

STUDY BACKGROUND

In 2013, MNP LLP (MNP) was commissioned by the Ontario Agri Business Association (OABA) to conduct an economic impact study of the Ontario agri-business industry and its sub-industries, including crop input suppliers, grain elevators and feed manufacturers. In 2016, MNP was commissioned to carry out an update of this study based on the most recent industry data available.

INDUSTRY PROFILE

For the purpose of this study, MNP referred to the crop input supply, grain elevator and feed manufacturing industries of Ontario together as the Ontario agri-business industry. Table A summarizes key statistics for the Ontario agri-business industry.¹

Table A. Summary of Key Industry Statistics – Current Study (2016)

ONTARIO AGRI-BUSINESS INDUSTRY PROFILE			
	Crop Input Suppliers ² (‘000)	Grain Elevators (‘000)	Feed Manufacturers ³ (‘000)
Total revenue	\$3,493,996 ⁴	\$9,457,194	\$2,240,437
Total expenses	N/A	\$9,189,763	\$2,162,117
Cost of goods sold	\$2,796,813	\$8,315,374	N/A
Wages and salaries	\$169,633	\$123,107	\$121,555
Number of establishments	204	284	157
Total number of employees	3,043	2,985	2,318

For a full list of our data sources, please see Section 4 and Appendix A of this report, and for an overview of the assumptions used in preparing the summary of key statistics of the Ontario agri-business industry, please refer to Appendix B.

¹ Because the available data sources for the three industry groups (i.e. crop input suppliers, grain elevators and feed manufacturers) differed, the types of statistics and reporting years differ across the industry groups.

² Please note that Statistics Canada has revised the methodology of its Annual Wholesale Trade Survey and does no longer report financial estimates for industries at a five digit North American Industry Classification Structure (NAICS) codes. For purposes of this study, MNP extrapolated financial figures (total operating revenue, total operating expenses, costs of goods sold, and wages and salaries) for the Seed Merchant Wholesalers [NAICS 41832] and Agricultural Chemical and Other farm Supplies Merchant Wholesalers [NAICS 41839] to provide a profile of the Ontario crop input industry in 2013. For information on MNP’s extrapolation methodology and assumptions, please see Appendix B.

³ Please note that Statistics Canada has revised the methodology of its Annual Survey of Manufacturing and Logging and does no longer report financial estimates for industries at a six digit North American Industry Classification Structure (NAICS) codes. For purposes of this study, MNP extrapolated financial figures (total revenue, revenue from goods manufactured, total expenses, wages and salaries, employment) for the Other Animal Food Manufacturing Industry [NAICS 31119] to provide a profile of the Ontario feed manufacturing industry in 2013. For information on MNP’s extrapolation methodology and assumptions, please see Appendix B.

⁴ This refers to total operating revenue only.

ECONOMIC IMPACTS OF THE ONTARIO AGRI-BUSINESS INDUSTRY

The Ontario agri-business industry was estimated to have generated the following economic impacts in the Ontario economy:

- Approximately \$6.9 billion in total output consisting of \$4.1 billion in direct output, \$2.1 billion in indirect output and \$728 million in induced output. The total output generated by the Ontario agri-business industry increased by approximately 41 percent since the 2013 baseline study.
- Approximately \$3.2 billion in total GDP consisting of \$1.6 billion in direct GDP, \$999 million in indirect GDP and \$587 million in induced GDP. The total GDP generated by the Ontario agri-business industry increased by approximately 42 percent since the 2013 baseline study.
- Approximately 29,823 total full-time equivalent employee (FTE) positions, consisting of direct employment of 8,346 FTEs, indirect employment of 11,230 FTEs, and induced employment of 10,247 FTEs. The total employment generated by the Ontario agri-business industry increased by approximately 31 percent since the 2013 baseline study.
- Approximately \$657 million in total federal, provincial and municipal tax revenue, consisting of direct tax revenue of \$333 million, indirect tax revenue of \$200 million and induced tax revenue of \$124 million. The total government tax revenue generated by the Ontario agri-business industry increased by approximately 42 percent since the 2013 baseline study.⁵

Table B summarizes the estimated economic impacts generated by the Ontario agri-business industry.

Table B. Economic Impacts of the Ontario Agri-Business Industry – Current Study (2016)

	Output ('000)	GDP ('000)	Employment (FTEs)	Federal Taxes ('000)	Provincial Taxes ('000)	Municipal Taxes ('000)
<i>Agri-Business Industry</i>						
Direct	\$4,079,441 ⁶	\$1,655,388	8,346	\$190,201	\$118,440	\$24,328
Indirect	\$2,146,140	\$999,318	11,230	\$112,465	\$69,798	\$18,191
Induced	\$727,825	\$586,827	10,247	\$70,279	\$43,554	\$10,008
Total	\$6,953,406	\$3,241,533	29,823	\$372,945	\$231,792	\$52,527

⁵ Please note that because tax revenues can regularly change due to modifications in tax policy, the tax revenue impacts in this report are estimates only and subject to change. They should be viewed as approximate in nature.

⁶ For the purpose of this study, MNP used the gross margin, the difference between total operating revenues and costs of goods sold, as the input in the economic impact model for grain elevators and crop input suppliers. Therefore, the total output impacts generated by grain elevators and crop input suppliers are not reflective of the total gross value ("revenue") generated by these two industries. For more information on our economic impact approach please refer to Appendix D.

COMPARISON WITH OTHER INDUSTRIES

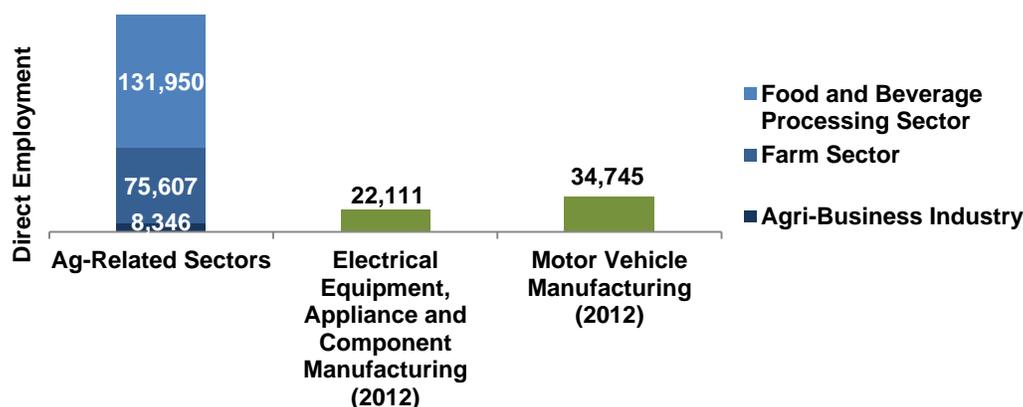
As shown in Figure A, the total GDP generated by the Ontario agri-business industry was roughly four times that generated by the Ontario chicken farming industry.⁷ The Ontario agri-business industry also amounts to roughly one quarter of the significant Ontario farming sector.⁸

Figure A. Total GDP Impacts – Industry Comparisons



As shown in Figure B, the direct employment supported by the Ontario agri-business industry, the farm sector and the food and beverage processing sector (215,903) was roughly ten times that generated by the Ontario electrical equipment, appliance and component manufacturing sector and approximately six times that generated by the Ontario motor vehicle parts manufacturing sector.^{9,10}

Figure B. Direct Employment – Industry Comparisons



⁷ Team Ontario, Economic Contributions of the Ontario Chicken Industry, 2013. Available here: <https://www.ontariochicken.ca/getmedia/0beb3db3-3224-49c9-a8b4-fbeeb12425e1/economicstudy.pdf.aspx>

⁸ JRG Consulting Group, Economic Contribution of the Ontario Farm Sector, 2013. Available here: <http://www.ofa.on.ca/uploads/userfiles/files/jrg%20economic%20impact%20presentation%20to%20ofa.pdf>

⁹ JRG Consulting Group, Economic Contribution of the Ontario Farm Sector, 2013. Available here: <http://www.ofa.on.ca/uploads/userfiles/files/jrg%20economic%20impact%20presentation%20to%20ofa.pdf>

¹⁰ MNP on behalf of Food and Beverage Ontario, Updated Economic Impact Analysis of the Ontario Food and Beverage Processing Sector, 2015. Available here: <http://www.foodandbeverageontario.ca/uploads/resources/files/final-report-may-5-2015.pdf>

2. INTRODUCTION

STUDY BACKGROUND

In 2013, MNP LLP (MNP) was commissioned by the Ontario Agri Business Association (OABA) to conduct an economic impact study of the Ontario agri-business industry and its sub-industries including crop input suppliers, grain elevators and feed manufacturers. In 2016, MNP was commissioned to carry out an update of this study based on the most recent industry data available.

The scope of the updated economic impact study included:

- **Updated industry profiles** - an updated summary of key statistics relevant to the economic performance of Ontario's crop input suppliers, grain elevators and feed manufacturers.
- **Updated economic impacts** - an updated analysis of the economic impacts generated by the Ontario agri-business industry. The analysis quantified output, GDP, tax revenues and employment.
- **Industry trends analysis** - a high level review and update of the key factors and trends impacting the Ontario agri-business industry.

ORGANIZATION OF THE REPORT

The remaining sections of the report are organized as follows:

- Section 3 provides an introduction to and definition of the Ontario agri-business industry, along with an industry value chain depicting the linkages between the Ontario agri-business industry and its suppliers and other sectors.
- Section 4 provides a summary of the key statistics relevant to the economic performance of the Ontario agri-business industry and an overview of historical changes in the industry's statistics.
- Section 5 contains an overview of the key factors and trends impacting the Ontario's agri-business industry along with primary production sector trends, food and beverage processing sector trends, government policy and consumer trends.
- Section 6 presents a summary of the economic impacts generated by Ontario's agri-business industry.
- The appendices include a list of data sources that informed the study, data gaps, a glossary of economic terms, a summary of the methodology used to estimate the economic impacts, along with relevant assumptions, and background information about MNP.

REPORT LIMITATIONS

The report is provided for information purposes and is intended for general guidance only. It should not be regarded as comprehensive or a substitute for personalized, professional advice.

We have relied upon the completeness, accuracy and fair presentation of all information and data obtained from public sources. The accuracy and reliability of the findings and opinions expressed in the presentation are conditional upon the completeness, accuracy and fair presentation of the information underlying them. As a result, we caution readers not to rely upon any findings or opinions for business or investment purposes and disclaim any liability to any party who relies upon them as such.

Additionally, the findings and opinions expressed in the presentation constitute judgments as of the date of the presentation, and are subject to change without notice. MNP is under no obligation to advise of any change brought to its attention which would alter those findings or opinions.

3. DEFINITION OF THE ONTARIO AGRI-BUSINESS INDUSTRY

3.1 DEFINITION OF THE INDUSTRY

For the purpose of this study, MNP referred to the crop input supply, grain elevator and feed manufacturing industries of Ontario together as the Ontario agri-business industry. The graphic below shows the activities associated with each of the three industry groups.

Figure 1. Agri-Business Industry Groups

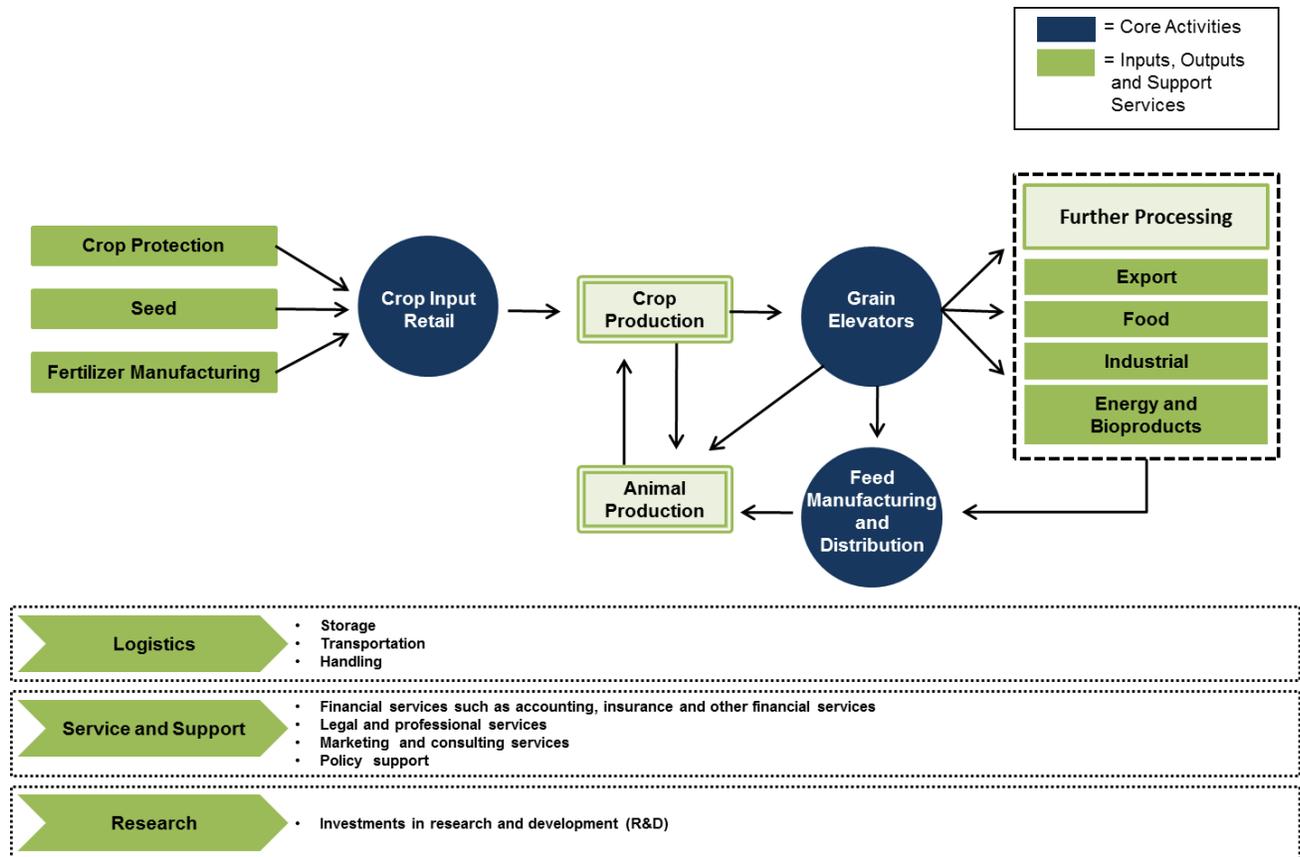
ONTARIO AGRI-BUSINESS INDUSTRY		
Crop Input Suppliers	Grain Elevators	Feed Manufacturers
Main Activities		
<ul style="list-style-type: none"> • Agricultural seeds, seeds, processed seeds, wholesale and retail • Plant protection sales and services • Agricultural equipment sales • Fuel delivery services • Soil sampling services • Custom crop spraying and fertilizer application services 	<ul style="list-style-type: none"> • Grain blending, handling and marketing services • Grain drying services • Grain storage • Grain and supplemental ingredients grinding, crushing and mixing services 	<ul style="list-style-type: none"> • Poultry and livestock feed, supplements and premix manufacturing • Feed technical and nutritional support

3.2 INDUSTRY VALUE CHAIN

A value chain illustrates the activities carried out by an industry that add value at each stage in the production process. Using the value chain as a starting point, linkages between an industry's main components and other industries can be highlighted. This is done by identifying inputs provided by suppliers and external service providers that the industry uses to create and deliver goods and services.

The value chain graphic in Figure 2 displays the linkages between the Ontario agri-business industry and its suppliers by illustrating its main components and the industries and organizations with which it interacts.

Figure 2. Ontario Agri-Business Industry Value Chain



4. PROFILE OF THE ONTARIO AGRIBUSINESS INDUSTRY

This section contains an overview of key statistics for the Ontario agri-business industry. MNP drafted this content based on available industry statistics from organizations such as Statistics Canada, Agricorp and WSIB. For a full list of our data sources, please see Appendix A, and for an overview of the assumptions used in preparing this section, please refer to Appendix B.

Because the available data sources for the three industry groups (i.e. crop input suppliers, grain elevators and feed manufacturers) differed, the types of statistics and reporting years differ across the industry groups.

4.1 ONTARIO CROP INPUT SUPPLIERS

INDUSTRY OVERVIEW

Ontario's crop input suppliers supply a range of essential products, including seed, plant nutrients and crop protection products, as well as related services, to the province's horticultural and field crop sector. In 2015, Ontario's farm cash receipts for field crops, including fruits and vegetables totalled \$6.2 billion.¹¹

Ontario's crop input supply sector sells a wide variety of seeds, which are based on local growing conditions, planned end use of the crop, and the management abilities of the individual producer. Crop input suppliers also provide Ontario producers with a wide range of fertilizers that supply plants with essential nutrients (nitrogen, phosphorus, potassium) and minerals required for healthy plant growth. Crop input suppliers use soil test results and crop removal data to develop science-based recommendations to help the crop meet quality and yield potential. The crop input sector is a strong supporter of the 4R Nutrient Strategy, an innovative and science-based approach that offers enhanced environmental protection, increased production, increased farmer profitability and improved sustainability. The 4R concept uses the right fertilizer source, at the right rate, at the right time, with the right placement. Crop protection products safeguard plants against competition from weeds, insects and disease, allowing them to produce increased yields per unit of land.



The crop input sector also provides a wide range of science and technology-based services to farmers, including agronomy services, professional application of crop protection products and fertilizers and precision agriculture to improve nutrient placement and efficiency. Crop input suppliers aim to support the competitiveness of Ontario's agriculture sector to satisfy the needs of end consumers. Through an effective combination of science, technology and products, the crop input supply sector seeks to ensure that farmers are able to:

- Protect their crops from diseases and pests;
- Improve the quality and yield potential of their crops; and
- Demonstrate environmental protection and environmental sustainability.

¹¹ Statistics Canada, Farm Cash Receipts, 2015.

KEY STATISTICS

Table 1 summarizes the key statistics for Ontario crop input suppliers in 2011 and 2013.

Table 1. Key Statistics for the Ontario Crop Input Industry¹²

CROP INPUT SUPPLIERS			
	Baseline Study 2011 ('000)	Current Study 2013 ('000)	Percentage Change
Total operating revenue **	\$2,840,769	\$3,493,996	23%
Sale of all goods purchased for resale *	\$2,780,282	N/A	N/A
Total expenses *	\$2,788,305	N/A	N/A
Total operating expenses **	\$403,600	\$459,102	14%
Cost of goods sold **	\$2,384,705	\$2,796,813	17%
Opening inventory *	\$394,062	N/A	N/A
Closing inventory *	\$394,771	N/A	N/A
Wages and salaries **	\$157,072	\$169,633	8%
Number of establishments¹³ ***			
	201	204	1%
Total number of employees ****			
	2,941	3,043	3%

Sources/Notes:

* Please note that Statistics Canada has revised the methodology of its Annual Wholesale Trade Survey and does no longer report on sale of all goods purchased for resale, total expenses, opening inventory and closing inventory.

** Statistics Canada, Annual Wholesale Trade Survey, 2011 / Please note that MNP extrapolated total operating revenue, total operating expenses, costs of goods sold, and wages and salaries for the Ontario crop input industry in 2013. For MNP's extrapolation methodology and assumptions, please refer to Appendix B.

*** Statistics Canada, Canadian Business Patterns, 2011 and 2013.

**** Statistics Canada, Input-Output Model 2011 / Statistics Canada, Survey of Employment, Payrolls and Hours, 2013.

Between 2011 and 2013, Ontario crop input suppliers experienced growth in terms of total operating revenue, total operating expenses, cost of goods sold, and wages and salaries.

- Total operating revenue increased approximately 23 percent, from \$2.8 billion in 2011 to \$3.5 billion in 2013. Ontario crop input suppliers accounted for approximately 19 percent of the total operating revenues generated by the crop input industry in Canada.¹⁴
- Total operating expenses increased approximately 14 percent, from \$404 million in 2011 to \$459 million in 2013.
- Cost of goods sold increased approximately 17 percent, from \$2.4 billion in 2011 to \$2.8 billion in 2013.
- Wages and salaries increased approximately 8 percent, from \$157 million in 2011 to \$170 million in 2013.

¹² Please note that Statistics Canada has revised the methodology of its Annual Wholesale Trade Survey and does no longer report financial estimates for industries at a five digit North American Industry Classification Structure (NAICS) codes. MNP extrapolated financial figures (total operating revenue, total operating expenses, costs of goods sold, and wages and salaries) for the Seed Merchant Wholesalers [NAICS 41832] and Agricultural Chemical and Other Farm Supplies Merchant Wholesalers [NAICS 41839] to provide a profile of the Ontario crop input industry in 2013. For information on MNP's extrapolation methodology and assumptions, please see Appendix B.

¹³ Please note that according to Statistics Canada, fluctuations in figures from the Canadian Business Patterns Database from one reference period to another can come from methodological changes. As a result, these estimates do not represent changes in the business population over time. Statistics Canada advises users to exercise caution when interpreting or comparing the number of establishments between 2011 and 2013.

¹⁴ MNP estimated total operating revenues for the Canadian crop industry using the same methodology used to extrapolate financial estimates for the crop input industry in Ontario. For MNP's extrapolation methodology and assumptions, please see Appendix B.

- Number of establishments stayed relatively stable, increasing from 201 establishments in 2011 to 204 establishments in 2013.
- Total number of employees increased approximately 3 percent, from 2,941 employees in 2011 to 3,043 employees in 2013.

4.2 ONTARIO GRAIN ELEVATORS

INDUSTRY OVERVIEW

Grain elevator facilities are located throughout Ontario in geographical locations where grains, oilseeds and dry beans are grown by producers. The major crops handled by Ontario's elevator system include wheat, corn, soybeans, white and coloured beans, canola, oats and barley.

Grain elevators receive grains, oilseeds and dry beans from crop producers and dry, clean, condition and store these commodities before marketing them into the domestic or export value chains. Grain elevators can be categorized into two main types of facilities, terminal/transfer elevators and country elevators.

Terminal elevators (may also be referred to as Transfer elevators) are typically located with water access and play a key role in facilitating the movement of Ontario grains and oilseeds into the U.S. and global export markets via vessel shipments. These elevators may also be able to receive and ship by rail. Terminal/transfer elevators may also serve as a receiving point for grains and oilseeds being imported into Ontario/Canada, typically from Canadian or U.S. sources. Terminal/transfer elevators located on water are regulated by the Canadian Grain Commission under authority of the Canada Grain Act.



Country grain elevators serve as the primary local delivery point for Ontario farmers during harvest and throughout the year. Ontario country grain elevators receive and purchase grains, oilseeds and dry beans grown by Ontario farmers and are regulated under the Ontario Grains Act. Country grain elevators typically receive farmer grains via truck or wagon delivery and ship via truck. A number of Ontario country elevators also have rail access which allows them to ship and receive grains and oilseeds via rail. Country grain elevator operators also provide assistance to farmers with the marketing of their crop. Country elevators have access to marketing instruments such as futures and options to help producers hedge and reduce their financial and market risk. The country elevator sector has invested significant capital into storage capacity and grain drying equipment to facilitate primary deliveries of Ontario grown grains, oilseeds and dry beans. These Ontario grown grains and oilseeds are then merchandized into various value chains based on specific quality attributes, and processed into numerous value-added food and industrial products including flour, corn oil, corn syrup, cereal, vegetable oil, soybean meal, tofu, whiskey, animal feed and ethanol.

KEY STATISTICS

Table 2 summarizes the key statistics for grain elevators in Ontario in 2012 and 2016.

Table 2. Key Statistics for the Ontario Grain Elevator Industry

GRAIN ELEVATORS			
	Baseline Study 2012 ('000)	Current Study 2016 ('000)	Percentage Change
Total revenue *	\$7,478,133	\$9,457,194	26%
Total expenses *	\$7,257,078	\$9,189,763	27%
Cost of goods sold *	\$6,661,156	\$8,315,374	25%
Other expenses *	\$406,633	\$567,060	39%
Net income *	\$221,056	\$267,431	21%
Fixed assets *	\$1,111,835	\$1,938,408	74%
Other assets *	\$416,921	\$568,124	36%
Wages and salaries (2012-2015) **	\$97,003	\$123,107	27%
Number of establishments (2013-2016) ***	270	284	5%
Total number of employees (2012-2015)**^{15,16}	2,381	2,985	25%

Sources/Notes:

* *Agricorp, Grain Financial Protection Program, 2012 and 2016.*

** *Workplace Safety and Insurance Board (WSIB), Enterprise Information Warehouse, 2012 and 2015.*

*** *Ontario Agri Business Association, 2013 and 2016.*

Between 2012 and 2016, Ontario grain elevators experienced growth in terms of total revenue, expenses, net income, assets and employment.

- Total revenue increased approximately 26 percent, from \$7.5 billion in 2012 to \$9.5 billion in 2016.
- Total expenses increased approximately 27 percent, from \$7.2 billion in 2012 to \$9.2 billion in 2016.
- Cost of goods sold increased approximately 25 percent, from \$6.7 billion in 2012 to \$8.3 billion in 2016.
- Other expenses increased approximately 39 percent, from \$407 million in 2012 to \$567 million in 2016.
- Net income increased approximately 21 percent, from \$221 million in 2012 to \$267 million in 2016.
- Fixed assets increased approximately 74 percent, from \$1.1 billion in 2012 to \$1.9 billion in 2016.
- Other assets increased approximately 36 percent, from \$417 million in 2012 to \$569 million in 2016.
- Wages and salaries increased approximately 27 percent, from \$97 million in 2012 to \$123 million in 2015.
- Number of establishments increased approximately 5 percent, from 270 in 2013 to 284 in 2016.
- Total number of employees increased approximately 25 percent, from 2,381 employees in 2012 to 2,985 employees in 2015.

¹⁵ The total number of employees in the grain elevator industry in Ontario are reported by WSIB as Full-Time Equivalents (FTE's). According to WSIB, an FTE is equivalent to a full-time staff working 2,000 hours a year.

¹⁶ Any overtime generated by existing FTEs over the 2,000 standard hours of work may be classified by WSIB as additional FTE hours. Therefore, the number of employees from one reference period to another may not be comparable as the 2015 FTE estimates may not reflect an actual increase in physical employees, but an increase in overtime hours worked by existing FTEs.

4.3 ONTARIO FEED MANUFACTURERS

INDUSTRY OVERVIEW

Ontario's feed manufacturing sector supplies essential animal nutrition products, including complete feeds, supplements and premixes to livestock, poultry and aquaculture producers. Animal nutrition products represent the largest input cost for livestock and poultry production, accounting for up to 75 percent of total costs, depending on the species.¹⁷

Ontario's feed manufacturing sector is a large value-added market for Ontario grown or processed grains and oilseeds, including corn, soybean meal, wheat, barley and canola meal. Most feed companies provide a variety of products targeted to specific species and their actual growth stage (starter, grower and finisher rations). Complete finished feed comes in many forms - it can be pelleted, or produced in a mash form, which is a fine textured feed. Feed is delivered to the farm in a bulk or bag format. Most feed companies have their own fleet of trucks that they use to deliver feed to farmers, and pick up raw ingredients. Feed companies may also retail feed to local markets through an established network of 'dealers' located across the province.

Feed companies employ knowledgeable sales and technical staff to provide technical expertise to producers. Nutritionists advise producers on what rations will provide the best results for their livestock or poultry. The feed industry has also filled a need within the producer community for information on new research and technology that was formerly provided by government extension agents.

The Canadian Food Inspection Agency (CFIA) enforces the Canada Feeds Act that regulates the production and sale of livestock and poultry feeds.

In response to Food Safety, feed manufacturers have adopted Good Manufacturing Practices and Hazard Analysis Critical Control Point (HACCP) programs in order to meet the needs and requirements of both producers and processors. FeedAssure™ is a comprehensive feed safety management and certification program developed in 1999 by the Animal Nutrition Association of Canada. FeedAssure™ was the first feed industry HACCP program developed in North America and one of the first in the world. Certification under the FeedAssure™ program carries the weight of third party verification that safety controls are effective and are being followed. Over 50 Ontario feed manufacturing and related facilities, representing over 70 percent of Ontario's commercial feed production are HACCP-certified under the FeedAssure™ program.



¹⁷ Animal Nutrition Association of Canada, Canadian Feed Stats, <http://www.anacan.org.vsd46.korax.net/en/resources-links/canadian-feed-industry/canadian-feed-stats>.

KEY STATISTICS

Table 3 summarizes the key statistics for Ontario's feed manufacturers in 2010 and 2013.

Table 3. Key Statistics for the Ontario Feed Manufacturing Industry¹⁸

FEED MANUFACTURING			
	Baseline Study 2010 ('000)	Current Study 2013 ('000)	Percentage Change
Total revenue *	\$1,612,714	\$2,240,437	39%
Revenue from goods manufactured *	\$1,441,601	\$1,881,787	31%
Total expenses *	\$1,541,138	\$2,162,117	40%
Exports ¹⁹ **	\$51,406	\$72,540	41%
Imports ²⁰ **	\$125,064	\$140,303	12%
Wages and salaries *	\$110,316	\$121,555	10%
Number of establishments (2010-2015) ***			
	159	157	-1%
Total number of employees (2010-2012) *			
	2,315	2,318	0%

Sources/Notes:

* Statistics Canada, *Annual Survey of Manufactures and Logging, 2010 and 2013* / Please note that MNP extrapolated total revenue, revenue from goods manufactured, total expenses, wages and salaries and employment for the Ontario feed manufacturing industry in 2013. For MNP's extrapolation methodology and assumptions, please refer to Appendix B.

** Statistics Canada, *International Trade, 2010 and 2013*.

*** Statistics Canada, *Canadian Business Patterns, 2013* / Canadian Food Inspection Agency, 2015.

Between 2010 and 2013, Ontario feed manufacturers experienced growth in terms of total revenue, revenue from goods manufactured, total expenses, exports, imports and wages and salaries.

- Total revenue increased approximately 39 percent, from \$1.6 billion in 2010 to \$2.2 billion in 2013. Ontario feed manufacturers accounted for approximately 30 percent of the total revenue generated by the feed manufacturing industry in Canada.²¹
- Revenue from goods manufactured increased approximately 31 percent, from \$1.4 billion in 2010 to \$1.9 billion in 2013.
- Total expenses increased approximately 40 percent, from \$1.5 billion in 2010 to \$2.2 billion in 2013.
- Exports increased approximately 41 percent, from \$51 million in 2010 to \$72 million in 2013.
- Imports increased approximately 12 percent, from \$125 million in 2010 to \$140 million in 2013.
- Wages and salaries increased approximately 10 percent, from \$110 million in 2010 to \$121 million in 2013.
- Number of establishments decreased approximately 1 percent, from 159 establishments in 2010 to 157 establishments in 2015.
- Total number of employees stayed stable, from 2,315 employees in 2010 to 2,318 employees in 2012.

¹⁸ Please note that Statistics Canada has revised the methodology of its Annual Survey of Manufacturing and Logging and does not longer report financial estimates for industries at a six digit North American Industry Classification Structure (NAICS) codes. For purposes of this study, MNP extrapolated financial figures (total revenue, revenue from goods manufactured, total expenses, wages and salaries, employment) for the Other Animal Food Manufacturing Industry [NAICS 311119] to provide a profile of the Ontario feed manufacturing industry in 2013. For information on MNP's extrapolation methodology and assumptions, please see Appendix B.

¹⁹ Please note that 2014 and 2015 trade statistics are available. We report 2013 trade statistics to be consistent with the remaining industry statistics for which only 2013 data is published.

²⁰ Ibid.

²¹ MNP estimated total revenue for the Canadian feed manufacturing industry using the same methodology used to extrapolate financial estimates for the feed manufacturing industry in Ontario. For MNP's extrapolation methodology and assumptions, please see Appendix B.

5. KEY FACTORS AND TRENDS IMPACTING THE AGRI-BUSINESS INDUSTRY

5.1 KEY FACTORS AND TRENDS IMPACTING THE AGRI-BUSINESS INDUSTRY

There are a number of internal and external factors or trends that have impacted Ontario's agri-business industry over the last several years. The main trends impacting Ontario's agri-business industry are presented below. Trends related to primary agriculture, food processing, government policy and consumer preferences also impact the agri-business industry. Such value chain trends are described after this subsection.

1. **Strong Agricultural Production in Ontario.** The agri-business industry serves one of the largest and strongest sectors in the province; agriculture. Ontario is one of the largest producers of grains and live animals in the country. In 2016, Ontario comprised 60 percent of the national seeded area for winter wheat, 11 percent for wheat overall, 50 percent for soybeans and 62 percent for corn.²² The rich agricultural lands and mild climate of southern Ontario allow for the production of more than 200 agricultural commodities, including greenhouse and field vegetables. The livestock sector has a strong emphasis on dairy, poultry, hog and beef production, but also includes many other species. This diversity is another strength of the agri-business industry, which supports these sectors.
2. **Educated and Skilled Workforce.** Education and training are a continuous need in the agri-business industry to properly advise and support farmers while implementing new technology. According to MNP's industry interviews, the Ontario agri-business industry generally does well at attracting and retaining skilled and educated agronomists and feed nutritionists. New technologies and evolving consumer needs have changed the way that the agri-business industry operates today. Agricultural production methods and equipment are becoming increasingly high-tech. By attracting and retaining skilled people, the agri-business sector is able to keep up with these trends. While generally seen as a strength, some of the industry representatives in our interviews indicated that finding labour with the right set of technological and agricultural skills is and will continue to become a challenge for their industry. Crop input suppliers noted that the overall labour pool has shrunk but at the same time the sector's labour demand has decreased and shifted due to new technology investments/improvements.
3. **Proximity to Local and International Markets.** Agri-businesses benefit from being located in close proximity to their suppliers and customers. For instance, crop input suppliers located in rural communities benefit from being able to sell to and serve farmers where they operate. Also, grain elevators are typically successful when purchasing grain grown in proximity. Ontario grain elevators' major strength is that they are located in the largest grain and oilseed producer province in Canada and are able to purchase and sell grain in proximity. The province of Ontario is home to over 51,950 farms and about 3,000 food and beverage food businesses which are both suppliers and customers of the agri-business industry in Ontario.^{23,24} Furthermore, Ontario agri-businesses benefit from being located in a province with extensive transportation infrastructures and integration with the U.S. and global systems. Ontario's highway, rail and sea networks with advanced traffic-

²² Statistics Canada, Table 001-0017, Estimated Areas, Yield, Production, Average Farm Price and Total Farm Value of Principal Field Crops, in Imperial Units, Annual, CANSIM, 2011-2016.

²³ Statistics Canada, Census of Agriculture, 2011.

²⁴ Statistics Canada, Annual Survey of Manufactures and Logging, 2010.

management systems help speed deliveries and connect agri-businesses with markets across Canada, the United States, Latin America and other markets around the world. Ontario agri-businesses' proximity to local and global markets, combined with the province's highly efficient transportation infrastructure, makes delivering products and services to market fast and convenient.

4. **Food Safety.** The feed industry plays a significant role in the production chain of healthy and safe food products. The feed manufacturing industry strives to meet regulations and guidelines relating to the identification and control of risk, both in the ingredients used to produce feeds and in the processing of the feed itself. The feed industry also aims to be on top of food safety, traceability systems and best management practices and collaborates with members at different stages of the food chain to ensure the production of healthy and safe food products. Ontario's feed manufacturers have adopted Good Manufacturing Practices and Hazard Analysis Critical Control Point (HACCP) programs in order to meet the needs and requirements of both producers and processors. In addition, over 50 Ontario feed manufacturing and related facilities, representing over 70 percent of Ontario's commercial feed production are HACCP-certified under the FeedAssure™ program.
5. **Investing in Technology.** Technology in the agri-business industry is advancing at an unprecedented rate. Precision farming, variable rate technology in crops, biotech enhanced crops, robotics and automation on farms are all examples of technology currently being used and offered by the agri-business industry. In MNP's industry interviews, a number of industry representatives indicated that technology is seen as an opportunity to further enhance efficiencies and innovation, boost their success at being environmentally compliant and improve traceability. For example, one of our interviews mentioned that combines can see yield results on a real time basis so that crop input suppliers, in turn, can immediately provide instructions on how to apply nutrients to farm clients; the interviewee commented that this is "a very positive impact on our operations". In addition, social technology can have a positive impact on how agri-businesses engage and communicate with their customers. In Canada, the percentage of farms using the internet for farm business increased from 35 percent in 2006 to 56 percent in 2011. According to the latest census data, 45 percent of all farms in Ontario reported using high speed internet.²⁵
6. **Regulation.** Many aspects of agri-business operations, including labour and environmental compliance, are strictly regulated by multiple levels of government. With increasingly tight labour and workplace safety and environmental regulations, agri-businesses have to make significant capital and time investments to comply. Agri-businesses find the regulatory process difficult to follow, especially when the regulations are not fully applicable to businesses operating in rural environments. Environmental compliance was mentioned as a top concern across our industry interviews.
7. **Capital Intensive.** A vast majority of agri-businesses use a large portion of their capital to buy new technology, equipment and machinery. High capital investment is required for agri-businesses like grain elevators to manage large amounts of grain and oilseeds at the harvest period of the year. While this allows grain elevators to raise their productivity, it also means that they assume a greater financial risk.
8. **Seasonality.** The agri-business industry is dependent on the agriculture sector, which is a highly seasonal sector. The agri-business sector has to competently manage seasonality, such as supplying fertilizer for a very short spring planting season, to be successful.
9. **Urbanization.** Urban areas in Ontario are increasing in population and expanding. Livestock production is shifting away from urban. Increases in urbanization are putting pressure on the agriculture sector and agri-business operations in nearby areas, in terms of having to comply with stricter environmental regulations for instance.

²⁵ Statistics Canada, Census Agriculture, 2006 to 2011.

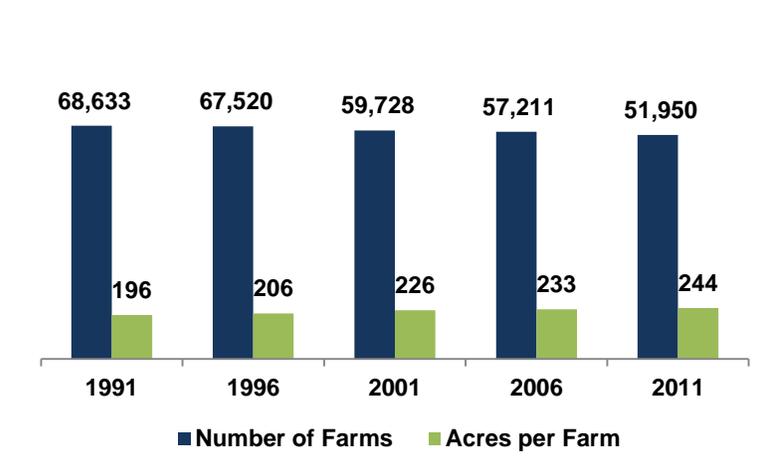
5.2 PRIMARY PRODUCTION SECTOR TRENDS

This section of the report looks at key trends in the agri-business industry value chain, including primary production, agri-food processing, government policy and consumer trends.

The top trends in the primary production sector include:

- 1. Consolidation at the Farm Level.** Due to a response to changing market conditions and on farm technology improvements, family farms continue to consolidate so the number of farms continues to decline but also they continue to get larger. At the same time, farms are becoming more efficient and capital intensive. In 2011, in Ontario there were 51,950 farms, representing a 24 percent decline from 1991. During the same period of time, average farm size, in terms of acres, continued to increase as farms become larger. Ontario's average farm size increased 24 percent from 1991 at an increase of 1 percent per year.²⁶ While the overall number of farms and total farm area in Ontario has been in decline, annual production of principal field crops has been steadily improving from 2000 to 2015. This trend is significantly stronger in the livestock sector reflecting industry consolidation. Since 2006, overall farms in Ontario decreased at a rate of 2 percent per year while cattle farms decreased at a much faster rate at 7 percent per year. As the livestock sector continues to evolve and restructure, agri-businesses like feed manufacturers mimic these structural changes and continue to consolidate. This trend means a smaller customer base for agri-business to serve over time. Larger farm operations, both livestock and crop, tend to be more challenging to serve for agri-business – more demanding, high volume but lower profit margin, and more self-sufficient.

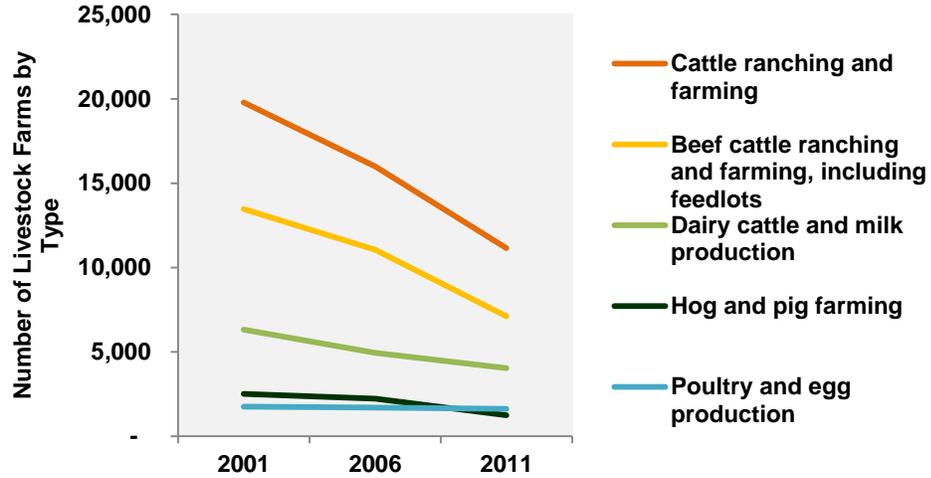
Figure 3. Number of Farms and Acres per Farm, 1991 to 2011



Source: Statistics Canada, Census of Agriculture

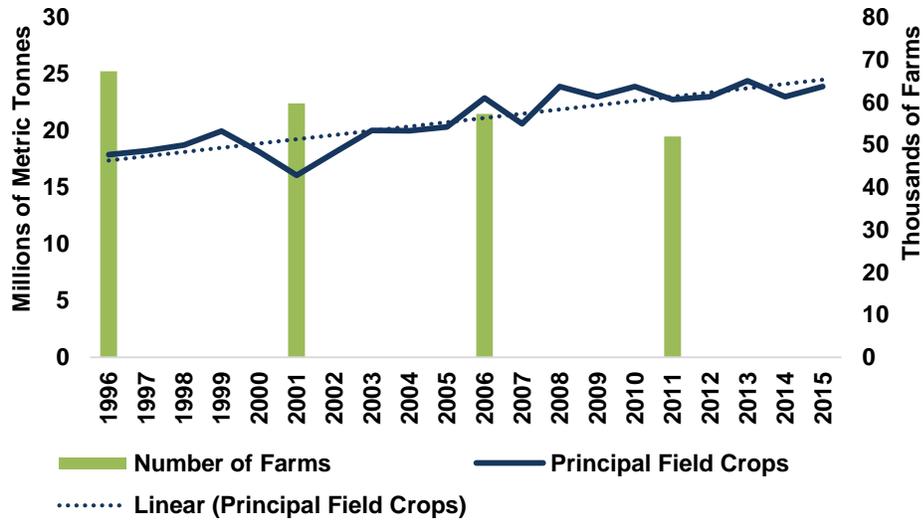
²⁶ Statistics Canada, Census Agriculture, 2006 to 2011.

Figure 4. Number of Livestock Farms by Type in Ontario, 2001 to 2011



Source: Statistics Canada, Census of Agriculture

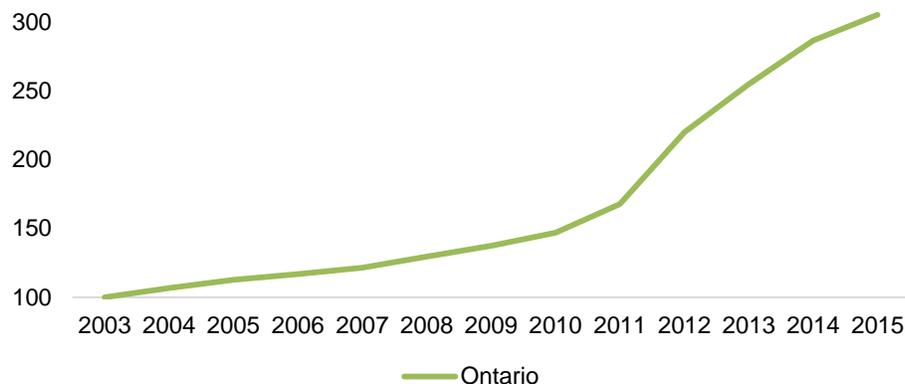
Figure 5. Estimated Production of Principal Field Crops in Ontario



Source: Statistics Canada

2. **Farm Value Appreciation.** Farmland values have grown every year since 1993, largely due to decreases in the availability of prime agricultural land and the expansion of urban centers into historically agricultural areas. Historically low interest rates and high cash receipts have accelerated this process. The compound annual growth rate in the value of farmland in Ontario from 2003 to 2015 is over 10 percent per annum, with the greatest amount of growth occurring over the last five years. By comparison, all other provinces experienced farmland appreciation in 2015, with Saskatchewan, Quebec, and Ontario experiencing the greatest growth.²⁷

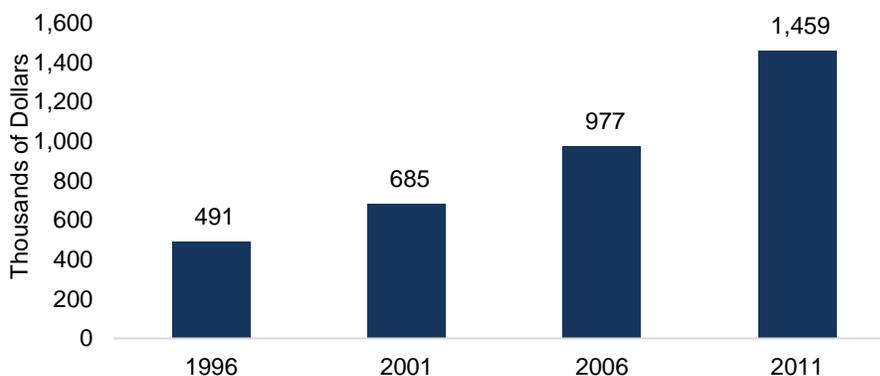
Figure 6. Index of Farm Land Values in Ontario



2003 = 100
Source: Farmland Values Report, Farm Credit Canada, 2015

In 2011, the market value of farmland and buildings reached \$75.8 billion in Ontario, more than double the value in 1996 (\$33.2 billion). The falling number of total farms has further increased the average market value of land and buildings per farm, which has tripled from approximately \$500,000 in 1996, to \$1.5 million in 2011.

Figure 7. Average Market Value of Land and Buildings per Farm

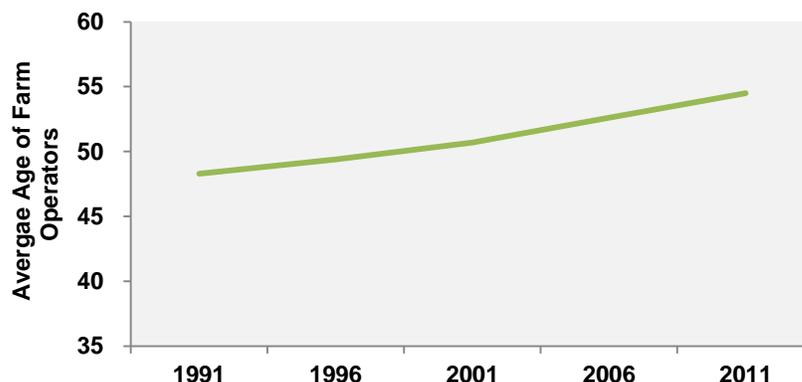


Source: Statistics Canada, Census of Agriculture

²⁷ Farmland Values Report, Farm Credit Canada, 2015. <https://www.fcc-fac.ca/fcc/about-fcc/corporate-profile/reports/farmland-values/farmland-values-report-2015.pdf>

3. **Changing Age Demographics at the Farm Level.** As shown in the figure below, the average age of a farm operator in Ontario increased from 53.8 in 2006 to 54.8 in 2011.²⁸ In MNP's industry interviews, many agri-business representatives indicated that even though the average age of farm operators is still increasing they have seen a surge in younger generation farmers. Younger generations are returning to the farm now that the agricultural economy has improved.

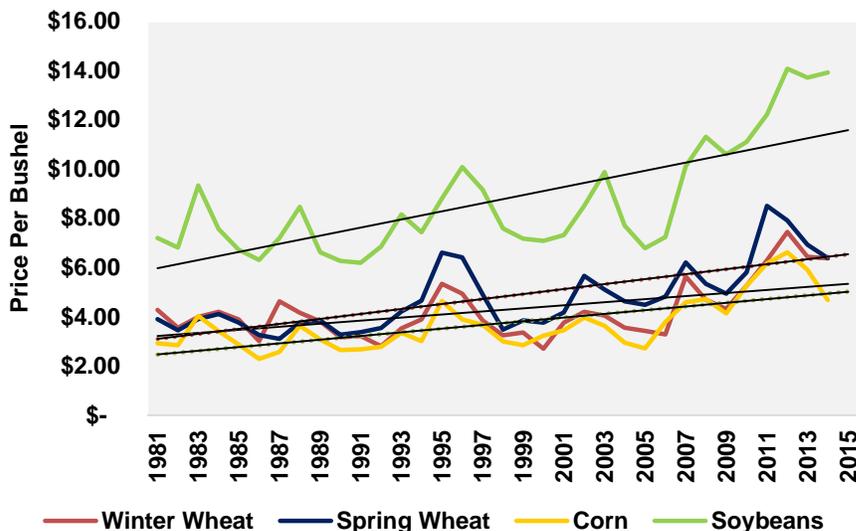
Figure 8. Average Age of Farm Operators, 1991 to 2011



Source: Statistics Canada, Census of Agriculture

4. **Market Volatility.** Since 2006, there has been extraordinary volatility in global grain prices and at least a cyclical increase in volatility since 2000.²⁹ Market and price volatility increases the risk exposure to agri-businesses that are highly reliant on the health of the crop and animal production sector. With the faster reach to information through technology, global markets tend to have a bigger and more immediate impact on domestic markets.

Figure 9. Price per Bushel, 1981 to 2015



Source: Ontario Ministry of Agriculture, Food and Rural Affairs

²⁸ Farmland Values Report, Farm Credit Canada, 2015. <https://www.fcc-fac.ca/fcc/about-fcc/corporate-profile/reports/farmland-values/farmland-values-report-2015.pdf>

²⁹ Wyatt Thompson, Garry Smith and Armelle Elasm, World Wheat Price Volatility: Selected Scenario Analyses, OECD Food, Agriculture and Fisheries Papers, 2012, <http://dx.doi.org/10.1787/5k8zpt62fs32-en>.

5. **Increased Global Demand for Animal Protein Products.** A growing middle class in emerging countries is leading to a shift in global demand towards more animal protein and products with added attributes. This translates into an increased global demand for animal products and the animal feed and oilseeds required to produce them.

5.3 FOOD PROCESSING SECTOR TRENDS

The top trends in the food processing sector include:

1. **Increased Recognition for Food Safety and Quality.** Consumers in Ontario know that they can trust Ontario food and beverage products as a result of the industry's high standards in safety and quality excellence.
2. **Quality Research and Education Opportunities.** Ontario is known for quality research and educational institutions. Examples include the universities of Guelph, Toronto, Queens and Western Ontario. There are over 50 post-secondary courses and programs in the areas of agriculture, food science, nutritional science and culinary arts. There are also plans to increase skilled labour in the food processing sector, with one-year to three-year college courses in food processing technology and a process operator apprenticeship.³⁰ In addition, in Ontario top-notch researchers are exploring many areas of advanced manufacturing, information technology, agriculture and life science. More than \$13.9 billion in R&D takes place every year in Ontario.³¹
3. **Increased Purchasing of Local Food Ingredients.** The Ontario agri-food processing sector purchases 65 percent of Ontario's farm food products.
4. **Commercialization Opportunities.** The Ontario economic environment is very welcoming towards commercialization opportunities. Centres such as the Agri-Tech Commercialization Centre, Ontario Centres of Excellence, Soy 20/20, Bio Enterprise, Toronto Food Business Incubator and the Vineland Research and Innovation Centre help Ontario processors bring innovative agri-food products to market.
5. **Ontario Food Clusters.** Ontario, particularly in areas such as Toronto and Guelph, is one of the largest and most competitive food clusters in North America, ranking as the second largest food processing jurisdiction. Many international food processing companies are locating to Ontario.³²
6. **Competition from Emerging Countries.** Ontario faces increased competition from imports from emerging nations such as China. With lower labour costs, Canada and hence Ontario has a cost disadvantage.
7. **Regulation.** Foreign protectionism and subsidies on agricultural commodities and products restrict market access and can make entry to global markets difficult. Raw materials, packaging, logistics and storage is strictly regulated by multiple levels of government. With increasingly strict safety regulations, companies have to make significant capital investments to comply. Regulatory barriers for importing into the US include country of origin labelling and the Food Modernization Safety Act.
8. **Sustainability.** Issues of sustainability, food safety, animal welfare, and the environmental impact of agriculture and food processing continue to play a central role in consumer preferences, and government policy. Sustainability is a major focus for consumers, who want evidence of local environmental efforts; furthermore, the "buy-local" movement has encouraged consumers to purchase locally produced and processed food, rather than imports. While this could be a significant opportunity for Ontario food processors, the local food movement is part of a larger consumer preference shift towards transparency, and healthier food options. It is possible that consumption

³⁰ Synthesis Agri-Food Network and Government of Ontario, A Global Hub for Food Processing: Agri-Food Asset Map, 2011, http://www.mri.gov.on.ca/english/publications/documents/Agrifood_Summary_Nov2010_ENG_AODA.pdf.

³¹ Research & Development in Ontario, Ontario Ministry of Economic Trade and Development, March 2011, <http://www.investinontario.com>.

³² Invest Toronto, Toronto's Food and Beverage Sector, http://www.investtoronto.ca/InvestAssets/PDF/Sector_One_Pagers_Food_and_Beverage_English.pdf

of particular kinds of processed foods may decrease, particularly as consumers become more aware of the contents of the products they consume.

5.4 GOVERNMENT POLICY TRENDS

High level government policy trends include:

1. **Focus On Local Food Procurement Policies.** Promoting local food is part of the new Ontario government's plan to strengthen the agri-food industry. In 2013, the Ontario government re-introduced the Local Food Act, a bill that promotes the access of local food in markets, schools, cafeterias, grocery stores and restaurants throughout the province.³³
2. **Investment in Agriculture and Agri-Food.** Continued government spending in support of public R&D in agriculture and agri-food is important for the future productivity growth and competitiveness of the sector. An *Overview of the Canadian Agriculture and Agri-Food System 2013* indicates that total government (federal and provincial) investment in the agriculture and agri-food sector was \$7.5 billion in 2011-12.³⁴ But although the government continues to support agriculture and agri-food sector R&D efforts, Agriculture and Agri-food Canada has recently experienced significant cutbacks on a number of research stations.³⁵
3. **International Trade Agreements.** Annual exports of Canadian agriculture and agri-food products amounted to over \$55 billion in 2015.³⁶ International trade agreements, such as the Trans-Pacific Partnership (TPP) and the Comprehensive Economic and Trade Agreement (CETA), are important for the growth of Ontario's ag-related sectors in terms of exports but may also pose risks to competition and sales within Canada. The CETA agreement, which was finalized in August 2014, will provide Canada with preferential market access to the European Union's (EU) 500 million consumers. Although CETA and the TPP have not yet been fully ratified, the final round of negotiations for CETA has concluded and the agreement is under review, and both agreements are expected to be ratified within the near future. CETA will give Canadian farmers yearly duty-free access into the EU for up to 45,000 tonnes of beef (including 67 percent fresh, 33 percent frozen), 75,000 tonnes of pork and 3,000 tonnes of bison. Poultry and eggs are excluded entirely from CETA. Canada will get unrestricted access to the EU's dairy sector and will more than double the amount of EU access into the Canadian cheese sector to around 30,000 tonnes annually. This bilateral agreement presents opportunities and challenges. It requires the Ontario agri-food sector to innovate and collaborate in order to follow up on export opportunities. In this competitive international environment, farmers, producers and processors also need to explore collaborations with EU companies seeking partnerships in Canada while preparing to compete with European imports.³⁷
4. **Increased Focus on Food Safety.** Threats to the safety of Canada's food supply continue to be a concern to Canadians and the responsibility and focus of the Government of Canada, along with all sector players. Ensuring a safe food supply has been an ongoing focus of Agriculture and Agri-Food Canada, whose focus from 2010 to 2014 was on research on food quality and food safety; development of new scientific knowledge and tools to help with the production of food products that satisfy food safety regulations and consumer quality expectations; and development of efficient alternatives to antibiotics for livestock production growth.³⁸

³³ Bill 36, Local Food Act, 2013, http://www.ontla.on.ca/bills/bills-files/40_Parliament/Session2/b036.pdf.

³⁴ Agriculture and Agri-Food Canada, *An Overview of the Canadian Agriculture and Agri-Food System*, 2013, <http://www.agr.gc.ca/eng/about-us/publications/economic-publications/alphabetical-listing/an-overview-of-the-canadian-agriculture-and-agri-food-system-2013/?id=1331319696826>.

³⁵ The Western Producer, *Research Stations Hit by Cuts*, <http://www.producer.com/2013/05/research-stations-hit-by-cuts/>.

³⁶ Agriculture and Agri-Food Canada, *http://www.agr.gc.ca/eng/industry-markets-and-trade/statistics-and-market-information/import-and-export-data/countries-at-a-glance/canada/?id=1410072148230*

³⁷ CETA – Summary of Final Negotiation Results http://trade.ec.europa.eu/doclib/docs/2014/december/tradoc_152982.pdf

³⁸ Agriculture and Agri-Food Canada, *The Way Forward: Summary of Agriculture and Agri-Food Canada's Science and Innovation Strategy Action Plan*, 2010, <http://www.agr.gc.ca/eng/science-and-innovation/science-publications-and-resources/other-science-related-publications-2010/the-way-forward-summary-of-agriculture-and-agri-food-canada-s-science-and-innovation-strategic-action-plan-2010/?id=1271686453735>.

5. **Reduction in Government Extension Services.** Over the past 10 to 20 years, government has cut back its outreach services to farmers and the provision of advice on crop and livestock production, leaving a gap that has been filled by OABA's membership. Agri-businesses can alert farmers to risks and opportunities and regularly provide farmers with guidance on seeding, growing and nutrition.
6. **Low Carbon Initiatives.** Ontario's 2016 Climate Change Action Plan focuses on the key issue of soil health and quality and its subsequent carbon sequestration effects³⁹. The Climate Change Action Plan highlights the key role that agriculture plays, both through emissions and carbon storage in healthy soils. In 2013, agriculture was responsible for 10 percent of national greenhouse gas initiatives.⁴⁰ In partnership with the federal government and the Ontario Soil and Crop Improvement Association, producers and processors alike are encouraged to adopt high-tech, low-carbon strategies in their operations. This is accomplished through a variety of different methods, from free workshops, to cost-sharing and assistance funding programs⁴¹. To support this initiative, the Environmental Farm Program Update initiative, a voluntary self-reporting assessment, aims to identify environmental strengths and weaknesses in Ontario's farms.⁴²

5.5 CONSUMER TRENDS

In 2014, Canadian consumers spent \$195 billion on food, beverages and tobacco from stores and restaurants. Changing consumer and societal demands are influencing changes throughout the whole agriculture and agri-food system. Consumers are demanding more variety, more convenience, more sustainable, local and healthier food choices, as well as food that addresses their values such as organic and halal products, accompanied by proper assurances of traceability, quality and food safety.⁴³ The breadth of consumer demand for food attributes is expanding and re-shaping agriculture and agri-based businesses. For example, Ontario farmers are adapting to consumer demands by changing their crop production mix and/or switching to specialty products such as organic production, identity preserved programs and halal processing, and growing for export markets and global supply chains. In Ontario the number of farms growing certified organic products increased 14 percent from 593 in 2006 to 674 in 2011.⁴⁴

In MNP's industry interviews, a number of agri-business industry representatives reported a surge in demand of niche and specialty products such as omega-3 eggs and black soybeans. Agri-businesses like crop input suppliers and feed manufacturers will continue to supply their customers with the latest and most innovative inputs as farmers continue to transform primary products and add value to meet consumer demands for niche and speciality foods. Our interviewees indicated an excitement for more opportunities outside of commodity production and more into the speciality products space.

Consumer concern for the welfare of farm animals has gained momentum alongside growing demand for animal-based products. This has encouraged further public awareness of this industry's linkages to health, safety, the environment and economic development. Consumers are also looking for tangible, functional qualities in their food such as gluten-free and zero trans-fat. While this may diminish the consumption of certain types of food, it also provides producers and processors with opportunities to innovate and develop healthier food products that satisfy consumer preferences.

Consumers are also looking for evidence of social, economic and environmental sustainability, including lower greenhouse gas emissions, smaller carbon footprints, fair trade programs and responsible production practices. Investing in the area of sustainability is related to marketing and revenue increasing opportunities.

³⁹Ontario's Five Year Climate Change Action Plan, 2016 - 2020

http://www.applications.ene.gov.on.ca/ccap/products/CCAP_ENGLISH.pdf

⁴⁰ Agriculture and Agri-food Canada, an Overview of the Canadian Agriculture and Agri-food system, 2016

⁴¹ Ontario Ministry of Agriculture, Food and Rural Affairs, Growing Forward 2.

<http://www.omafra.gov.on.ca/english/about/growingforward/gf2-farmbus.htm>

⁴² ibid

⁴³ Agriculture and Agri-Food Canada, An Overview of the Canadian Agriculture and Agri-Food System, 2016,

<http://www.agr.gc.ca/eng/about-us/publications/economic-publications/alphabetical-listing/an-overview-of-the-canadian-agriculture-and-agri-food-system-2016/?id=1462288050282#a2>

⁴⁴ Statistics Canada, Census Agriculture, 2006 to 2011.

Farmers have responded to this push for sustainability from consumers, investing in new soil management methods, fertilizers, precision farming, and marketing operations⁴⁵.

Additional consumer trends documented by Agriculture and Agri-Food Canada several years ago are summarized in the table below.⁴⁶

Table 4. Consumer Trends

Trend	Impact
Aging population	The aging population will impact the type and quantity of food demanded as well as where it will be consumed.
Evolving society	Brands will become less of a status symbol and more an expression of individualization.
Changing meal patterns	Consumers will become even more disconnected from food preparation. Shopping and eating habits will be sporadic. Meal planning cycles will be shorter, snacking will replace courses as well as whole meals and food will become even more portable.
Shifting expenditures	The move to spending less of our disposable income on food will continue and retail food purchases will still dominate, while food service will see only modest growth in expenditures. The real shift will be in prepared meals and take-outs.
Food for health	There will be a move to adopt healthier lifestyles but it will be slow.
The educated consumer	Consumers will become more conscious of nutrition and food ingredients than ever before and foods with a function beyond just energy will be in demand, as consumers seek to manage their health and prevent disease.
Ethnic food	Immigration from regions off the Pacific Ocean and Hispanic influences will lead to diversification, fusion and blended cuisines.
No trade-off for convenience	The next wave of product differentiation will be to provide fresher, more nutritious, great tasting and/or ethnic foods in the most convenient forms possible.
Vegetables	True vegetarianism may not grow dramatically, but consumption of meatless meals will continue to increase.
Local foods	Consumers will continue to look for local products and at the same time demand global fusion foods and beverages. ⁴⁷
Organic foods	Organics, at a modest price premium, will continue to rise, especially as quality and availability matches that of conventionally produced foods.
Small indulgences	Adult Canadians will embrace gourmet foods and boutique brands. Slow foods, high quality, smaller portions and nutritious foods will gradually replace demand for fast, big and cheap foods.
Food safety and production issues	Consumer confidence in foods tends to shift with the news story of the day. Lack of consumer confidence, regardless of the cause, will lead to avoidance of the offending food.

⁴⁵ Agriculture and Agri-Food Canada, An Overview of the Canadian Agriculture and Agri-Food System, 2016

⁴⁶ Agriculture and Agri-Food Canada, Canadian Food Trends to 2020 - A Long Range Consumer Outlook, June 2011.

⁴⁷ Food in Canada, Trends, Impacts & Responses – Forecast 2014, September 2013.

6. ECONOMIC IMPACTS OF THE ONTARIO AGRI-BUSINESS INDUSTRY

6.1 ECONOMIC IMPACT ANALYSIS OVERVIEW

The main goal of an economic impact study is to quantify the economic contributions that an industry, project or organization makes to a region. In general, economic impacts are viewed as being restricted to quantitative, well-established measures of economic activity. The most commonly used of these measures are output, GDP, employment and government tax revenue:

- **Output** is the total gross value of goods and services produced by a given organization, industry or project measured by the price paid to the producer. This is the broadest measure of economic activity.
- **Gross Domestic Product (“GDP”)**, or value added, refers to the additional value of a good or service over the cost of inputs used to produce it from the previous stage of production. Thus GDP is equivalent to the unduplicated value of goods and services produced.
- **Employment** is the number of additional jobs created. Employment is measured in terms of full-time equivalents (“FTEs”).
- **Government Tax Revenues** are the total amount of tax revenues generated for different levels of government. Please note that because tax revenues can frequently change due to modifications in tax policy, the tax revenue impacts in this report are estimates only and subject to change. They should be viewed as approximate in nature.

Economic impacts may be estimated at the direct, indirect and induced levels.

- **Direct impacts** are changes that occur in “front-end” businesses that would initially incur expenditures and receive operating revenue as a direct consequence of the operations and activities of an industry.
- **Indirect impacts** arise from changes in activity for suppliers of the “front-end” businesses.
- **Induced impacts** arise from shifts in spending on goods and services as a consequence of changes to the payroll of the directly and indirectly affected businesses.

MNP estimated the economic impacts of the Ontario agri-business industry using Statistics Canada’s input-output economic multipliers.⁴⁸ Input-output modeling is a widely-used and accepted approach, making it recognizable by many different stakeholders and audiences. The structure of the approach also facilitates easy comparisons between reported results for different projects, organizations or industries.

For a detailed description of MNP’s economic terms please refer to Appendix C, and for a detailed methodology and related assumptions please refer to Appendix D.

⁴⁸ In order to be able to compare the economic impacts generated by the Ontario agri-business industry against the 2013 baseline study, MNP employed the same multipliers used in the 2013 baseline study to estimate the economic impacts of the industry for the 2016 study.

6.2 ECONOMIC IMPACTS OF THE ONTARIO AGRI-BUSINESS INDUSTRY

The economic impacts of Ontario's agri-business industry are summarized in the tables below. For the distribution of the economic impacts by sub-industry, please refer to Appendix E.

Table 5. Economic Impacts of the Ontario Agri-Business Industry – Baseline Study (2013)

	Output ('000)	GDP ('000)	Employment (FTEs)	Federal Taxes ('000)	Provincial Taxes ('000)	Municipal Taxes ('000)
<i>Agri-Business Industry</i>						
Direct	\$2,885,755 ⁴⁹	\$1,162,027	7,637	\$133,407	\$83,097	\$16,992
Indirect	\$1,521,595	\$706,547	7,938	\$79,531	\$49,362	\$12,834
Induced	\$508,616	\$410,085	7,161	\$49,113	\$30,436	\$6,993
Total	\$4,915,966	\$2,278,659	22,736	\$262,051	\$162,895	\$36,819

Table 6. Economic Impacts of the Ontario Agri-Business Industry – Current Study (2016)

	Output ('000)	GDP ('000)	Employment (FTEs)	Federal Taxes ('000)	Provincial Taxes ('000)	Municipal Taxes ('000)
<i>Agri-Business Industry</i>						
Direct	\$4,079,441 ⁵⁰	\$1,655,388	8,346	\$190,201	\$118,440	\$24,328
Indirect	\$2,146,140	\$999,318	11,230	\$112,465	\$69,798	\$18,191
Induced	\$727,825	\$586,827	10,247	\$70,279	\$43,554	\$10,008
Total	\$6,953,406	\$3,241,533	29,823	\$372,945	\$231,792	\$52,527

⁴⁹ For the purpose of this study, MNP used the gross margin, the difference between total operating revenues and costs of goods sold, as the input in the economic impact model for grain elevators and crop input suppliers. Therefore, the total output impacts generated by grain elevators and crop input suppliers are not reflective of the total gross value ("revenue") generated by these two industries. For more information on our economic impact approach please refer to Appendix D.

⁵⁰ Ibid.

Output

Direct output generated by the Ontario agri-business industry is estimated at \$4.1 billion. Direct output supports a further \$2.1 billion in indirect and \$728 million in induced output impacts. **The total output generated by the industry increased by 41 percent since the 2013 baseline study.**

GDP

Direct GDP generated by the Ontario agri-business industry is estimated at \$1.6 billion. Direct GDP supports a further \$999 million in indirect and \$587 million in induced GDP impacts. **The total GDP generated by the industry increased by 42 percent since the 2013 baseline study.**

Employment

Approximately 8,346 direct full-time equivalent positions (FTEs) are generated by agri-business industry in the Ontario economy. The Ontario agri-business industry further generates 11,230 indirect and 10,247 induced FTEs. **The total employment generated by the industry increased by 31 percent since the 2013 baseline study.**

Tax Revenue

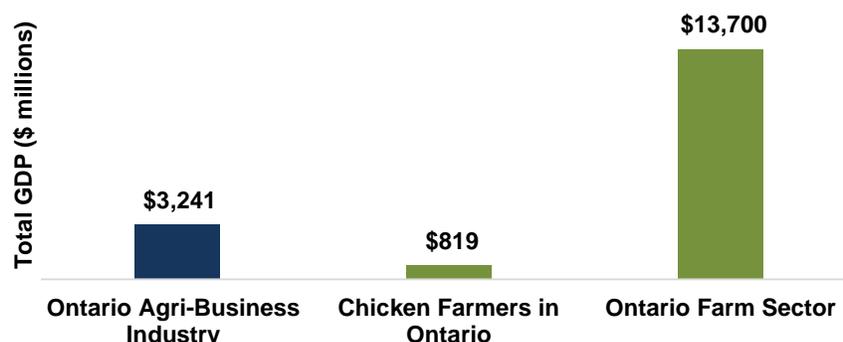
Direct federal, provincial and municipal taxes generated by the Ontario agri-business industry are estimated at \$333 million. The industry further generates \$200 million in indirect and \$124 million in induced taxes to the different levels of government. **The total government taxes generated by the industry increased by 42 percent since the 2013 baseline study.**⁵¹

⁵¹ Please note that because tax revenues can regularly change due to modifications in tax policy, the tax revenue impacts in this report are estimates only and subject to change. They should be viewed as approximate in nature.

6.3 COMPARISON WITH OTHER INDUSTRIES

As shown in Figure 10, the total GDP generated by the Ontario agri-business industry was roughly four times that generated by the Ontario chicken farming industry.⁵² The Ontario agri-business industry also amounts to roughly one quarter of the significant Ontario farming sector.⁵³

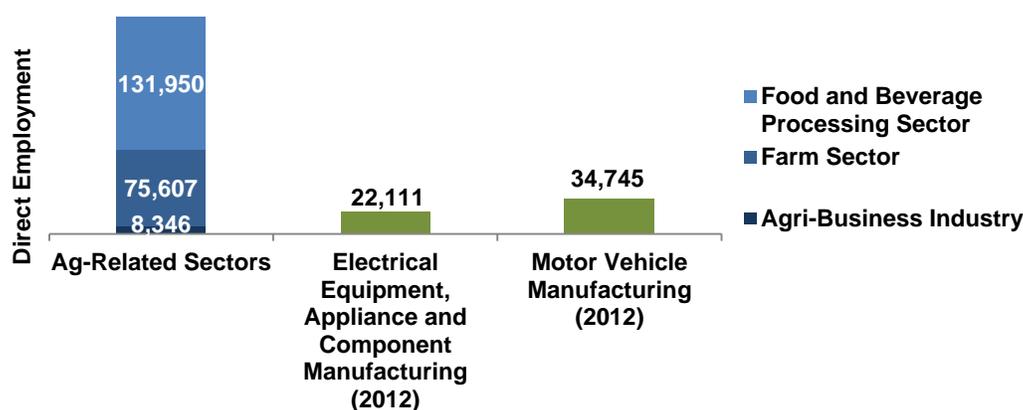
Figure 10. Total GDP Impacts – Industry Comparisons



Sources: Team Ontario, *Economic Contributions of the Ontario Chicken Industry*, 2013 and JRG Consulting Group, *Economic Contribution of the Ontario Farm Sector*, 2013.

As shown in Figure 11, the direct employment supported by the Ontario agri-business industry, the farm sector and the food and beverage processing sector (215,903) was roughly ten times that generated by the Ontario electrical equipment, appliance and component manufacturing sector and approximately six times that generated by the Ontario motor vehicle parts manufacturing sector.^{54,55}

Figure 11. Direct Employment – Industry Comparisons



Sources: MNP on behalf of Food and Beverage Ontario, *Updated Economic Impact Analysis of the Ontario Food and Beverage Processing Sector*, 2015 and JRG Consulting Group, *Economic Contribution of the Ontario Farm Sector*, 2013.

⁵² Team Ontario, *Economic Contributions of the Ontario Chicken Industry*, 2013. Available here: <https://www.ontariochicken.ca/getmedia/0beb3db3-3224-49c9-a8b4-fbeeb12425e1/economicstudy.pdf.aspx>

⁵³ JRG Consulting Group, *Economic Contribution of the Ontario Farm Sector*, 2013. Available here: <http://www.ofa.on.ca/uploads/userfiles/files/jrg%20economic%20impact%20presentation%20to%20ofa.pdf>

⁵⁴ JRG Consulting Group, *Economic Contribution of the Ontario Farm Sector*, 2013. Available here: <http://www.ofa.on.ca/uploads/userfiles/files/jrg%20economic%20impact%20presentation%20to%20ofa.pdf>

⁵⁵ MNP on behalf of Food and Beverage Ontario, *Updated Economic Impact Analysis of the Ontario Food and Beverage Processing Sector*, 2015. Available here: <http://www.foodandbeverageontario.ca/uploads/resources/files/final-report-may-5-2015.pdf>

APPENDICES



APPENDIX A – DATA SOURCES

This appendix lists the key data sources that MNP consulted throughout our analyses. Supplementary references are included in the footnotes throughout the report.

ONTARIO WEBSITES

- Ontario Agri Business Association, www.oaba.ca
- Ontario Farm & Food Care, www.farmfoodcare.org
- Agricorp, www.agricorp.com
- Workplace Safety and Insurance Board (WSIB), www.wsib.on.ca
- Ontario Ministry of Agriculture, Food and Rural Affairs, <http://www.omafra.gov.on.ca/>

CANADIAN WEBSITES

- Agriculture and Agri-Food Canada, www.agr.gc.ca
- Innovation, Science and Economic Development Canada, www.ic.gc.ca
- Statistics Canada, www.statcan.gc.ca
- Animal Nutrition Association of Canada, www.anacan.org

APPENDIX B – DATA GAPS

DATA GAPS FOR ONTARIO CROP INPUT SUPPLIERS

For the baseline economic impact study, financial estimates for Seed Merchant Wholesalers [NAICS 41832] and Agricultural Chemical and Other Farm Supplies Merchant Wholesalers [NAICS 41839] for the year 2011 were used to develop the profile of Ontario's crop input suppliers:

Agricultural Supplies Wholesaler-Distributors [NAICS 4183]:

- ~~Agricultural Feed Wholesaler Distributors [NAICS 41831]~~
- Seed Merchant Wholesalers [NAICS 41832]
- Agricultural Chemical and Other Farm Supplies Merchant Wholesalers [NAICS 41839]

Financial estimates for five digit NAICS codes (i.e. NAICS 41831, 41832 and 41839) are no longer reported by Statistics Canada. Therefore, the profile of Ontario's crop input suppliers cannot be developed using the same approach used in the baseline economic impact study.

To estimate financial estimates for Ontario's crop input suppliers, MNP used the following four-step approach. The process and related assumptions are described below using the variable "total operating revenue" as an example:

1. Estimated the average share of total operating revenues of Agricultural Feed Wholesaler Distributors [NAICS 41831] to the total operating revenues of Agricultural Supplies Wholesaler-Distributors [NAICS 4183] from 2008 to 2011. From 2008 to 2011, NAICS 41831 accounted on average for 33 percent of the total operating revenues of NAICS 4183.
2. Assumed that the average share of total operating revenues of NAICS 41831 from 2008 to 2011 is the same for the year 2013. The most recent year for which final data is reported by Statistics Canada for NAICS 41831 is 2013.
3. Applied the historical average share of total operating revenues of NAICS 41831 (33 percent) to the total operating revenues reported for NAICS 4183 in 2013 to extrapolate total operating revenues of NAICS 41831 in 2013.
4. Subtracted the estimated total operating revenues of NAICS 41831 in 2013 from the total operating revenues reported for NAICS 4183 in 2013 to estimate the aggregate total operating revenues of Ontario's crop input suppliers (i.e. Seed Merchant Wholesalers [NAICS 41832] and Agricultural Chemical and Other Farm Supplies Merchant Wholesalers [NAICS 41839]).

MNP used the same procedure to extrapolate total operating expenses, costs of goods sold, and wages and salaries for Ontario's crop input suppliers in 2013.

DATA GAPS FOR ONTARIO FEED MANUFACTURERS

For the baseline economic impact study, financial estimates reported for Other Animal Food Manufacturing [NAICS 311119] were used to develop the profile of Ontario's feed manufacturers:

Animal Food Manufacturing [NAICS 3111]:

- ~~Dog and Cat Food Manufacturing [NAICS 311111]~~
- Other Animal Food Manufacturing [NAICS 311119]

Financial estimates for six digit NAICS codes (i.e. NAICS 311111 and 311119) are no longer reported by Statistics Canada. Therefore, the profile of Ontario's feed manufacturers cannot be developed using the same approach used in the baseline economic impact study.

To estimate financial estimates for Ontario's feed manufacturers, MNP used the following four-step approach. The process and related assumptions are described below using the variable "total revenue" as an example:

1. Estimated the average share of total revenue of the Other Animal Food Manufacturing [NAICS 311119] to the total revenue of Animal Food Manufacturing [NAICS 3111] from 2004 to 2010. From 2004 to 2010, NAICS 311119 accounted on average for 69 percent of the total revenue of NAICS 3111.
2. Assumed that the average share of revenues of NAICS 311119 from 2004 to 2010 is the same for the year 2013. The most recent year for which data is reported by Statistics Canada for NAICS 41831 is 2013.
3. Applied the historical average share of total revenue of NAICS 311119 (69 percent) to the total revenue reported for NAICS 3111 in 2013 to extrapolate revenues of NAICS 311119 in 2013.

MNP used the same procedure to extrapolate revenue from goods manufactured, total expenses, wages and salaries and employment for the remaining financial estimates for Ontario's feed manufacturers for the year 2013.

APPENDIX C – GLOSSARY OF ECONOMIC TERMS

Table 7. Glossary of Economic Terms

Term	Definition
Direct Impacts	<ul style="list-style-type: none"> Direct impacts are the economic impacts of an industry that are due to changes to front end businesses that receive expenses or operating revenue as a direct consequence of an industry. Direct impacts are related to original purchases or “direct sales” from primary suppliers. <ul style="list-style-type: none"> <i>Example: In the case of feed manufacturing, direct impacts are related to the spending that feed manufacturers make when purchasing goods and services from their suppliers; for instance, purchasing agricultural products (i.e. grains) and nutrients.</i>
FTE	<ul style="list-style-type: none"> FTE means full-time equivalent employee.
GDP	<ul style="list-style-type: none"> GDP is the “value added” to the economy (the unduplicated total value of goods and services).
Government Tax Revenue	<ul style="list-style-type: none"> Government tax revenue is the total amount of tax revenue generated for different levels of government, including municipal, provincial and federal taxes.
Indirect Impacts	<ul style="list-style-type: none"> Indirect impacts are due to changes in the activity of an industry’s suppliers. Indirect impacts include the spending that agri-business companies’ suppliers make when purchasing goods and services from their own suppliers (i.e. secondary suppliers) in order to meet the demand generated by the industry. <ul style="list-style-type: none"> <i>Example: When feed manufacturers spend money on agricultural products (i.e. grains), grain farmers in turn purchase inputs such as fertilizer, fuel and machinery to produce grains and meet feed manufacturers’ demand. The spending by grain farmers reflects the indirect impacts of feed manufacturers spending on agricultural products.</i>
Induced Impacts	<ul style="list-style-type: none"> Induced impacts are due to shifts in spending on goods and services as a consequence of the payroll of the directly and indirectly affected businesses. In the case of feed manufacturing, induced impacts reflect the additional spending by the employees of the feed manufacturers, feed manufacturers’ suppliers (primary suppliers) and their suppliers’ suppliers (secondary suppliers). <ul style="list-style-type: none"> <i>Example: Additional wages received by feed manufacturers’ employees, grain farmers’ employees and nutrient manufacturers’ employees “induce” spending. These employees in turn make consumer purchases that are considered induced impacts.</i>
Output	<ul style="list-style-type: none"> Output is the total gross value of all business revenue. This is the broadest measure of economic activity. For the purpose of this study, MNP used the gross margin, the difference between total operating revenues and costs of goods sold, as the input in the economic impact model for grain elevators and crop input suppliers. Therefore, the total output impacts generated by grain elevators and crop input suppliers are not reflective of the total gross value (“revenue”) generated by these two industries.

APPENDIX D – ECONOMIC IMPACT METHODOLOGY AND ASSUMPTIONS

ECONOMIC IMPACT MULTIPLIERS

Economic impacts of Ontario's crop input suppliers, feed manufacturers and grain elevators were estimated using Statistics Canada's inter-provincial 2008 multipliers.⁵⁶ Multipliers for the following industry aggregations were used:

- For crop input suppliers, MNP used the *NAICS 41: Wholesale Trade* multiplier.⁵⁷
- For feed manufacturers, MNP used the *NAICS 3111: Animal Food Manufacturing* multiplier.⁵⁸
- For grain elevators, MNP used the *NAICS 41: Wholesale Trade* multiplier.⁵⁹

INPUT

MNP applied the relevant multipliers to the revenue generated by Ontario's crop input supply, grain elevator and feed manufacturing industry to estimate direct, indirect and induced impacts. Due to limited availability of industry data, the most recent revenue data available and used in our analysis differed across the three industry groups. MNP used the following data as input:

- **Crop Input Suppliers.** MNP used the gross margin, the difference between total operating revenues and costs of goods sold, as the input in the input-output model for crop input suppliers. MNP assumed a total gross margin of \$697 million for Ontario crop input suppliers.
- **Grain Elevators.** MNP used the gross margin, the difference between total operating revenues and costs of goods sold, as the input in the input-output model for grain elevators. Based on financial estimates obtained through Agricrop, Grain Financial Protection Program, 2016, we assumed a gross margin of \$1.1 billion for Ontario grain elevators.
- **Feed Manufacturers.** MNP used total revenues as the input in the input-output model for feed manufacturers. We assumed total Ontario feed manufacturing revenues of \$2.2 billion.

ESTIMATING MUNICIPAL TAX IMPACTS

Statistics Canada's inter-provincial 2008 input-output model does not report municipal tax multipliers.⁶⁰ For the purposes of this study, MNP needed to estimate municipal tax multipliers in order to report municipal tax revenue generated by Ontario's crop input suppliers, grain elevators and feed manufacturers.

MNP used the "Indirect Taxes on Production" multiplier from the input-output model to approximate municipal tax impacts. The "Indirect Taxes on Production" multiplier includes a number of federal and provincial fees and taxes as well as municipal taxes. Examples of federal taxes include capital taxes levied against corporate entities, Canada Deposit Insurance Corporation premiums and Canadian Dairy Commission levies. Provincial taxes include (personal and commercial) motor vehicle license fees, land

⁵⁶ In order to be able to compare the economic impacts generated by the Ontario agri-business industry against the 2013 baseline study, MNP employed the same multipliers used in the 2013 baseline study to estimate the economic impacts of the industry for the 2016 study.

⁵⁷ NAICS 41 comprises establishments primarily engaged in wholesaling merchandise, generally without transformation, and rendering services incidental to the sale of merchandise.

⁵⁸ NAICS 3111 comprises establishments primarily engaged in manufacturing food and feed for animals, including pets.

⁵⁹ NAICS 41 comprises establishments primarily engaged in wholesaling merchandise, generally without transformation, and rendering services incidental to the sale of merchandise.

⁶⁰ In order to be able to compare the economic impacts generated by the Ontario agri-business industry against the 2013 baseline study, MNP employed the same multipliers used in the 2013 baseline study to estimate the economic impacts of the industry for the 2016 study.

transfer taxes and capital taxes. Local taxes include real property taxes, developer's lot levies and deed transfer taxes.

MNP analysed revenues for each of the fees/taxes included in the "Indirect Taxes on Production" category to separate the municipal proportion. MNP estimated that municipal taxes are approximately 39 percent of the "Indirect Tax on Production" multiplier. The estimated ratio was then applied to the multiplier to calculate and report on municipal tax revenue.

ESTIMATING INDUCED ECONOMIC IMPACTS

Statistics Canada's inter-provincial 2008 input-output model does not report induced multipliers.⁶¹ MNP estimated induced multipliers using the following procedure:

1. A portion of wages and salaries are directed towards consumption within Ontario.
2. Wages and salaries are assumed to be spent in a pattern consistent with that reported in Statistics Canada's 2009 Ontario Survey of Household Spending (SHS).
3. Data from the SHS is matched with their respective industry (direct and indirect) Statistics Canada multipliers for output, GDP, employment and wages and salaries.
4. Using the above matching of industry multipliers to the SHS, estimate the first round of induced impacts. For example, if a worker is paid \$1,000 and has \$700 remaining after taxes and savings, we distribute that \$700 across consumer goods and services and apply relevant industry multipliers to estimate a first round of induced impacts. That first round of consumer spending will, in turn, generate further incremental wages, a portion of which will be consumed in the Ontario economy. That spending will create a further amount of incremental wages and this will continue until the successive rounds of impacts converges to zero. The sum total of all of these rounds of spending is then totalled.
5. Using the results from steps 1 to 4, together with the Statistics Canada direct and indirect multipliers we then construct a set of induced multipliers for each NAICS code which can then be used to estimate induced impacts associated with a particular increase or decrease in a particular industry's output.

⁶¹ In order to be able to compare the economic impacts generated by the Ontario agri-business industry against the 2013 baseline study, MNP employed the same multipliers used in the 2013 baseline study to estimate the economic impacts of the industry for the 2016 study.

APPENDIX E – ECONOMIC IMPACTS BY SUB-INDUSTRY

ECONOMIC IMPACTS BY SUB-INDUSTRY

Table 8. Economic Impacts by Sub-Industry – Baseline Study (2013)

	Output ('000)	GDP ('000)	Employment (FTEs)	Federal Taxes ('000)	Provincial Taxes ('000)	Municipal Taxes ('000)
<i>Crop Input Suppliers</i>						
Direct	\$456,064 ⁶²	\$265,801	2,941	\$31,506	\$19,410	\$4,678
Indirect	\$209,016	\$114,965	1,314	\$12,802	\$7,905	\$2,340
Induced	\$137,483	\$110,850	1,936	\$13,276	\$8,227	\$1,890
Total	\$802,563	\$491,616	6,191	\$57,584	\$35,542	\$8,908
<i>Feed Manufacturers</i>						
Direct	\$1,612,714	\$420,080	2,315	\$45,461	\$28,917	\$3,934
Indirect	\$938,155	\$385,637	4,271	\$43,795	\$27,296	\$6,303
Induced	\$124,850	\$100,663	1,758	\$12,056	\$7,471	\$1,717
Total	\$2,675,719	\$906,380	8,344	\$101,312	\$63,684	\$11,954
<i>Grain Elevators</i>						
Direct	\$816,977 ⁶³	\$476,146	2,381	\$56,440	\$34,770	\$8,380
Indirect	\$374,424	\$205,945	2,353	\$22,934	\$14,161	\$4,191
Induced	\$246,283	\$198,572	3,467	\$23,781	\$14,738	\$3,386
Total	\$1,437,684	\$880,663	8,201	\$103,155	\$63,669	\$15,957

⁶² For the purpose of this study, MNP used the gross margin, the difference between total operating revenues and costs of goods sold, as the input in the economic impact model for grain elevators and crop input suppliers. Therefore, the total output impacts generated by grain elevators and crop input suppliers are not reflective of the total gross value ("revenue") generated by these two industries. For more information on our economic impact approach please refer to Appendix D.

⁶³ Ibid.

Table 9. Economic Impacts by Sub-Industry – Current Study (2016)

	Output ('000)	GDP ('000)	Employment (FTEs)	Federal Taxes ('000)	Provincial Taxes ('000)	Municipal Taxes ('000)
<i>Crop Input Suppliers</i>						
Direct	\$697,184 ⁶⁴	\$406,329	3,043	\$48,164	\$29,672	\$7,151
Indirect	\$319,522	\$175,747	2,008	\$19,571	\$12,085	\$3,577
Induced	\$210,171	\$169,455	2,959	\$20,294	\$12,577	\$2,890
Total	\$1,226,877	\$751,531	8,010	\$88,029	\$54,334	\$13,618
<i>Feed Manufacturers</i>						
Direct	\$2,240,437	\$583,590	2,318	\$63,156	\$40,173	\$5,465
Indirect	\$1,303,317	\$535,740	5,933	\$60,841	\$37,921	\$8,756
Induced	\$173,445	\$139,845	2,442	\$16,748	\$10,379	\$2,385
Total	\$3,717,199	\$1,259,175	10,693	\$140,745	\$88,473	\$16,606
<i>Grain Elevators</i>						
Direct	\$1,141,820 ⁶⁵	\$665,469	2,985	\$78,881	\$48,595	\$11,712
Indirect	\$523,301	\$287,831	3,289	\$32,053	\$19,792	\$5,858
Induced	\$344,209	\$277,527	4,846	\$33,237	\$20,598	\$4,733
Total	\$2,009,330	\$1,230,827	11,120	\$144,171	\$88,985	\$22,303

⁶⁴ For the purpose of this study, MNP used the gross margin, the difference between total operating revenues and costs of goods sold, as the input in the economic impact model for grain elevators and crop input suppliers. Therefore, the total output impacts generated by grain elevators and crop input suppliers are not reflective of the total gross value ("revenue") generated by these two industries. For more information on our economic impact approach please refer to Appendix D.

⁶⁵ Ibid.

APPENDIX F – ABOUT MNP

MNP is the fastest growing chartered accountancy and business advisory firm in Canada. Founded in 1945, MNP has grown from a single office in Manitoba to more than 75 offices and 3,000 team members across Canada. MNP is a member of Praxity AISBL, a global alliance of independent firms, which enables us to access a broad range of sector specific expertise worldwide.

At MNP, our professionals are the driving force behind our success. They continue to demonstrate our culture and values which is integral to the way we conduct business, both internally and externally. As such, MNP is proud to be recognized as one of the *50 Best Employers in Canada* by *Maclean's* magazine.



ABOUT MNP'S FOOD AND AG ECONOMICS TEAM

MNP's Food and Ag Economics Practice consists of a team of dedicated members that have a successful track record of conducting industry studies, market research studies and economic impact engagements in the agriculture and food and beverage processing sector. Our team consults on a range of agri-food related topics and has carried out assignments across Canada for businesses, industry associations and government.

*Ontario's Agri Business Sector - With it...Ontario will
grow!*



Ontario Agri Business Association
Suite 104 – 160 Research Lane
Guelph, Ontario N1G 5B2
Phone: (519) 822-3004
Fax: (519) 822-8862
www.oaba.on.ca