



Sectoral Profile

Agriculture: Crop and Animal Production, and Related Support Activities

Ontario

2016-2018



Sectoral Profiles provide an overview of recent labour market developments and outlooks for key industries, for various regions of the country.

AGRICULTURAL INDUSTRY FACES FURTHER EMPLOYMENT DECLINES

- In Ontario, agricultural employment levels have remained relatively flat over the last decade while both labour and capital productivity have increased
- High seasonality and difficult working conditions contribute to labour supply challenges
- Ontario's agri-food products exports are expected to gain strength
- For 2016-2018, agricultural employment is expected to decline in Ontario

Ontario's agriculture industry (i.e., crop and animal production, and support activities) accounted for about 0.70% of provincial total gross domestic product (GDP) in 2015.¹ Over the last three decades the sector's share of Ontario's GDP has remained relatively small and steady. While its contribution may seem minor, the primary agricultural industry's impact on the economy cannot be disregarded, as it plays a vital role in the supply chain for Ontario's food and beverage manufacturers. The agriculture and agri-food industries (food and beverage manufacturing, and other sectors related to agriculture) accounted for approximately 5.9% of Ontario's 2015 GDP.²

The top three commodities produced by Ontario farms are dairy products, soybeans, and cattle. These combine to make up about 40% of farm cash receipts.³ Cattle ranching and farming is the largest agricultural employer in Ontario.⁴ Overall, worldwide demand for livestock products is expected to increase due to

¹ Ministry of Agriculture, Food and Rural Affairs. (2016, June 13). Economic Indicators. Retrieved from <http://www.omafra.gov.on.ca/english/stats/economy/index.html>

² Excludes leather and allied product manufacturing (NAICS 316)

³ Ministry of Agriculture, Food and Rural Affairs. (2016, June 9). Commodity Share of Farm Cash Receipts, Canada and the Provinces, 2015. Retrieved from <http://www.omafra.gov.on.ca/english/stats/finance/comshare.htm>

⁴ Ministry of Agriculture, Food and Rural Affairs. (2016, June 13). Employment, Agri-Food Industries, Ontario, 2007-2015. Retrieved from http://www.omafra.gov.on.ca/english/stats/economy/labour_force.htm

population and income growth.⁵ In fact, the global rise in demand for products from animal production is one of the fastest in the agricultural economy.⁶ Beef prices have been rising,⁷ and consumption is expected to increase over the next ten years primarily driven by the growing populations in developing regions.⁸ However, within Canada, beef consumption has been hampered by relatively high prices and health concerns,⁹ and exports to the U.S. fell in 2015 after three years of growth.

Next to cattle ranching and farming, a significant number of workers are employed in Ontario's greenhouse, nursery, and floriculture production sector. Most employees in this subsector work in the production of vegetables and flowering and ornamental plants. Sales by farm cash receipts for greenhouse vegetables have grown since 2012,¹⁰ and sales for greenhouse floriculture products have remained relatively stable since 2010. The greenhouse industry is expected to grow modestly in the forecast period¹¹ due to factors such as rising export sales stemming from a lower Canadian dollar, the renewed focus on healthy greenhouse products, and the "buy-local movement" across the nation. This will be partially offset by concerns about high energy prices.¹²

High seasonality and difficult working conditions contribute to labour supply challenges in Ontario's agriculture industry

From 2013 to 2015, Ontario's primary agricultural industry GDP grew at an average rate of 0.8% per year – 1.6 percentage points below the average rate for all industries. The agriculture industry was less affected by the 2008 recession compared to other industries, as demand for food products is inelastic in nature. But viewed over a longer time period, the province's agriculture employment experienced a significant slide from the higher employment levels in the 1990's. This is not unique to Ontario, as the same phenomenon occurred Canada-wide. In 2013, Ontario began to experience a downwards trend in employment which is expected to carry forward into 2016-2018.

⁵ Food and Agriculture Organization of the United Nations.(2012). Global Trends and Future Challenges for the Work of the Organization. Retrieved from http://www.fao.org/docrep/meeting/025/gt_webannex_rc2012.pdf

⁶ ibid

⁷ Statistics Canada CANSIM Table 326-0012

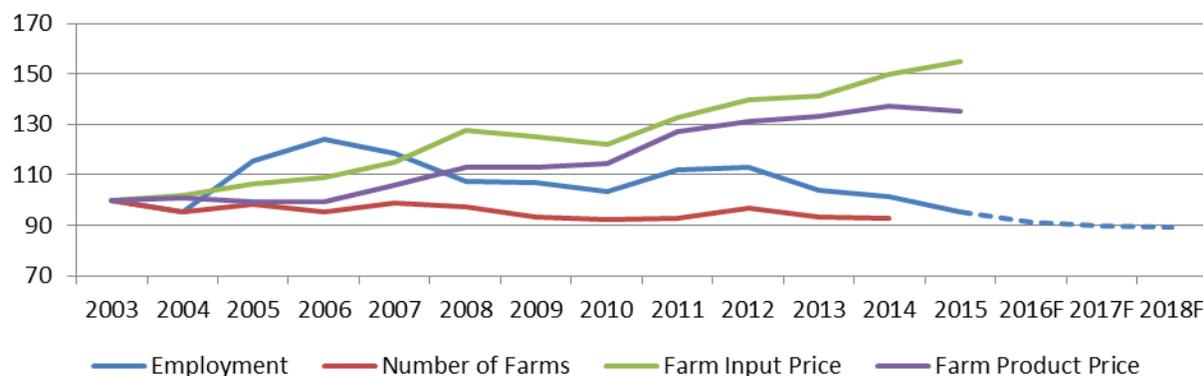
⁸ OECD/FAO. (2016), OECD-FAO Agricultural Outlook 2016-2025, *OECD Publishing, Paris*.
http://dx.doi.org/10.1787/agr_outlook-2016-en (page 108)

⁹ Farm Credit Canada. The 2015 Beef Sector Report. Retrieved from <https://www.fcc-fac.ca/fcc/about-fcc/corporate-profile/reports/beef-sector/beef-sector-report-2015.pdf> (page 7)

¹⁰ Statistics Canada CANSIM Table 002-0001

¹¹ Harrison, D. (2016, April 13). Sales, Profits Are On the Rise. *Greenhouse Canada*. Retrieved from <http://www.greenhousecanada.com/business/trends/sales-profits-are-on-the-rise-31052>

¹² Hein, T. (2014, December 9). State of the industry. *Greenhouse Canada*. Retrieved from <http://www.greenhousecanada.com/business/trends/state-of-the-industry-30080>

Figure 1: Employment, Number of Farms, Input and Output Prices Index, 2003 – 2018F

* Data is expressed as an index where year 2003 = 100

Sources: Statistics Canada, Employment – LFS, Number of farms – CANSIM 002-0044, Farm Input Price – CANSIM 328-0015, Farm Product Price – CANSIM 002-0069

Between 2013 and 2015, animal production accounted for most of jobs in agriculture (49.9%), and the rest were distributed amongst crop production (40.5%), mixed farming (5.2%), and support activities (4.5%). The following occupations make up about three quarters of the agricultural workforce;

- Managers in agriculture (NOC 0821)
- General farm workers (NOC 8431)
- Nursery and greenhouse workers (NOC 8432)
- Harvesting labourers (NOC 8611)
- Agricultural service contractors, farm supervisors and specialized livestock workers (NOC 8252)

In the agriculture industry, a large part of the work is seasonal. This high degree of seasonality along with difficult working conditions are major reasons why the supply of labour may be limited. Despite the increased adoption of new technology, traditional farming methods still exist for harvesting crops as machines have not yet been able to replace the work of labourers. Demand for harvesting labourers remains high, especially during peak season due to perishable crops. There are also a number of other challenges for the agriculture labour supply. For instance, the older age profile of farmers is one of the primary concerns as successors are few and far between in some regions.¹³¹⁴

Agricultural employment levels remain steady while both labour and capital productivity increase

Though the number of farms has decreased by about 24% from 1991 to 2011, average farm size has increased. During this time, farms were able to achieve greater production capacity due to the rise of mechanized farming and increased labour and capital efficiency.¹⁵ Consequently, farms amalgamated to create larger farm sizes, bigger herd sizes, but fewer farms. Production, as a result, increased while inputs required, such as labour,

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Burke, J. et. al. (2011). Agriculture in Muskoka. Local Food Solutions. Retrieved from <https://muskoka.civicweb.net/Documents/DocumentDisplay.aspx?ID=17975> (page 34)

¹⁴ Caldwell, W. and Marr, E. (2011, November). Current and Future Opportunities for Agricultural Development in Northeast Ontario: A Regional Development Perspective. *University of Guelph*. Retrieved from http://www.uoguelph.ca/~claws/Press_files/NeCN_AgStudy.pdf (page 5)

¹⁵ Siman, E. (2014, May). Agriculture and Agri-food Sector Report. *Worktrends.ca*. Retrieved from <http://worktrends.ca/sites/default/files/documents/Agriculture%20Sector%20Report%20v3.pdf> (page 4)

were kept to a minimum. The total decline in farms was primarily driven by the reduction in the number of animal production farms, while the number of crop production farms increased over the same time period.¹⁶

Over the past ten years, the farm input prices index¹⁷ rose by more than 40%, while output prices rose by 36% as shown in Figure 1 above.¹⁸ Lower profit margins have encouraged farmers to move away from traditional farming methods to increase both labour and capital productivity. In addition to this long-term upwards trend, farm product prices can also be volatile and unpredictable in the short- to medium-term. Farm revenues are subject to a number of potential shocks such as weather, disease, international policy changes, and government programs and subsidies. The federal-provincial *Growing Forward 2* initiative, introduced in 2013, provides risk management programs designed to help producers manage these risks in market volatility.¹⁹ In addition, the initiative aims at helping producers to improve innovation, competitiveness, and marketing. These recent initiatives should moderate some of the risks associated with farm operation and stimulate the primary agriculture sector.

Ontario's agri-food products exports are expected to gain strength

The United States is Ontario's biggest trading partner for agri-food products. From the period of 2013 to 2015, it accounted for approximately 74.1% of all Ontario's agri-food exports, and about 66.3% of Ontario's imports originated from the United States.²⁰ Trade between the two regions is facilitated by the North American Free Trade Agreement (NAFTA). Similar free trade agreements with India, Japan, and the Caribbean community are under negotiation, while an agreement has been reached with the European Union and Trans-Pacific partners.²¹ Free trade agreements allow Ontario's farmers to reach a broader export customer base, but will also stiffen competition. Industry reactions to the recently finalized Trans-Pacific Partnership have been mixed. Beef and pork, canola, wheat, soy all should benefit from greater market access, but supply managed industries such as poultry, eggs, and dairy could face greater outside competition.²² It is estimated that for every \$10 million increase in exports of agricultural products, 127 new jobs are created.²³ However, the effect of these agreements on agricultural employment in the forecast period for 2016 to 2018 is still unclear. Overall, Ontario's agri-food exports are expected to benefit from the lower Canadian dollar in 2016-2018.

Sector Outlook, 2016-2018

Provincial employment in the agriculture industry is expected to decrease by an annual average of 2.1% for the years 2016 to 2018. Agricultural trends of farm consolidation, increased factor costs, and increased productivity are expected to dominate and temper the employment growth in the agriculture industry, despite

¹⁶ Statistics Canada CANSIM Table 002-0044

¹⁷ Included in the farm product price index are both total crop production, and total livestock and animal production prices. This index is an aggregate of factors needed in agricultural production such as buildings, machinery and motor vehicles, fuel, fertilizer, and commercial feed.

¹⁸ Statistics Canada CANSIM Table 328-0015

¹⁹ Agriculture and Agri-Food Canada. (2016, July 14). *Growing Forward 2*. Retrieved from <http://www.agr.gc.ca/eng/about-us/key-departmental-initiatives/growing-forward-2/?id=1294780620963>

²⁰ Ministry of Agriculture, Food and Rural Affairs. (2016, February 12). Ontario Agri-food Trade by Region, 2005-2015. Retrieved from <http://www.omafra.gov.on.ca/english/stats/trade/region.htm>

²¹ Global Affairs Canada. (2016, February 11). Canada's Free Trade Agreements. Retrieved from <http://www.international.gc.ca/trade-agreements-accords-commerciaux/agr-acc/fta-ale.aspx?lang=eng>

²² RealAgriculture News Team. (2015, October 5). Industry Reactions to the Signing of the Trans-Pacific Partnership. *RealAgriculture*. Retrieved from <https://www.realagriculture.com/2015/10/industry-reactions-to-the-signing-of-the-trans-pacific-partnership/>

²³ Ministry of Agriculture, Food and Rural Affairs. (2014, December 18). Recognizing Ontario's Top Food Exporters. Retrieved from <http://news.ontario.ca/omafra/en/2014/12/recognizing-ontarios-top-food-exporters.html>

the expected rise in farm revenue for animal and greenhouse products. Despite the decline in employment, demand for certain agricultural workers is expected to be high due to high seasonality and difficult working conditions in the agriculture sector.

Sub-provincial trends - high farm land costs in southern Ontario prohibit new entrants, especially young farmers

The **Stratford-Bruce Peninsula** economic region has the highest concentration of farm employment in Ontario with a 15.7% share.²⁴ Hog farming and poultry and egg production are dominant in this region. Along with the high prices of commodities, the price of farm land has increased dramatically, and competition to acquire farms has become more intense.²⁵ However, as commodity prices fell in the past year, growth in the cost for farm land slowed,²⁶ though prices remain at elevated levels. This creates a barrier for new entrants, as well as for those interested in expansion, and thus limits growth opportunities. Compared to other economic regions of Ontario, Stratford-Bruce Peninsula is home to the largest proportion of farms that do not hire any employees. The prominence of self-operated farms lowers the outlook for agricultural employment, as high land prices make the purchasing of farms less feasible.

The **Hamilton-Niagara Peninsula** region accounted for around 14.3% of Ontario's farm employment. In contrast to Stratford-Bruce Peninsula and Kitchener-Waterloo-Barrie however, the Hamilton-Niagara region has the largest proportion of farms which employ at least one staff. Having farms which have employees on payroll is a positive for the employment outlook. As well, this region is home to a number of large-scale agricultural businesses and the region accounts for 31.2% of Ontario's large farms, which also bodes well for employment. Nurseries and greenhouses, which are expected to provide relatively stable employment demand, are prominent in this region. The greenhouse sector also welcomed a \$12.9M investment from the provincial and federal governments into the Vineland Research and Innovation Centre in 2016. The investment will boost research and development in Ontario's greenhouse horticultural products, including the development and implementation of automated systems in areas of planting, packaging, harvesting, and disease detection.²⁷

The region of **Kitchener-Waterloo-Barrie** accounted for around 14.1% of Ontario's total agriculture employment. Within the region, Wellington County is one of the main producers of poultry and eggs in the province. This economic region also has a low proportion of farms employing at least one worker. The effect of fewer staff per farm numbers lower the employment outlook in agriculture for this region.

The **London** economic region's share of agricultural employment is about 13.7%, the fourth largest in the province. The majority of farms in London are micro-establishments²⁸ and there are very few large-scale operations. The region has also posted high land price growth, especially in Oxford county.²⁹ The above-average prevalence of micro-establishments and high prices for farm land are major barriers to entry for occupations in agriculture in London.

²⁴ Labour Force Survey, average annual employment in 2013-2015

²⁵ Mann, S. (2014, April 16). Farmland values still rising in Ontario but pace of increase slows. *Better Farming*. Retrieved from <http://www.betterfarming.com/online-news/farmland-values-still-rising-ontario-pace-increase-slows-55561>

²⁶ Mann, S. (2016, April 12). Ontario's farmland value growth rate lags behind national rate. *Better Farming*. Retrieved from <http://www.betterfarming.com/online-news/ontario%E2%80%99s-farmland-value-growth-rate-lags-behind-national-rate-61412>

²⁷ Harrison, D. (2016, June 6). Major investment into Vineland research. *Greenhouse Canada*. Retrieved from <http://www.greenhousecanada.com/news/major-investments-into-vineland-research-31129>

²⁸ Establishments with an employment size of 1 to 4 employees.

²⁹ Mann, S. (2016, April 12). Ontario's farmland value growth rate lags behind national rate. *Better Farming*. Retrieved from <http://www.betterfarming.com/online-news/ontario%E2%80%99s-farmland-value-growth-rate-lags-behind-national-rate-61412>

The **Windsor-Sarnia** economic region accounted for 10.3% of Ontario's agricultural employment. The economy in the region has struggled since the recession and growth has been slow, but the agricultural industry has mostly been a positive driver for Windsor-Sarnia.³⁰ Employment in agriculture did not feel the effects of the recession as strongly as the region's manufacturing industry. The southern location of the region also means that Windsor-Sarnia enjoys the longest growing season in Canada, which allowed agriculture to have a historically significant impact on the local economy.³¹ Hence the region is home to a number of large-scale agricultural operations, especially those with more than 100 workers on payroll. The prominence of large businesses may provide more agricultural employment opportunities in the region, such as for harvesting labourers. Like many other regions in southern Ontario, farmland prices in the region have grown, especially in Chatham-Kent county.³² For many, this restricts entry into the agricultural industry. Employment prospects are strengthened by the fact that farm workers in this region have one of the highest age profiles in the province, at an average age of 48.9 years, which may lead to opportunities due to replacement needs. However, rural agricultural areas within the Windsor-Sarnia region may face challenges in attracting youths and more effort to promote the industry is needed.³³

As the land prices in southern Ontario rise, the **Northeast** economic region's agriculture sector may see some growth. Land costs in the region are as little as 10% of that in the south.³⁴ For new entrants, the low entry costs may be a sufficient reason to start up business in the north. Currently, the region hosts a relatively small share of Ontario's agriculture employment at 2.6% on average from 2013 to 2015. Farming communities are located along the Trans-Canada Highway 11 near Hearst, Kapuskasing, Timmins, and Kirkland Lake, where transportation to larger markets is far, but available. Clay soil in the region is conducive to field crops such as cereals and oilseeds.³⁵ But while the number of oilseed and grain farms is fast growing,³⁶ beef and dairy farms are most prominent in the region currently.³⁷ However, the climate of the Northeast region limits the variety of products that the region can support.³⁸ Possible growth in this region is still somewhat hindered by the location and the long winter, as well as the existence of the large mining industry as an alternative employer.

³⁰ Statistics Canada CANSIM Table 282-0125

³¹ Promising Sectors & Occupations Windsor-Essex 2012-2015. (2015, April). *Workforce WinsorEssex*. Retrieved from <http://workforcewindsorEssex.com/wp-content/uploads/2015/04/Promising-Sectors-and-Occupations-in-Windsor-Essex-2012-20151.pdf> (page 12)

³² Mann, S. (2016, April 12). Ontario's farmland value growth rate lags behind national rate. *Better Farming*. Retrieved from <http://www.betterfarming.com/online-news/ontario%E2%80%99s-farmland-value-growth-rate-lags-behind-national-rate-61412>

³³ Promising Sectors & Occupations Windsor-Essex 2012-2015. (2015, April). *Workforce WinsorEssex*. Retrieved from <http://workforcewindsorEssex.com/wp-content/uploads/2015/04/Promising-Sectors-and-Occupations-in-Windsor-Essex-2012-20151.pdf> (page 14)

³⁴ Northeast Community Network. (2016). Agriculture. Retrieved from <http://www.opportunitiesnortheastontario.ca/index.php/opportunities/agriculture/>

³⁵ Petherick, A. (2013, July). Growing the Great White North. *Ontario Grain Farmer*. Retrieved from <http://www.ontariograinfarmer.ca/MAGAZINE.aspx?Aid=653>

³⁶ *ibid*

³⁷ Ministry of Agriculture, Food and Rural Affairs. (2012, July 17). Northern Ontario Region at a Glance. Retrieved from <http://www.omafra.gov.on.ca/english/stats/county/index.html>

³⁸ Agriculture and Agri-Food Canada. (2014, June 9). Length of Growing Season in Ontario. Retrieved from <http://www.agr.gc.ca/eng/science-and-innovation/agricultural-practices/agriculture-and-climate/future-outlook/climate-change-scenarios/length-of-growing-season-in-ontario/?id=1363033977515>

Despite declines in employment, agriculture industry continues to generate employment opportunities in Ontario

Although provincial employment in the agriculture industry is expected to decline, demand for certain agricultural workers will be high due to high seasonality and difficult working conditions in the sector. Opportunities will be more plentiful in the Hamilton-Niagara Peninsula and Windsor-Sarnia regions, where more farms have workers on payroll. Rising exports and a strong food and beverage manufacturing industry in Ontario will bode well for the primary agricultural sector in the forecast period.

***Note:** In preparing this document, the authors have taken care to provide clients with labour market information that is timely and accurate at the time of publication. Since labour market conditions are dynamic, some of the information presented here may have changed since this document was published. Users are encouraged to also refer to other sources for additional information on the local economy and labour market. Information contained in this document does not necessarily reflect official policies of Employment and Social Development Canada.*

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