



Sectoral Profile

Agriculture

Ontario

2017-2019



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

AGRICULTURAL INDUSTRY ADAPTS TO MEET STRUCTURAL AND CONSUMER DEMANDS

- The number of farms fell in Ontario but operations are larger and more valuable
- Machinery and new technologies have allowed farms to maintain production with fewer inputs
- The industry faces challenges to attract local workers and relies heavily on temporary labour
- Greenhouses and the advent of medicinal marijuana will be a focal point in the years ahead
- Employment growth will likely remain flat in the agricultural industry over the 2017 to 2019 period

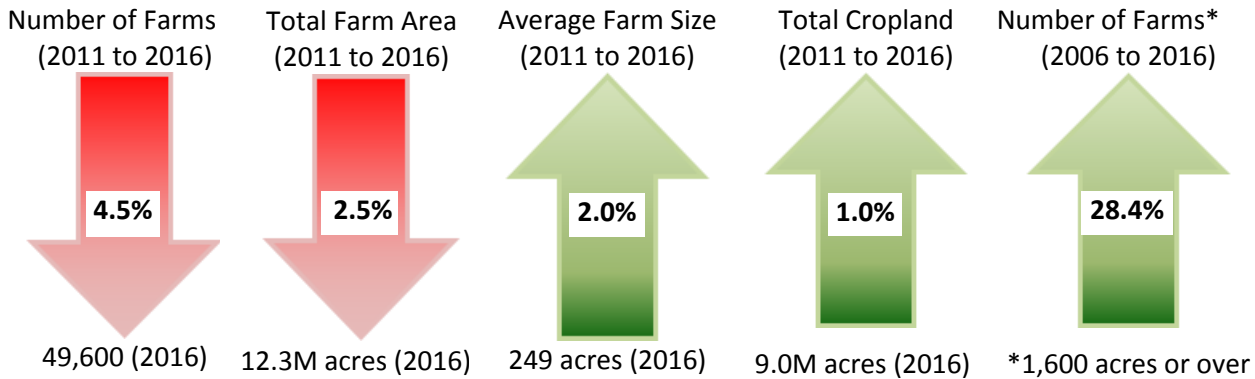
Ontario has a fertile agricultural base that supplies the food chain with a rich basket of goods both locally and abroad. The province has the highest number of census farms in Canada with 49,600.¹ This represents about one-quarter of all Canadian farms. Employment in primary agriculture rose slightly to 77,700 in Ontario in 2016, after three consecutive years of decline.² Farming has deep roots in several communities particularly in the southwestern region of the province. The industry works in tandem with food and beverage manufacturers, retail and food service providers, wholesale distributors, and research and environmental partners. While primary agriculture made up just 0.7% of Ontario's total gross domestic product in 2016,³ that figure jumped to 5.9% for the broader agri-food industry. The agri-food industry includes food, beverage and tobacco manufacturing and other industries related to agriculture.

Snapshot of Ontario's Farms

The number of farms continues to fall in Ontario driven by a drop in livestock and dairy farms (See Figure 1). Despite a decline in total farm area, agricultural operations across the province are larger and utilize a higher share of land to produce crops. Farm consolidation over the last several years is a key reason for this trend as smaller operations merge. Some of this may stem from greater use of technology, heightened competition, and structural shifts. Large-scale farms are often more capital-intensive and are able to boost production with fewer inputs though a labour shortfall in the industry remains. The total market value of all farm capital grew to \$131.8B in Ontario in 2016. Most of this came from a jump in the value of land and buildings such as

greenhouses, which are a thriving part of the provincial industry. Innovation in crop science, farming practices, and marketing, opened the door for farmers to sell a wider range of goods and this pattern is likely to grow in the years ahead.

Figure 1: Highlights of the Agricultural Industry in Ontario

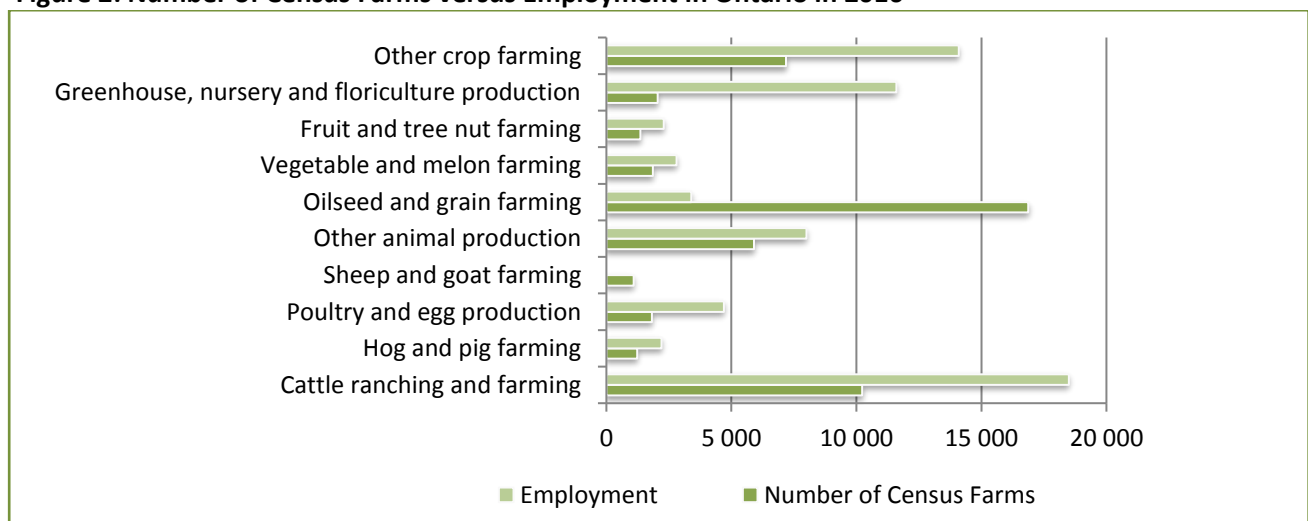


Source: Statistics Canada, Census of Agriculture

Breakdown of Ontario’s Agricultural Base

Close to 70.0% of all farms in the province were oilseed and grain farms, cattle ranches and farms, and other crop farms (See Figure 2). There has been an ongoing shift in the industry away from livestock and dairy farming to crop-based production. Even though there were fewer animal-based farms, employment was fairly even between both as livestock production tends to be more labour-intensive than crop farming. Nearly 60.0% of the primary agricultural workforce was in cattle ranching and farming, other crop farming, and greenhouse, nursery and floriculture production in 2016.

Figure 2: Number of Census Farms versus Employment in Ontario in 2016



Note: Employment for sheep and goat farming was not available in 2016

Sources: Statistics Canada, Census of Agriculture and Ontario Ministry of Agriculture, Food and Rural Affairs

Dairy products, soybeans, and vegetables (including greenhouse) made up 40.0% of all farm market receipts (cash receipts minus program payments), which totalled \$12.6B in Ontario in 2016. This tally has grown steadily

over the past decade with gains in both crop and livestock and animal products (See Figure 3). Despite a dip in the number of dairy cows between 2011 and 2016, milk production rose during this time because of greater output per animal achieved through nutrition, genetics, and milking practices.

Figure 3: Growth in Market Receipts for the Top Commodities in Ontario in 2016

Top Commodities based on Market Receipts	2016 (\$M)	2006 (\$M)	Percentage Change
Dairy products	1,975	1,591	24.1%
Soybeans	1,664	937	77.6%
Vegetables (including greenhouse)	1,621	987	64.2%
Cattle and calves	1,314	846	55.3%
Corn	1,250	868	44.0%
Hogs	1,119	454	146.5%
Poultry	977	547	78.6%
Floriculture and nursery	796	634	25.6%

Source: Statistics Canada, Census of Agriculture

Sector Outlook: Labour Challenges Persist for the Agricultural Industry

Although productivity gains and farm consolidation will likely keep employment growth limited, the agricultural industry faces ongoing difficulties to attract and retain labour in Ontario. Some of the main reasons include strenuous working conditions, seasonality, rural locations, competition from other industries, and a lack of awareness or negative views on agriculture. A survey of Ontario's agricultural employers revealed that the majority were not able to find sufficient labour and that more than one-half plan to increase the number of new hires in the next five years.⁴ Respondents also indicated that a large number of positions require post-secondary education. To try to fill this gap there has been greater recruitment efforts by educational institutions and talks to alter training to meet employer needs.

Some of the key occupations in the agricultural industry in Ontario include:

- Managers in agriculture (NOC 0821)
- Managers in horticulture (NOC 0822)
- Agricultural representatives, consultants and specialists (NOC 2123)
- Agricultural service contractors, farm supervisors and specialized livestock workers (NOC 8252)
- General farm workers (NOC 8431)
- Nursery and greenhouse workers (NOC 8432)
- Harvesting labourers (NOC 8611)

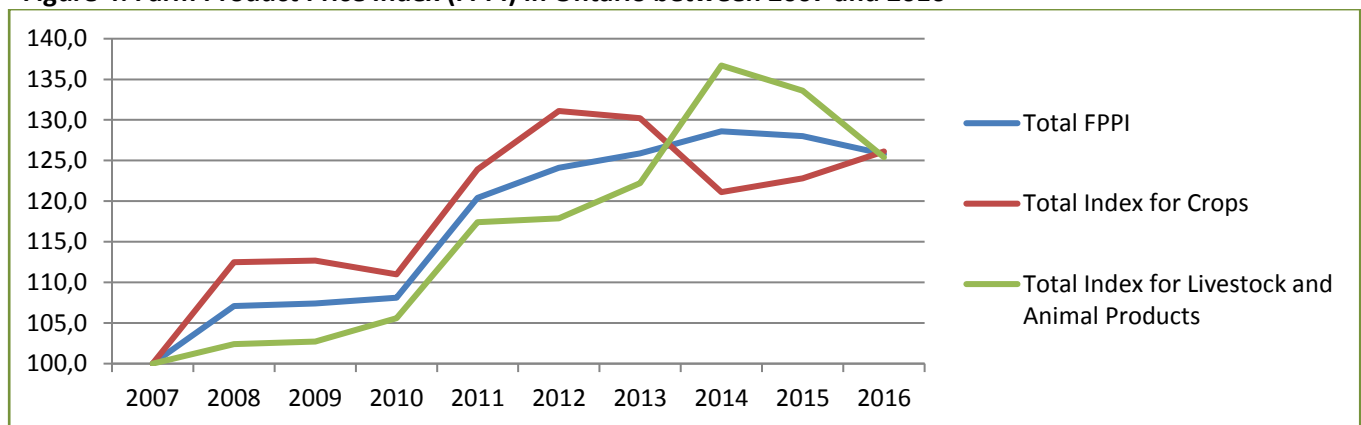
Challenges exist to fill vacancies across the board from lower-skilled labourers to high-skilled positions. The lack of workers may result in lost revenues, delayed expansion plans, or the move to less labour-intensive operations such as oilseed and grain farming. To help cope, the industry relies heavily on temporary foreign workers to supplement the domestic workforce, especially for general farm workers, nursery and greenhouse workers, and harvesting labourers during peak seasons.⁵ The horticulture industry may see a deeper shortage since work is highly seasonal and many of the tasks are manual. In contrast, other areas such as dairy farming may experience less pressure because of productivity gains and steadier working conditions. Based on an industry report the most challenging positions to fill in the coming years will be managers in agriculture, and general farm workers, followed by nursery and greenhouse workers, harvesting labourers, and managers in horticulture.⁶

Another hurdle that faces the industry is the older age profile of farm operators. In 2016, 55.1% of operators were over the age of 55 and many had no succession plan in place. While there seems to be some interest to join the agricultural community from younger individuals, high start-up costs for land and capital is a roadblock for many. As such, there are initiatives to bridge the financial gap between older farmers and prospective entrants as well as the option to rent land or participate in crop sharing.

Farm Finance in Ontario

Total gross farm receipts reached \$15.1B but higher operating expenses pushed the expense-to-receipt ratio up to 0.85 for farmers in 2015. While farmers continue to see an increase in the prices received for agricultural goods, the cost of inputs required to sustain and grow operations have risen.^a Since 2007, prices received for crops have trended higher than for livestock and animal products except in 2014 and 2015 when there was a spike in the price of cattle and calves (See Figure 4). The price received for oilseed and specialty crops has been particularly strong. This may be part of the reason for the steady shift towards crop farming and the rise in land dedicated to grow products such as soybean and corn for grain. On the input side, farmers in animal production have seen input costs tread slightly above those in crop production over the past few years. This was mainly because of higher costs to purchase livestock. Supply-managed goods such as dairy, eggs, and poultry often require more capital and infrastructure to house livestock and support production as well. Going forward, some farmers have expressed concern over the provincial minimum wage hike.

Figure 4: Farm Product Price Index (FPPI) in Ontario between 2007 and 2016



Source: Statistics Canada, CANSIM Table 002-0069 - Farm product price index (FPPI), annual (index, 2007=100)

Outlook for Ontario's Key Crop and Livestock Commodities

Several of Ontario's major agricultural commodities should benefit from a lower Canada-United States exchange rate and favourable market conditions in the short run.

- **Oilseed and Grains:** market prices for soybean and corn is expected to be steady in the near term. Soybean farmers will likely continue to see growth from the large Chinese market that relies on soybeans for animal feedstock and human consumption.⁷ The outlook for corn should be healthy as well led by higher domestic demand for livestock feeding, ethanol production and industrial usage.⁸

^a FPPI: prices received by farmers from the sale of agricultural products
FIPI: change in the price of farm inputs faced by Canadian farmers

- **Meat Production:** the demand for meat products is expected to remain positive in Canada and the United States.⁹ In particular, a potential rise in pork processing capacity south of the border could greatly boost exports.¹⁰ There is also rising demand for animal products worldwide, especially for pork and beef in China.¹¹ This should lead to a positive near term outlook for cattle, hog and poultry farmers.¹² Ontario has the highest number of broilers, roasters and Cornish fowl, and the second largest number of livestock pigs in the country. Meanwhile, the stock of beef cattle declined further in 2016 as some farmers capitalized on recent higher prices.

Local and Global Patterns will Help Boost Agricultural Production

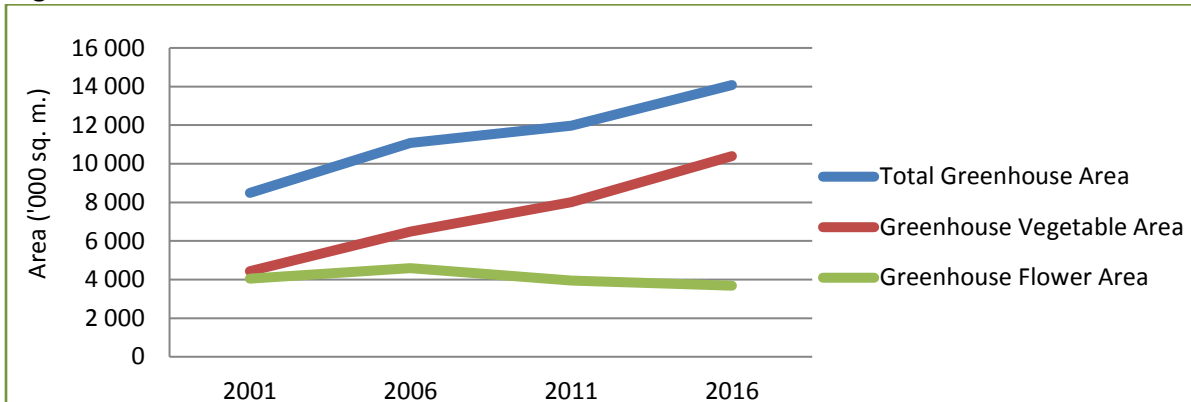
A key driver of Ontario's agricultural industry is the buy local movement. Consumer preferences towards locally sourced food, healthier options, specialty products, and convenience items will create opportunities for farmers. In 2016, 15.1% of farms in the province sold goods directly to consumers through avenues such as farmer's markets and stands. Farmers may also choose to venture into new crop varieties to serve the ethnic market or a segment of food manufacturing such as hazelnut production. In a recent survey, more than 20.0% of farmers in Ontario tried to grow a new crop over the past five years and 7.0% plan to introduce a new crop within the next two years. A larger number of farms produced organic goods as well between 2011 and 2016. Some of these niche markets have attracted younger farmers to set up micro-operations in the province.

Outside of Ontario, local farmers should benefit from a stronger export market, as the United States is the top export destination for Ontario's agricultural goods. A growing middle class, particularly in China, will also raise the demand for sustainable, traceable, and specialty items such as ginseng. Recent free trade agreements like the Canada-European Union Comprehensive Economic and Trade Agreement (CETA) and the Trans-Pacific Partnership (TPP) received mixed reactions. For some producers such as those in oilseed, grain, beef and hog farming, the agreements will open the door to a wider customer base. However, for those in supply-managed commodities such as dairy, eggs and poultry, it could tighten competition. Farmers can face a number of external shocks that can affect the viability of their operations such as inclement weather, disease, supply of feed, and international and domestic policy changes. The federal, provincial and territorial governments established the Canadian Agricultural Partnership in 2018 to help farmers manage these risks as well as strengthen the industry to compete better locally and abroad.¹³

Ontario Leads the Way for Greenhouse Production

Ontario is the centre for greenhouse production in the country with two-thirds of all greenhouse vegetable area in Canada. The industry continues to play a greater role in the provincial agricultural base by extending the growing season and raising output. The area used for greenhouse operations rose by 65.8% between 2001 and 2016 led by gains in greenhouse vegetables (See Figure 5). Greenhouse vegetable production will benefit from higher demand for local produce and increased popularity in the American market in the near term. Meanwhile, operators that grow flowers face tougher competition from imported goods though some producers hope to see opportunities to supply the ethnic population with specialty plants and branch out to new export markets. The increase in multi-dwelling housing compared to single detached homes may also hurt sod and nursery producers because of less landscaping needs and the shift to hardscaped gardens. Technology has allowed greenhouse farmers to raise production and efficiency, which helped offset higher operating expenses such as material purchases and electricity.

Figure 5: Greenhouse Production Area in Ontario between 2001 and 2016



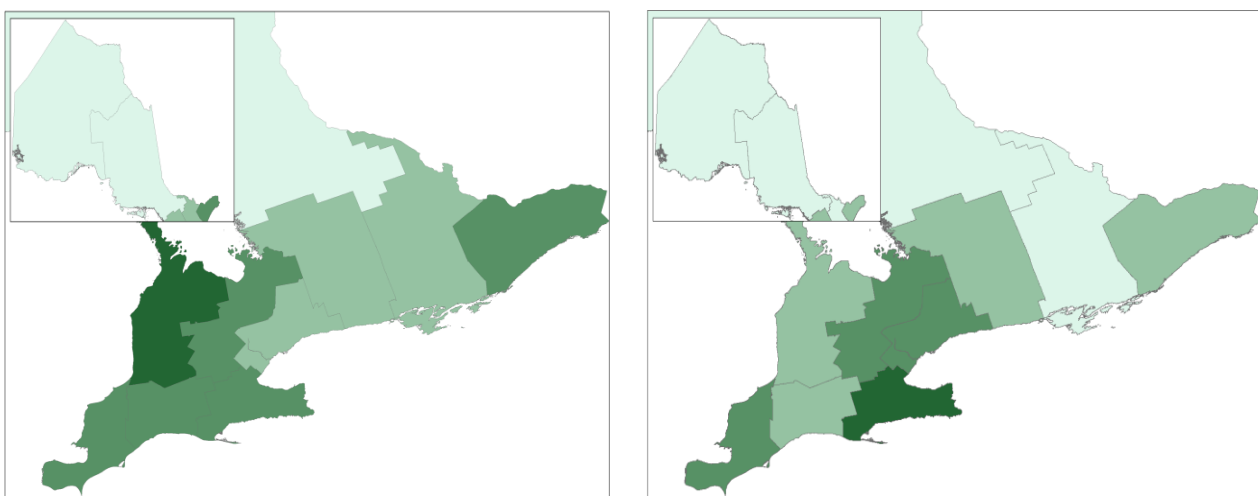
Source: Ontario Ministry of Agriculture, Food and Rural Affairs

One area that has grabbed much of the attention lately in the province is medicinal marijuana farming. Several companies announced plans to build or transform greenhouse facilities as Canada moves to legalize recreational use in July 2018. There is also budding demand for this good worldwide with more countries easing regulations. Some local producers have already launched into the global market as Ontario works to establish itself as an industry leader in both high-tech production and research.

Ontario’s Agricultural Industry at the Regional Level

The agricultural industry has roots in every region of the province with farming specialties in certain areas. Most farms and greenhouses are in the agricultural heartland in southwestern Ontario though sizeable pockets exist in the central and eastern regions (See Figure 6). The province is also a key player in agricultural innovation with farmers, scientists and industry experts working together. Guelph is the core of Ontario’s agri-food industry anchored by research and development activities at the University of Guelph, along with other agricultural-related companies and institutions.

Figure 6: Share of Farms (left) and Greenhouses (right) by Economic Region in Ontario in 2016



Source: Statistics Canada, Census of Agriculture

Ottawa Economic Region (ER)¹⁴

- Share of provincial farms: 10.4%
- Share of provincial greenhouses: 7.9%
- Key farming communities: Stormont, Dundas and Glengarry, Ottawa, and Leeds and Grenville
- Main farming activities: oilseed and grain, and beef cattle ranches
- Regional Highlights:
 - Prescott and Russell was the only area in the ER to see an increase in both employment and total area of land used for farming activities in 2016
 - Ottawa has the highest number of greenhouses in the region
- Labour Market News:
 - Upper Canada Creamery announced that it would expand operations to produce organic cheese products
 - Wilkridge Farm opened a new \$2.3M dairy barn with advanced robotic milking systems near Fournier in 2017

Kingston–Pembroke Economic Region

- Share of provincial farms: 7.1%
- Share of provincial greenhouses: 4.2%
- Key farming communities: Renfrew and Hastings
- Main farming activities: beef cattle ranches, and oilseed and grain
- Regional Highlights:
 - The total area of land used for farming activities fell throughout the region
 - Hastings has the highest number of greenhouses in Kingston–Pembroke
 - The county of Prince Edward is the top area for agricultural employment in the region
- Labour Market News:
 - Archer’s Poultry Farm Inc. announced that it would update technology at its newly opened hatchery in Trenton to raise processing capacity, leading to 10 full-time jobs
 - Performance Plants Inc. opened a new facility in Kingston in May 2017. The company is a technology provider to the agricultural industry, especially crop farming.

Muskoka–Kawarthas Economic Region

- Share of provincial farms: 6.8%
- Share of provincial greenhouses: 5.2%
- Key farming communities: Kawartha Lakes, Northumberland and Peterborough
- Main farming activities: beef cattle ranches, and oilseed and grain
- Regional Highlights:
 - Agricultural employment grew in Peterborough and Muskoka in 2016
 - Muskoka–Kawarthas has several floriculture greenhouse operations
 - Northumberland is the top area for agricultural employment in the region
- Labour Market News:
 - John Millar Farm announced that it would upgrade its egg storage facility in Peterborough to allow for greater production
 - TCO Agromart Ltd. will build a facility in Northumberland in the spring of 2018 to serve local farmers in the region. The company provides crop inputs and services.

Toronto Economic Region

- Share of provincial farms: 5.1%
- Share of provincial greenhouses: 12.4%

- Key farming communities: Durham and York
- Main farming activities: oilseed and grain farms
- Regional Highlights:
 - Agricultural employment grew in York in 2016
 - York has the highest number of mushroom producers in the province
 - Toronto saw an increase in greenhouse, nursery, and floriculture establishments in 2016
- Labour Market News:
 - Ripple Farms Inc. announced that it would establish a new aquaponics growing facility on Seneca College's Newnham Campus in Toronto
 - Sharon Mushroom Farm expanded its mushroom growing operation in York in 2017 to keep up with demand

Kitchener–Waterloo–Barrie Economic Region

- Share of provincial farms: 12.9%
- Share of provincial greenhouses: 12.0%
- Key farming communities: Wellington and Simcoe
- Main farming activities: oilseed and grain, beef cattle ranches, and dairy cattle and milk production
- Regional Highlights:
 - Simcoe, Wellington, and Waterloo all have a larger agricultural workforce than many other parts of the province
 - Wellington is one of the main producers of poultry and eggs in Ontario
 - Simcoe has the second highest number of nursery and tree producers after the Niagara area
- Labour Market News:
 - Construction started on the Livestock Research and Innovation Centre - Beef Facility in Elora worth \$15.5M
 - James E. Wagner Cultivation announced that it would move into a new facility in Kitchener to produce medicinal marijuana. The company expects to hire 400 to 600 employees by the end of 2018.
 - Fairhaven Farm will upgrade equipment to help meet demand for local black seed honey
 - Bell's Edge Farm will upgrade machinery and develop products under its flavoured butter line

Hamilton–Niagara Peninsula Economic Region

- Share of provincial farms: 12.0%
- Share of provincial greenhouses: 28.4%
- Key farming communities: Haldimand-Norfolk, Niagara, Hamilton and Brant
- Main farming activities: oilseed and grain, vegetable and melon, and poultry and egg production
- Regional Highlights:
 - This region has the largest agricultural workforce in Ontario with Haldimand-Norfolk and Niagara as the top two areas of employment in the province
 - Agricultural employment increased sharply in Haldimand-Norfolk and modestly in Brant in 2016
 - The Niagara area has the greatest number of fruit and tree nut farms, which includes a large number of vineyards that support the wine and icewine industry
 - Niagara has the highest number of greenhouses as the top floriculture, and nursery and tree producer in Ontario
 - This region contains many of the province's biggest farming operations
- Labour Market News:

- Vineland Research and Innovation Centre opened a testing greenhouse in the Niagara region in 2016 to support farming innovation, pest and disease control, and plant breeding
- Tweed Farms Inc. announced that it would expand its cannabis production facility in Niagara-on-the-Lake, which will lead to 100 full-time jobs
- Brantford Mushroom Farm will invest \$1M to install equipment to help automate production and harvesting as well as to meet food safety standards. This will create eight additional jobs.
- Colonial Florists Ltd. announced that it plans to expand operations with the purchase of a new location in Niagara-on-the-Lake, which will create 15 to 20 jobs

London Economic Region

- Share of provincial farms: 11.2%
- Share of provincial greenhouses: 6.5%
- Key farming communities: Middlesex, Oxford and Elgin
- Main farming activities: oilseed and grain, dairy cattle and milk production, livestock such as beef and poultry, and vegetable and melon
- Regional Highlights:
 - This region has one of the largest agricultural workforces in Ontario
 - Middlesex is one of the top farming communities in the province
 - The number of farms rose in Oxford and in Elgin in 2016
 - Unlike many other economic regions, the total area of land used for farming activities grew across London, especially in Oxford
 - Middlesex saw the biggest increase in the number of nursery and tree producers in Ontario in 2016
- Labour Market News:
 - WeedMD Inc. announced that it would lease five acres of greenhouse space from Perfect Pick Farms Ltd. in Strathroy to produce medicinal marijuana. The company plans to hire 100 employees as it expands.

Windsor–Sarnia Economic Region

- Share of provincial farms: 12.0%
- Share of provincial greenhouses: 12.3%
- Key farming communities: Chatham-Kent, Lambton and Essex
- Main farming activities: oilseed and grain, and vegetable and melon
- Regional Highlights:
 - This region has one of the largest agricultural workforces in Ontario and contains many of the province's biggest farms
 - Chatham-Kent is one of the top farming communities in Ontario and Essex saw a jump in agricultural employment in 2016
 - The number of farms increased sharply in Chatham-Kent and modestly in Essex in 2016
 - Unlike many other economic regions, the total area of land used for farming activities grew across Windsor–Sarnia, with large gains in Chatham-Kent and Essex
 - Essex has the second highest number of greenhouses and is the centre for greenhouse crop production in the province. The Leamington and Kingsville localities are the main growing areas for greenhouse vegetables such as tomatoes.
- Labour Market News:
 - Lakeside Produce Inc. announced that it would invest \$7M to expand operations in Leamington. The investment will add 203 jobs by 2019.

- Mucci Farms Ltd. will invest an additional \$12M to expand operations in Kingsville to become one of the biggest greenhouse strawberry growers in North America. The company will add 100 positions.
- Del Fresco Produce Ltd. invested \$15M to update equipment at its Kingsville greenhouse to allow for strawberry production throughout the winter months
- GrowCo will open a 30-acre medicinal marijuana greenhouse in Leamington in 2018

Stratford–Bruce Peninsula Economic Region

- Share of provincial farms: 18.1%
- Share of provincial greenhouses: 6.0%
- Key farming communities: Huron, Perth, Grey and Bruce
- Main farming activities: oilseed and grain, livestock such as beef cattle and hog, dairy production, and poultry and eggs
- Regional Highlights:
 - This region has one of the largest agricultural workforces in Ontario as Huron, Grey, Perth, and Bruce are all top farming communities
 - The number of farms increased in Grey and in Huron in 2016 with Huron having the highest number of farms in the province
 - Unlike many other economic regions, the total area of land used for farming activities grew in Stratford–Bruce, with gains in Perth, Huron and Grey
 - The county of Grey has been able to attract younger farmers and West Grey has a sizeable organics sector
 - Grey has the highest number of greenhouses in the region
- Labour Market News:
 - Trillium Hatchery Inc. will open a \$23M hatchery in Stratford in the fall of 2018 creating 20 jobs. The hatchery will produce antibiotic-free and organic chickens.
 - GreenSeal Cannabis Company will produce medicinal marijuana at a \$5.5M facility in Stratford creating 20 to 30 jobs

Northeast Economic Region

- Share of provincial farms: 3.5%
- Share of provincial greenhouses: 3.4%
- Key farming communities: Timiskaming, Algoma and Parry Sound
- Main farming activities: beef cattle ranches, and oilseed and grain
- Regional Highlights:
 - The agricultural workforce increased in several areas in the Northeast ER including Timiskaming, Algoma and Greater Sudbury
 - A longer growing season because of warmer temperatures and more abundant and cheaper land is expected to encourage new farming activities throughout the region
 - Northern Ontario is the largest maple syrup producer in the province
 - Algoma and Greater Sudbury have the highest number of greenhouses in the region
- Labour Market News:
 - The Government of Ontario released the Northern Ontario Agri-Food Strategy in January 2018 to support the agricultural industry in the North
 - Smart Greens, a hydroponic container farm, announced that it plans to add a second site in Sudbury and will need additional staff to assist with planting and harvesting
 - The University of Guelph will conduct research through its facilities in New Liskeard to help Northern Ontario farmers increase beef production

- Collège Boréal launched an agricultural technician program at its Sudbury campus

Northwest Economic Region

- Share of provincial farms: 1.0%
- Share of provincial greenhouses: 1.8%
- Key farming communities: Rainy River and Thunder Bay
- Main farming activities: beef cattle ranches, and dairy cattle and milk production
- Regional Highlights:
 - The agricultural workforce increased slightly in Thunder Bay, Rainy River, and Kenora in 2016
 - A longer growing season because of warmer temperatures and more abundant and cheaper land may encourage new farming activities in the region
 - Northern Ontario is the largest maple syrup producer in the province
 - Thunder Bay has the highest number of greenhouses in the region
- Labour Market News:
 - The Government of Ontario released the Northern Ontario Agri-Food Strategy in January 2018 to support the agricultural industry in the North
 - The Government of Ontario will collaborate with Lakehead University to promote agricultural research in northwestern Ontario. The partnership will include a \$1.7M investment from the government over the next five years.

Ontario's Agricultural Industry will continue to Adapt to Satisfy Consumers

Greater use of technology and mechanization to drive efficiency and scale will remain a key component of the agricultural industry. Advances in crop science and animal production will allow farmers to grow more products and better adapt to consumer tastes and international markets. At the same time, higher input costs and stiffer competition in some areas of farming could create headwinds. Though employment will likely see little gains as farms consolidate and increase productivity, challenges to find sufficient labour and skill sets will persist as farmers look to boost output in the years ahead.

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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¹ Statistics Canada, Census of Agriculture (2001, 2006, 2011, 2016)

Note: unless otherwise stated, all data referenced in this report comes from the Census of Agriculture

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