



OVERVIEW OF THE CANADIAN AGRICULTURE AND AGRI-FOOD SECTOR

FEBRUARY 2020



Agriculture and
Agri-Food Canada

Agriculture et
Agroalimentaire Canada

Canada ¹

Purpose

To outline:

- The global and domestic outlook of the sector and current challenges
- AAFC's role in supporting the sector
- Opportunities to drive economic growth and support the environmental sustainability of the sector

Economic driver here at home

The Canadian agriculture and agri-food system is a key driver of Canada's economy.

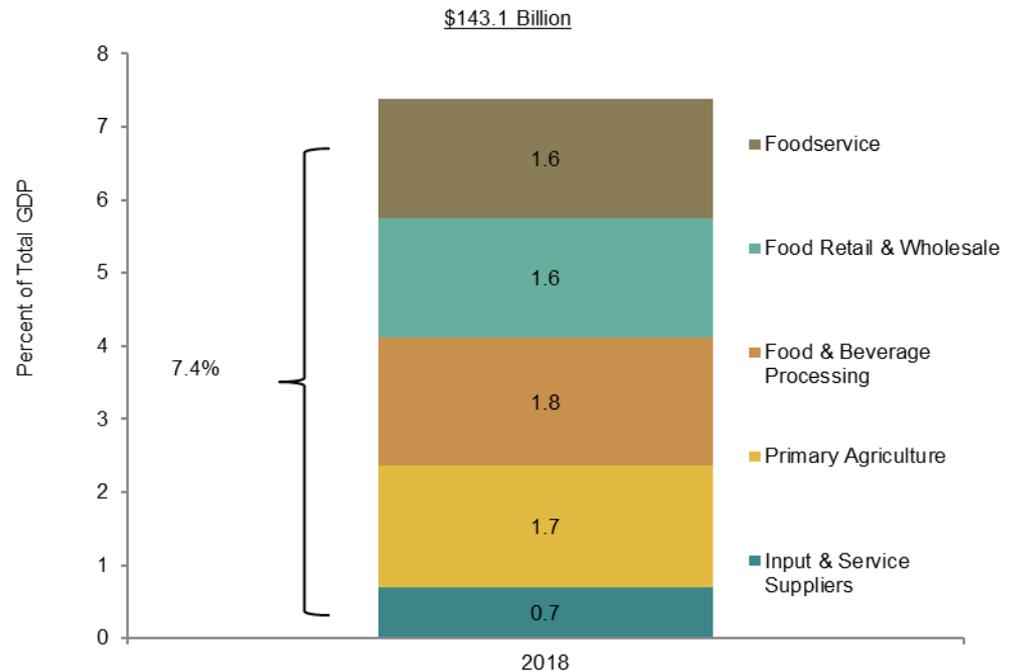
In 2018, the system generated \$143 billion, accounted for 7.4% of GDP, and provided one in eight jobs in Canada.

The agriculture sector is healthy and profitable, experiencing strong growth in the past decade. Farm market receipts grew by 4.4% annually, on average, between 2009 and 2018, with the largest growth coming from grains and oilseeds.

Net Cash Income reached a record high of \$14.6 billion in 2017 but decreased in 2018 to \$11.9 billion due to higher operating costs.

In 2016, the average farm family had an estimated income of \$127,172, compared to \$108,600 for the average Canadian family.

Agriculture and Agri-Food System's Contribution to Canadian GDP, 2018



Source: Statistics Canada and AAFC calculations.

Notes: (1) Data is preliminary and subject to revisions. (2) Components may not add up due to rounding.

Even with increased operating expenses, most farms are strong financially

Farm expenses saw their largest increase in 2018.

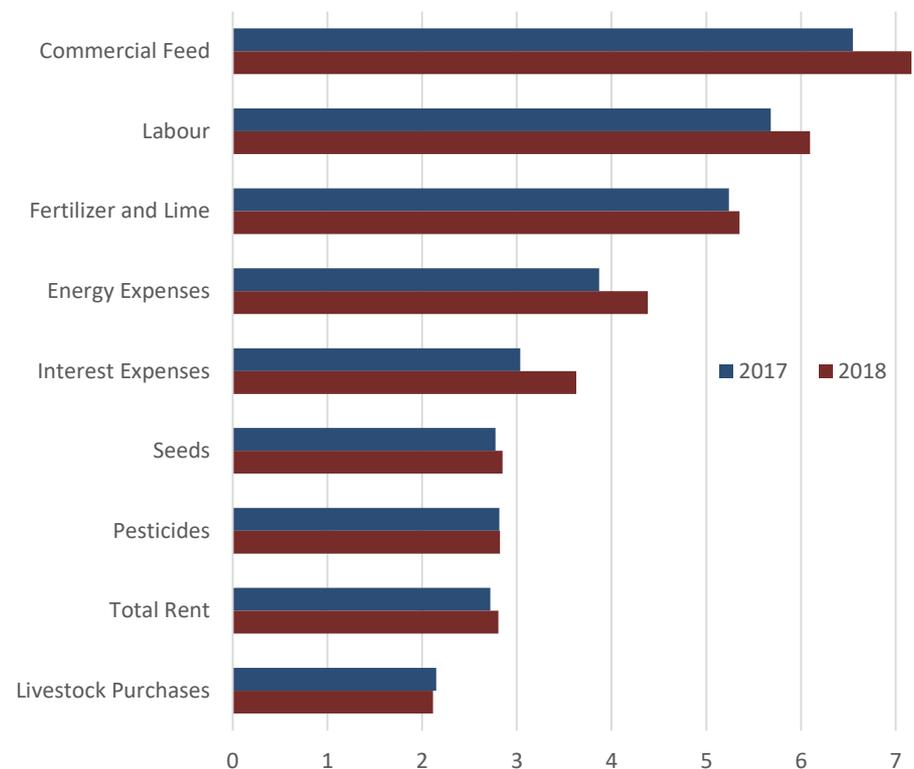
Feed purchases, the largest single expense, increased 9.4 per cent (to \$7.2 billion) in 2018 as low feed grain supplies increased prices.

Labour costs, the second largest expense, also increased in 2018 by 7.3 per cent (to \$6.1 billion). Minimum wage legislation in many provinces resulted in higher wages and increased cannabis production also contributed to the rise.

Energy expenses increased by 13.3 per cent to \$4.4 billion, due to price increases.

Interest expenses increased 19.5 per cent to \$3.6 billion due to higher interest rates and higher debt levels.

Selected farm production expenses (\$billion)



Source: Statistics Canada

From farm to plate

Large in scope, the agriculture and agri-food system is an integrated supply chain making a significant contribution to the Canadian economy.

Key players in this system:

- Input and service suppliers
- Producers (primary agriculture)
- Food and beverage processors
- Food retailers and wholesalers
- Foodservice providers

Federal, provincial and territorial (FPT) governments work within this system to support **primary agriculture** and **food and beverage processing** through our programs and services.

Governments also maintain relationships with suppliers, retailers and others in the value chain.



Agriculture and Agri-Food Canada: Departmental focus

Agriculture and Agri-food Canada's (AAFC) vision is to drive innovation and ingenuity to build a world leading agricultural and food economy that results in benefits for all Canadians.

AAFC supports the sector's competitiveness by focusing on:

- Market growth
- Science and technology advances
- Helping producers mitigate risks

Departmental programs and initiatives target:

- Farmers
- Processors and agri-businesses
- Industry associations

AAFC works with CFIA and Portfolio organizations and agencies. The Minister is responsible for coordinating the portfolio's work to serve the interests of the sector and Canadians. These organizations include:

- The Canadian Dairy Commission
- The Canadian Grain Commission
- Farm Credit Canada
- The Farm Products Council of Canada
- Canada Agricultural Review Tribunal

Mandate Letter Commitments

- Undertaking a review of risk management programs, in collaboration with the provinces and territories, with a special focus on AgriStability.
- Working with the Minister of Finance and farmers on tax measures to facilitate the intergenerational transfer of farms.
- Leading the consolidation of existing federal financial and advisory services currently scattered among several agencies into a new entity, Farm and Food Development Canada.
- Continuing to protect supply-managed agricultural sectors and working with them to develop a vision of the future.
- Drawing on lessons from recent trade disputes and evidence-based research to develop additional capacity to respond to export protections against Canadian agriculture, such as were recently faced by canola, beef and pork producers.
- Leading work across government to move forward with the new Food Policy for Canada.
- Working with the Minister of Economic Development and Official Languages to create a new fund to help producers and processors close the technology and infrastructure gap in order to develop domestic and international markets.

Federal-Provincial-Territorial (FPT) governments collaborate with stakeholders to support the growth and resilience of the sector

Agriculture is a concurrent and shared jurisdiction.

- The federal government has jurisdiction over international and inter-provincial trade and commerce.
- Provinces have responsibility for intra-provincial trade and commerce.
- Food safety enforcement involves federal and provincial functions.
- Both levels of government undertake and support research through universities and partnerships with industry.

Since 2003, FPT governments have entered into four successive five-year agriculture policy frameworks to define the manner, purpose, and context in which governments work together on agricultural issues.

Major innovation, market development, environmental, research support and Business Risk Management (BRM) programs are governed by the current multilateral Canadian Agricultural Partnership agreement.

The agriculture and agri-food sector is seen as having significant potential for economic growth

Canada's ability to help feed a rapidly growing, increasingly affluent global population can **create economic opportunities in Canada.**

“With the correct skills mix, the agriculture sector could add another \$11 billion to Canada's GDP and make the sector more productive than auto manufacturing and aerospace combined”

– Royal Bank of Canada Report, September 2019

The Agri-Food Economic Strategy Table (EST), one of six industry-led tables created to examine barriers to economic growth, has established an ambitious vision:

By 2025, Canada will be one of the top five competitors in the agri-food sector, recognized as the most trusted, competitive and reliable supplier of safe, sustainable, high-quality agri-food products and an innovator in value-added products to feed the dynamic global consumer. We will have a leading digital and technology-based supply chain and stand out as the world's favoured protein provider.

And drivers of change provide real opportunities

- **Global food demand** is expected to increase by 50% as the world's population approaches 10 billion by 2050.
- **Consumers are increasingly interested** in how and where food is produced, and shifts in their purchasing habits create disruptions and opportunities for producers and companies that adapt.
- **Advances in science and emerging digital technologies** will transform production of agricultural and agri-food products.
- **Canada is well positioned** to grow the sector and meet ambitious exports targets, provided key challenges are addressed.
- **Climate change** is already affecting global agriculture productivity, and Canada will need to adapt, help reduce global emissions and ensure sustainable, resilient production.

Canadian agriculture and agri-food is reliant on its ability to export

From the Agri-Food EST:

“For Canada’s agri-food sector to succeed, we need access to global and domestic markets where goods can be traded more freely.”

Canada relies on free trade agreements to provide us with access to markets with two-thirds of global GDP.

Canada works through multilateral institutions, such as the World Trade Organization (WTO), and bilateral discussions to resolve issues.

Our regulations and standards have given Canada **a global reputation for safe and high quality products.**

These factors have allowed Canada to grow its exports, with greater potential on the horizon.

76.6% of Canadian agriculture and agri-food exports are under free trade agreements



Total Agriculture, Agri-Food & Seafood Exports: \$67.1 Billion



| | | | |
|------------------|--------|--------------|--------|
| Oilseed Products | \$1.3B | Dried Pulses | \$0.7B |
| Fish and Seafood | \$1.3B | Red Meats | \$0.7B |
| Oilseed | \$1.0B | Other | \$0.6B |
| Grains | \$0.9B | | |

The current market and production environment has been challenging for the sector

Volatility in global trade from recent disputes (e.g., U.S. and China on soybeans, and China's action on Canadian canola) is affecting commodity prices for producers.

The value of canola exports have fallen by approximately 34% since 2017 due to decreased exports to China. Pork and beef prices have fluctuated significantly over the past year, but have started to rebound.

Canola Seed Exports from 2010 to 2019

| | Exports to China | | Exports to Rest of World | |
|-------------|---------------------|--------------------|--------------------------|--------------------|
| | Volume (kg billion) | Value (\$ billion) | Volume (kg billion) | Value (\$ billion) |
| 2010 | 1.5 | \$0.7 | 6.0 | \$2.7 |
| 2011 | 1.3 | \$0.8 | 6.6 | \$3.8 |
| 2012 | 3.0 | \$1.9 | 5.4 | \$3.3 |
| 2013 | 2.9 | \$1.8 | 4.1 | \$2.5 |
| 2014 | 4.3 | \$2.3 | 5.4 | \$2.9 |
| 2015 | 3.8 | \$2.0 | 5.4 | \$2.9 |
| 2016 | 3.5 | \$1.9 | 7.0 | \$3.7 |
| 2017 | 4.5 | \$2.6 | 7.1 | \$3.9 |
| 2018 | 4.9 | \$2.8 | 5.4 | \$3.0 |
| 2019 | 1.6 | \$0.9 | 6.7 | \$3.4 |

Adverse weather events during fall 2019 created production challenges for producers:

- Early snowfall in Western Canada disrupted the harvest and damaged the quality of some commodities.
- Hurricane Dorian impacted producers in Atlantic Canada damaging silage corn and fruit trees.

Despite current challenges, underlying strengths endure

Sector exports continue to grow.

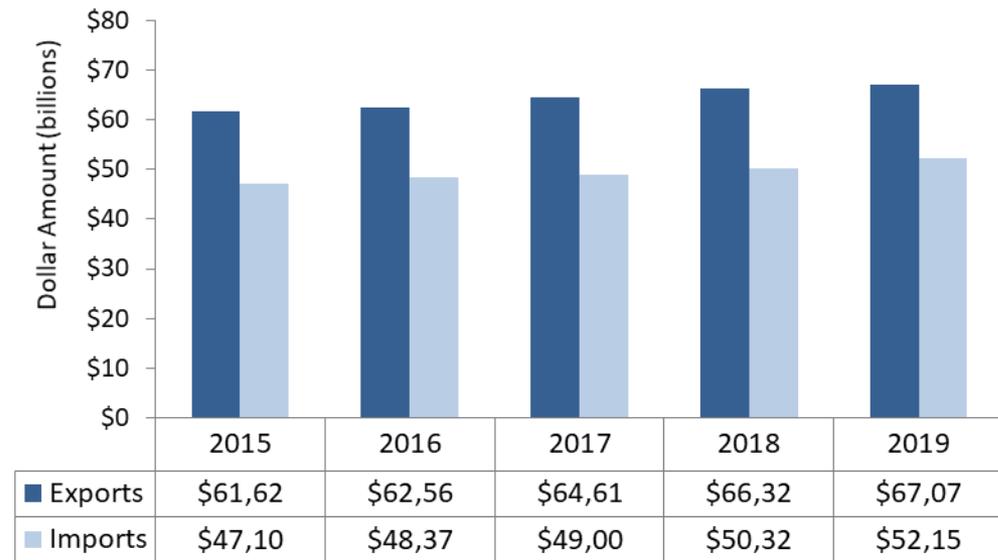
Exports are up 1.1% in 2019 from 2018.

Despite the decline in canola, increased exports of fish and seafood, beef, and pork products have helped increase the value of Canadian exports.

Total food processing sales grew by 12.5% from 2015 to 2018.

Including seafood, agricultural exports in 2019 were valued at \$67.1 billion.

Growth of Canada's exports and imports



Charting a path to continued growth in food and beverage processing

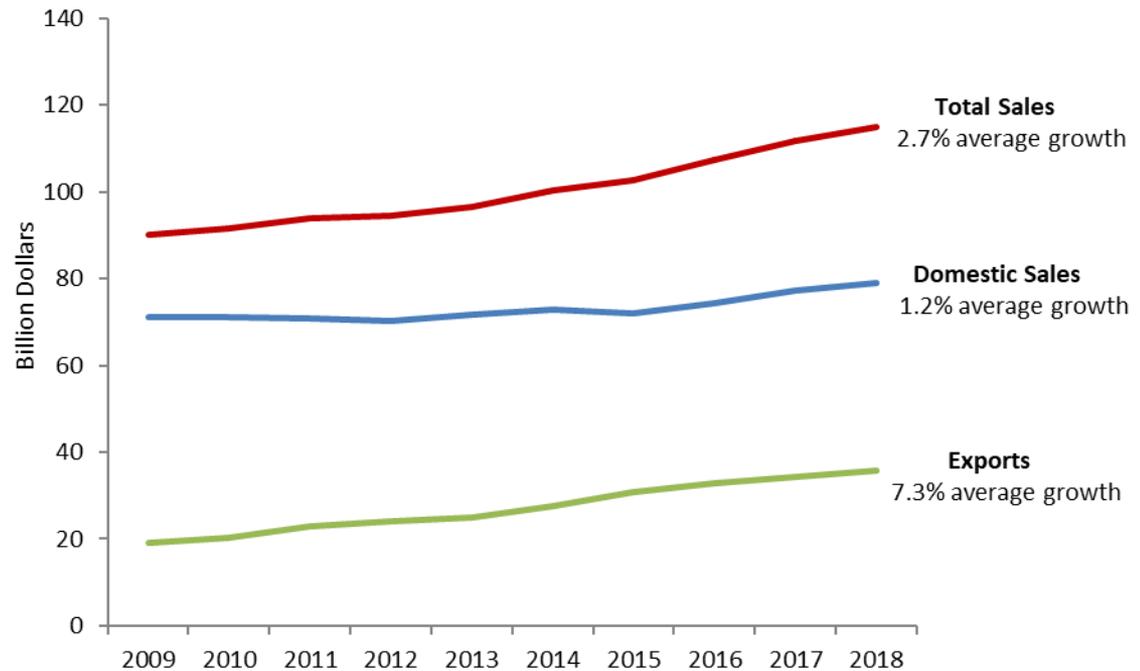
Domestic and international food and beverage processing sales have increased steadily over the past 10 years.

However, processing is viewed as an area of untapped potential because of under-investment.

Processors experience labour productivity challenges and lower profit margins compared to the overall manufacturing sector.

Other major agri-food exporting countries have been more successful in developing their value-added industries.

Canadian Food and Beverage Processing Sales and Exports, 2009-2018



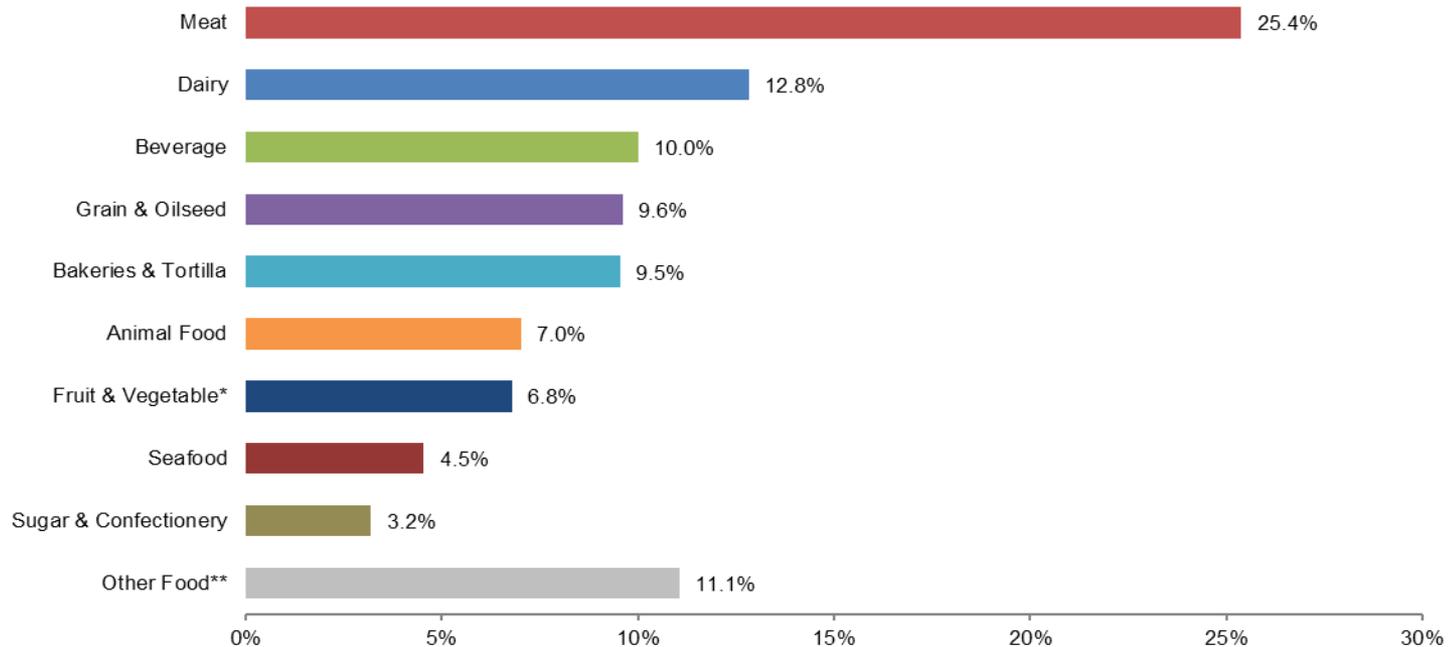
Source: Statistics Canada and AAFC calculations.

Food and beverage processing – Number One in Canada

Largest manufacturing sector in Canada in terms of both GDP and employment -- with plants across the country.

The #1 market for Canadian primary agriculture products, using 42% of primary production.

Distribution of Food and Beverage Processing Shipments by Sub-Industry, 2018



Source: Statistics Canada and AAFC calculations.

Note: Data is preliminary and subject to revisions.

* Fruit and vegetable preserving and specialty food manufacturing.

** Includes snack food, coffee and tea, flavoured syrup and concentrates, seasoning and dressings, and all other food manufacturing.

The new realities of farming

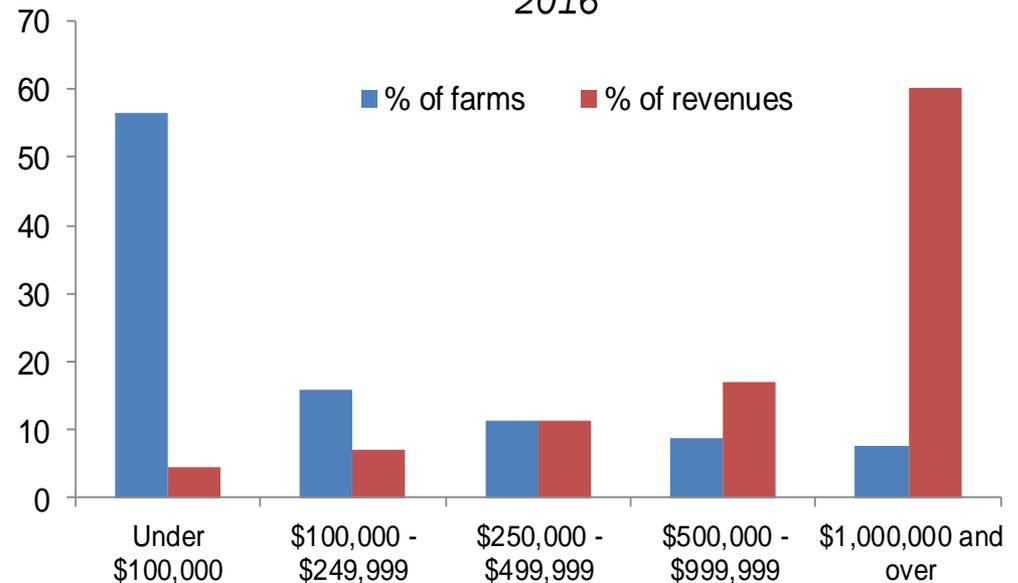
Canadian agriculture has evolved over time in response to challenges, opportunities and market developments.

Over the past 50 years, the number of farms in Canada has decreased by half, average farm size has doubled, and farm value per acre has almost quadrupled.

Today's farm can produce roughly twice as much output as 50 years ago, with the same amount of total input.

Consolidation has led to a small number of very large farms earning the majority of revenues, with the largest 8% of farms accounting for over half of farm cash receipts.

Distribution of Farms and Gross Farm Receipts, Canada, 2016



Source: Statistics Canada, Census of Agriculture, 2016, AAFC custom tables.

Attracting the next generation of farmers

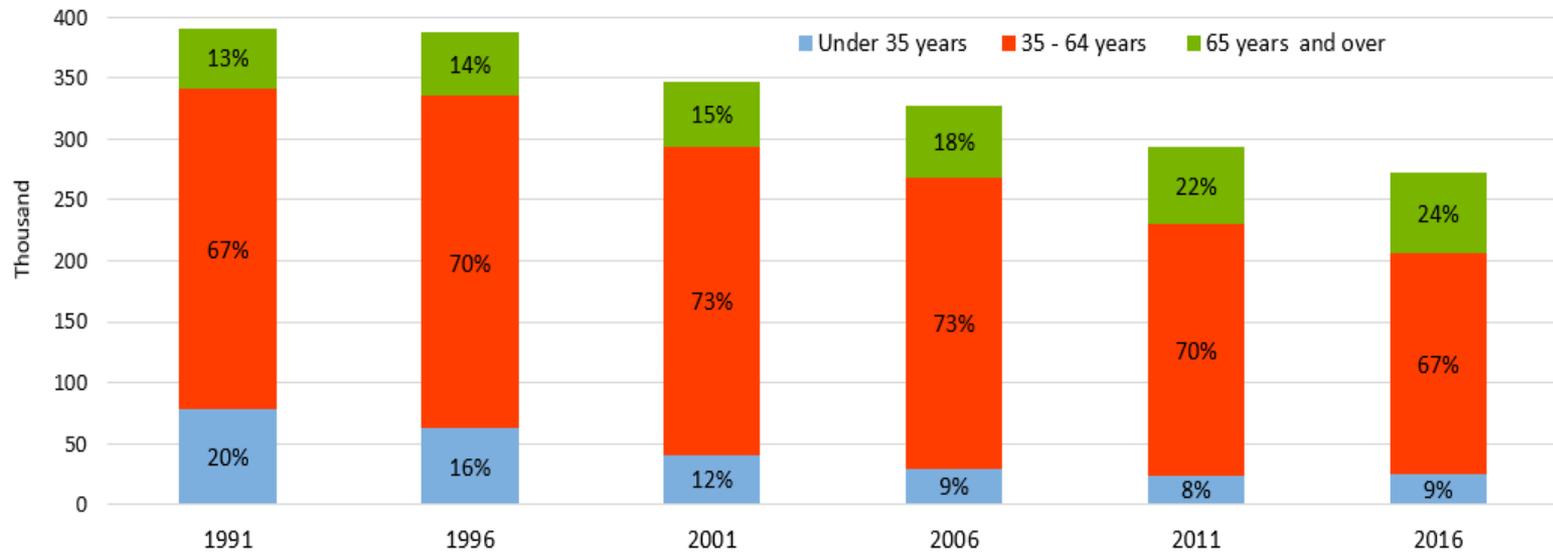
A quarter of farm operators are 65 and over, a steady increase in age over the past 25 years.

In 2016, only 7% of farms were operated by women only, and 33% by both men and women.

The proportion of new Canadians operating farms has decreased to 8.7% in 2016.

Over the past 20 years, operators who self-identified as Indigenous increased only slightly to 1.9%.

Number of farm operators by age group, Canada, 1991 to 2016



Source: Statistics Canada, 2016 Census of Agriculture, AAFC calculations.

Labour is a key factor affecting the sector's growth

The majority of jobs are considered low-skilled and pay lower wages than in other sectors.

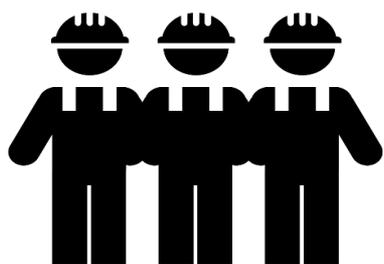
While increasing use of automation in both the primary and processing sectors has the potential to reduce the need for low-skilled labour, high vacancy rates and an aging workforce are challenges for industry growth.

The use of temporary foreign workers (TFW) has been steadily increasing, particularly in primary agriculture. TFWs accounted for about 19% of the agricultural workforce in 2018.

The national agriculture job vacancy rate is 7% and continues to grow: for example, meat packers have a 12% vacancy rate -- 7,300 positions.

The launch of several new federal immigration pilots are expected to address critical labour shortages in agri-food and rural communities.

Primary Agriculture employs:

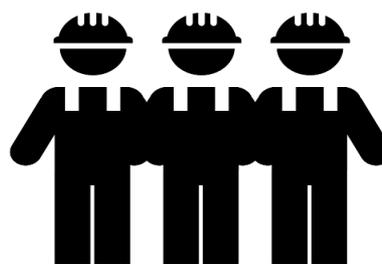


277,200
people



Sector employment
declined by 16% between
2008 and 2018.

Food and Beverage Manufacturing employs:



298,200
people



Sector employment
increased by 1.43%
between 2008 and 2018.

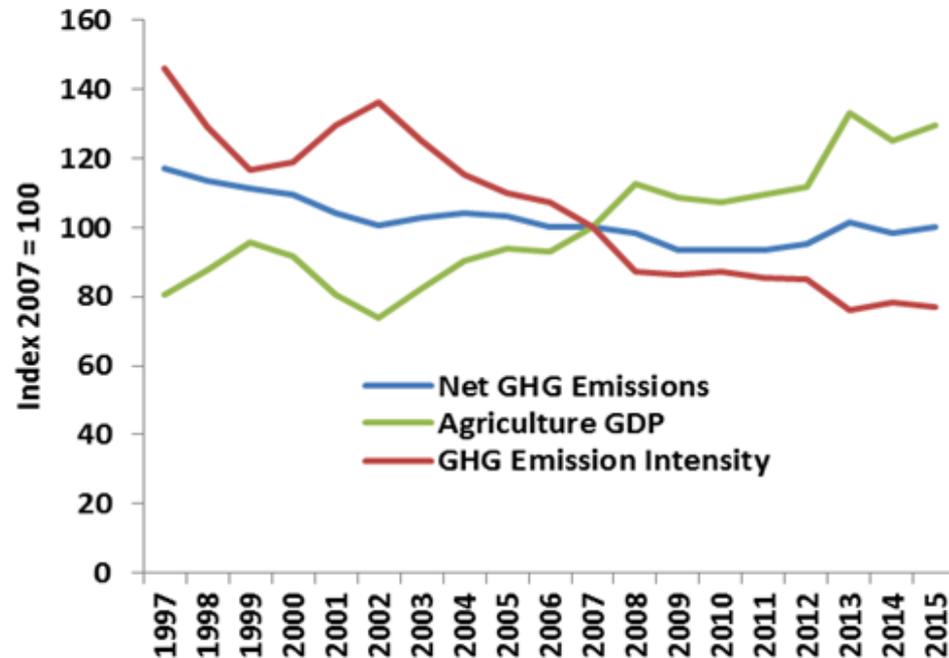
Agriculture sector has shown leadership on climate

The sector has made progress in reducing greenhouse gas (GHG) emissions intensity and storing carbon in soils.

While production has increased significantly, total emissions from the sector have been relatively stable for twenty years, resulting in a decrease of GHG emission intensity (GHG/\$GDP) of 50% from 1997 to 2017 compared to a 36% decrease for the Canadian economy as a whole over the same period.

Due to adopting soil conservation practices (e.g., no-till and crop rotations), **agricultural soils in Canada have been sequestering carbon** for twenty years, particularly in the prairie provinces.

In terms of GHG emissions intensity, Canada is among **better performing countries** worldwide, notably in terms of its carbon footprint for beef and milk production, and its net carbon sink.



GHG Emission Intensity (GHG per \$ agricultural GDP)
50% reduction since 1997.

Climate Change Impacts

Climate change can exacerbate current environmental issues and introduce new challenges, for example:

- Changes in precipitation and extreme weather can increase soil erosion.
- Increased heat waves can impact crop yields and heat stress livestock, and increase greenhouse gas emission intensity.
- Pest and diseases outbreaks will become more prevalent, impacting farmers, livestock, crops, and increasing pesticide use.

Despite risks and uncertainties current trends and international scientific research suggests there may be some opportunities in northern latitudes:

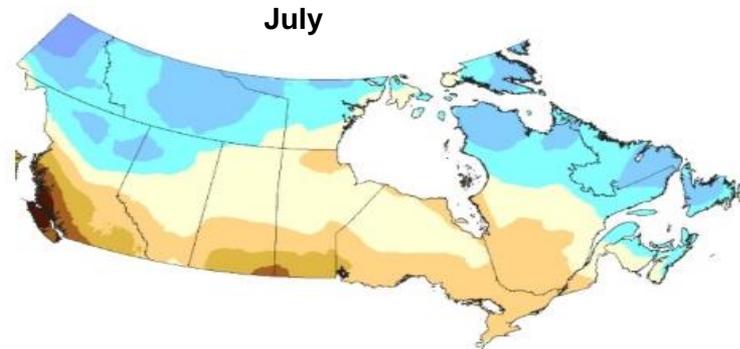
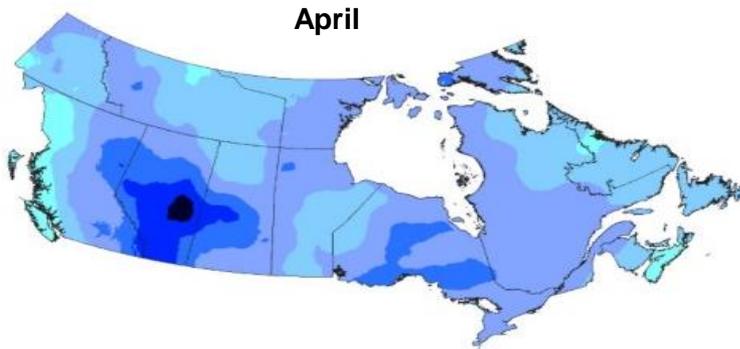
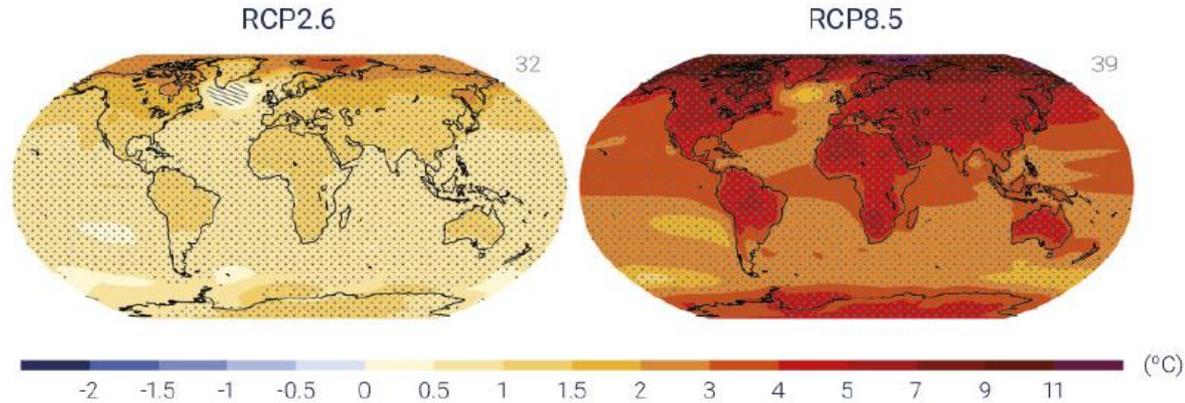
- Warmer and longer growing seasons can provide opportunities to increase crop production further north, as soils permit.
- Warmer winter and spring temperatures could benefit livestock growth and reduce energy use and costs, for example in beef production.

Globally, climate change is expected to negatively affect both crop and livestock production in most regions (OECD 2016)

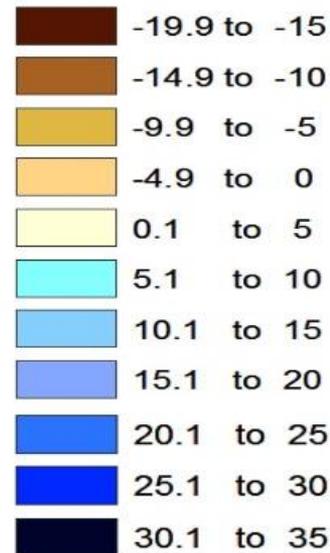
- In this context, Canada's geography and relative abundance of water should leave us well positioned to meet growing global demand.

Climate Change Impacts

Change in average surface temperature (1986–2005 to 2081–2100)



Precipitation Change (%)
(Relative to 1981–2010)



Wetter springs may delay seeding dates and increase risk of flooding

While drier summers would increase irrigation demand and reduce yields

Promise and potential

Agriculture is one of the sectors with the highest economic growth potential in Canada.

Demand is growing for the kinds of food that Canadian farmers and processors can deliver – meats, grains, oilseeds, fruits, vegetables, pulses and processed foods.

Canada has some key advantages that will make us a leader in sustainable food production:

- abundant land and water resources;
- access to international markets;
- strong R&D capacity;
- strong global reputation as a trusted supplier of safe, top-quality food

Together, these advantages create a powerful brand for Canadian food.