AGRI-LMI
LABOUR MARKET INFORMATION

Agriculture Forecast to 2029

How Labour Challenges Will Shape the Future of Agriculture in Canada

A widening gap between the labour requirements and the available domestic workforce for Canada's agriculture sector* will create challenges for this vital part of the country's economy in the years ahead.

Introduction

The agriculture and agri-food sectors, which include primary agriculture, aquaculture, food and beverage processing, input and service suppliers, food distribution, retail, wholesale, and foodservice industries, are a major economic force in Canada. These sectors employ over two million Canadians and account for one in eight jobs in the Canadian economy, or 12% of total Canadian employment. They contribute over $122 billion dollars annually, or 6.3% of Canada's GDP[1], and as demand for Canadian food and agriculture products increases worldwide, this contribution to the economy is expected to grow.

The primary agriculture sector includes 11 key agricultural industries: 'apiculture', 'aquaculture'; 'beef'; 'dairy'; 'field fruit and vegetable'; 'grain and oilseed'; 'greenhouse, nursery, and floriculture'; 'poultry and egg'; 'sheep and goat'; 'swine'; and 'tree fruit and vine'. Without a thriving primary sector, the entire agri-food value chain is at risk.

However, this sector faces labour challenges that threaten its continued growth. The area of greatest concern to agricultural employers and sector stakeholders is the persistent lack of workers, especially workers with the right skills who are in areas where agricultural jobs are located.

In 2017, Canada's agricultural sector was unable to find enough workers, and 16,500 jobs went unfilled as a result of labour shortages. Those shortages resulted in production losses and delays, as well as $2.9 billion in lost sales.

[1] See CANSIM table 36-10-0434-01.

* The Labour Market Information data classifies Canada's agriculture sector into 11 commodity areas: 1) 'apiculture'; 2) 'aquaculture'; 3) 'beef'; 4) 'dairy'; 5) 'field fruit and vegetable'; 6) 'grain and oilseed'; 7) 'greenhouse, nursery, and floriculture'; 8) 'poultry and egg'; 9) 'sheep and goat'; 10) 'swine'; and 11) 'tree fruit and vine'.

In 2017, Canada's agriculture sector employed 348,560 people.

The agriculture sector was unable to fill **16,500 jobs**, which cost it **$2.9 billion**, or **4.7%** of sales.

By 2029, the sector will have **123,000** more jobs than the domestic labour force can fill.

Between now and 2029, Canada's agriculture sector is predicted to enjoy robust productivity growth and a growing demand for labour. However, the sector's domestic labour supply is predicted to shrink during that time, which will almost double the labour gap and create even greater labour challenges in the years ahead.

Labour Trends

Between 1997 and 2017, Canada's agriculture sector saw the strongest productivity gains of any major sector in the country.

Towards the latter half of this period, Canada's agriculture sector underwent significant changes, with a trend towards consolidation that resulted in a smaller number of much larger farms. The product mix for the agriculture sector also changed, as farm operators responded to changing market conditions and leveraged technology to maximize the value of Canada's arable land. In addition, the sector saw a rapid

rise in productivity during this time, with farm operators producing far more output today with fewer workers.

The effects of farm consolidation and higher productivity helped to reduce the need for labour; as a result, the sector's labour demand declined between 2007 and 2017, falling by an estimated 0.7% per year. However, because the supply of domestic workers fell even more rapidly, the sector's labour gap has steadily widened. In 2007, the sector had over 31,500 more jobs than the domestic agricultural workforce could fill; by 2017, that figure had doubled to 63,000.

To address these labour shortages, Canada's agriculture sector has relied increasingly on foreign workers. In 2017, the sector filled over three-quarters of its labour gap with this labour source, and more than one in six people in Canada's agricultural workforce (17%) were foreign workers. Still, the sector was unable to fill 16,500 jobs in 2017, which is equivalent to 5.4% of the sector's workforce. This inability to fill agricultural jobs cost the sector $2.9 billion in lost sales, or 4.7% of sales, and had other significant consequences. Our survey showed that of producers who could not find enough workers, 87% experienced excessive stress for owner and other staff, 57% experienced production delays, and 55% experienced production losses. Labour shortages also affect the future growth of Canada's agriculture sector, with 46% of these producers reporting that they delayed or cancelled expansion plans due to the lack of available labour.

Labour Forecast

Between now and 2029, a growing global market for Canada's agricultural products is expected to increase the demand for labour. In particular, the rising global demand for food, especially animal protein, will be a key growth driver. In addition, the sector's strong productivity growth is expected to slow over the forecast period, which will further increase the demand for labour. Overall, labour demand for Canada's primary agriculture sector is expected to grow by an average of 0.5% per year over the forecast period.

At the same time, the size of the workforce is expected to shrink, mainly due to the rising number of retirements and fewer younger workers entering the labour force. While every sector in Canada will be impacted by the aging workforce, the agricultural labour force is considerably older than the average. In fact, over 17% of agricultural workers are over the age of 65, compared to 4% of the general labour force. The sector is expected to see 112,200 workers retire between 2018 and 2029, which is equivalent to 37% of the current agricultural workforce, or more than one in three workers.

A shrinking number of young workers leaving school will be another key factor limiting the sector's labour supply in the years to come. The number of Canadians aged between 15 and 24 years is expected to decline noticeably in the next half decade, falling from a high of 4.5 million people in 2018 to about 4.3 million in 2024 before a slight rebound in the remaining years of the forecast. The share of the young population relative to total in Canada will fall from 12.3% in 2018 to just 10.8% by 2029. Moreover, this trend will be widespread, with nearly all provinces expected to record a decline in population in that cohort over this period. Alberta and Saskatchewan

will be the only exceptions. Even there, it is likely that the greater number of younger workers in those provinces will be located in urban areas and not close to agricultural operations. The end result will be fewer people leaving school and looking for work than we have become accustomed.

As a result of these demographic forces, the sector's labour gap is expected to double, putting nearly 123,000 jobs at risk of going unfilled by 2029. This is equivalent to 32% of the total demand for labour, or roughly one in three jobs.
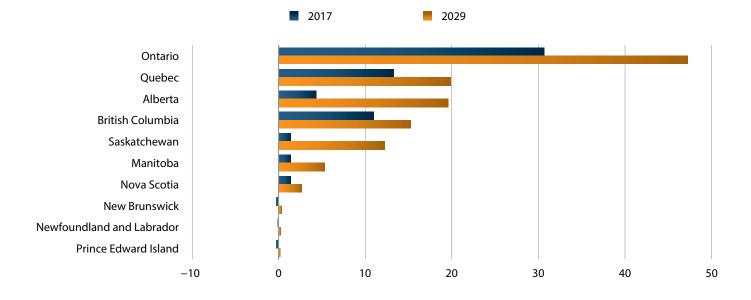
Canada's Agriculture Sector Faces a Widening Labour Gap

Provincial Overview

The labour gap will affect each province differently, with Ontario expected to see approximately 47,300 jobs at risk by 2029. This is the largest share of any province, and more than double that of Quebec, the province with the second-largest share. However, Alberta has one of the fastest growing gaps; between 2017 and 2029, it will more than quadruple in size, rising from 4,400 jobs to 19,600. British Columbia and Saskatchewan will both see more moderate shares of the labour gap, with a respective 15,200 and 12,300 jobs potentially going unfilled. At the other end of the spectrum, New Brunswick and Newfoundland and Labrador are expected to have a negligible labour gap.

Labour Gap by Province

Legend: ■ 2017 ■ 2029

Provinces (top to bottom): Ontario, Quebec, Alberta, British Columbia, Saskatchewan, Manitoba, Nova Scotia, New Brunswick, Newfoundland and Labrador, Prince Edward Island

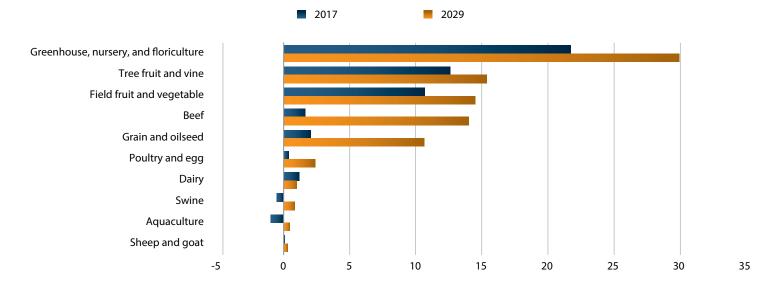X-axis: −10, 0, 10, 20, 30, 40, 50

Commodity Overview

Each commodity group will experience a labour gap to a different degree. The 'greenhouse, nursery, and floriculture' industry will continue to have the largest labour gap. With 29,900 more jobs than available domestic workers by 2029, this commodity group will account for one third of the sector's labour gap. Other horticultural commodities will also continue to experience significant labour gaps. However, 'grain and oilseed' producers and 'beef' producers will see the largest increases in their labour gaps, in addition to accounting for much of the increase in the labour gap for the sector as a whole. The other commodity groups will generally be impacted less acutely, although these gaps are still sizeable relative to the total demand for labour. By contrast, the 'dairy' industry will account for a small share of the gap. Moreover, the 'dairy' industry is also expected to have the most balanced labour market over the forecast period, with a labour gap equivalent to just 3% of total demand for workers.

Labour Gap by Commodity

Legend: ■ 2017 ■ 2029

Commodity	2017	2029
Greenhouse, nursery, and floriculture	~22	~30
Tree fruit and vine	~12.5	~15.5
Field fruit and vegetable	~11	~14.5
Beef	~1.5	~14
Grain and oilseed	~2	~11
Poultry and egg	~0.5	~2.5
Dairy	~1.5	~1
Swine	~-0.5	~1
Aquaculture	~-1	~0.5
Sheep and goat		~0.3

(x-axis: -5 to 35)

Meeting the Challenge

Canada's agriculture sector must navigate a future in which a strong production outlook and a growing need for labour coincides with a shrinking domestic labour pool. Looking ahead to 2029, the sector faces a situation in which domestic workers will not be available to fill 32% of its jobs. In other words, roughly one in three agricultural jobs could be at risk of going unfilled.

Given that in 2017, a labour gap equivalent to just 17% resulted in lost sales of $2.9 billion, this reality could significantly impact the sector's profitability and growth potential.

The agriculture sector faces a unique combination of labour challenges:

- The sector has the second-highest voluntary turnover rate of any Canadian sector; in 2018, the voluntary turnover rate was estimated at 10.3%, which is well above the average voluntary turnover rate of 7.1% across all sectors in Canada.

- The sector's ability to recruit and retain workers is hindered by issues such as seasonality and variability in hours, rural locations of many agricultural operations, competition with other sectors for workers, the physical nature of the work, and the lack of workers with the right skills and experience.

- An older-than-average agricultural workforce is expected to reduce the size of the agricultural workforce, with 112,200 workers (or 37% of the total workforce) expected to retire between 2018 and 2029.

- Every province except Alberta and Saskatchewan will see a shrinking number of young people; even there, it is likely that the greater number of younger workers in those provinces will be located in urban areas and not close to agricultural operations.
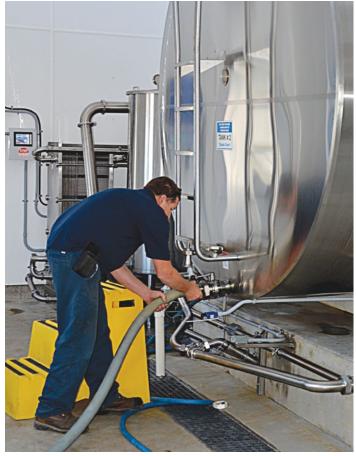
These challenges are significant and require a coordinated effort on the part of agricultural employers, government ministries, educational institutions, sector councils, and other stakeholders. The sector data collected and analyzed by the LMI identified potential solution areas that align with the findings of the Workforce Action Plan, a roadmap published by the Labour Task Force after extensive consultation with industry stakeholders, including commodity value-chain roundtables, industry associations, educational institutions, and agriculture and agri-food businesses.

The key solution areas identified by industry stakeholders through the Workforce Action Plan include:

- Improve access to foreign workers to supplement the dwindling domestic workforce and enable employers to meet the labour needs of highly seasonal operations.

- Attract more domestic workers by promoting the vast number and types of agricultural jobs available across Canada and delineating clear career pathways to job seekers, students, and educators.

- Increase awareness of agriculture careers and enhance recruitment and retention efforts with a collective career-promotion and training tool for job seekers, students, and educators.

- Enhance worker knowledge and skills by improving the availability and accessibility of learning options, especially in rural areas where agricultural operations tend to be located.

- Align training resources with workplace needs and support on-the-job training requirements to ensure that today's students can meet tomorrow's needs.

- Improve human-resource management by giving managers and supervisors the support, knowledge, and training they need to enhance recruitment, employment, and retention efforts.

To read the accompanying report, or to access additional provincial, commodity, or national fact sheets and reports, please visit www.AgriLMI.ca.

About This Fact Sheet

The data cited in this fact sheet is based on an update to the Labour Market Information (LMI) study that the Canadian Agricultural Human Resource Council (CAHRC) undertook between 2014 and 2016. Information was collected by modelling labour demand and supply by province, commodity, and occupation; conducting a survey of more than 1,700 sector stakeholders; and validating the results through webinars as well as an advisory group presentation.

The study was initiated by the Canadian Agricultural Human Resources Council (CAHRC), a national, nonprofit organization focused on addressing human resource issues faced by agricultural businesses across Canada. For more information about the Council and its products and services for Canada's agriculture sector, please visit www.cahrc-ccrha.ca.

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