



# How Labour Challenges Will Shape the Future of the 'Greenhouse, Nursery, and Floriculture' Industry:

*Agriculture Forecast to 2029*



Canada's agriculture sector faces unique labour market challenges in the coming years, and so will the 'greenhouse, nursery, and floriculture' industry. This report explores some of the workplace trends and realities that will shape this industry between now and 2029.



## Industry Overview

The 'greenhouse, nursery, and floriculture'\* industry is the largest agricultural employer, and the third most reliant on foreign workers. Over the next decade, the industry faces a shrinking pool of domestic workers, a growing need for workers, and heavier financial losses due to labour shortages.

The 'greenhouse, nursery, and floriculture' industry includes farms that produce nursery crops and trees, flowers and ornamental plants, or crops of any kind grown under cover (including mushrooms). The industry can be subdivided into two segments, including floriculture and ornamental horticulture operations, and food-crop operations.

In 2017, the 'greenhouse, nursery, and floriculture' industry employed 52,000 people, or roughly 15% of the total agricultural workforce, making it the largest employer in the sector. Jobs in this industry tend to be highly seasonal and labour intensive, with many products requiring hand picking and packaging. As a result, this industry has one of the heaviest reliance on foreign workers of any industry in the agriculture sector, with foreign workers accounting for 40% of the industry's workforce. Even with a high percentage of foreign workers, the industry was unable to fill 2,800 jobs in 2017.

The industry's workforce is geographically concentrated, with 48% of the total workforce located in Ontario, 22% located in British Columbia, and 12% located in Quebec.

Strong growth in foreign markets for 'greenhouse, nursery, and floriculture' products will support strong production growth over the next decade. While productivity is predicted to grow steadily during this time, the industry will still need a larger workforce to meet production targets and avoid lost sales. However, the supply of domestic workers is actually projected to shrink during the next decade, which will widen the labour gap and threaten the industry's growth.

\*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'.

### *The 'greenhouse, nursery, and floriculture' industry at a glance*

#### **In 2017:**

- 52,000 people employed
- 40% foreign workforce
- 2,800 jobs left unfilled
- 103 million in lost sales due to labour shortages

#### **In 2029:**

- 3,500 fewer domestic workers available
- 36% of the workforce lost to retirement
- 29,900 more jobs than the domestic workforce can fill



## Production Trends

While industry productivity levels are predicted to rise, a growing global market for Canada's 'greenhouse, nursery, and floriculture' products will require the industry to grow its workforce in order to increase output and keep up with the demand. After a period of stable productivity between 2007 and 2017, the industry's productivity levels (the amount of output each worker can produce) are predicted to increase by 1.6% per year between 2018 and 2029.

However, these productivity gains alone are not enough to meet the strong global demand for industry products. While the level of output for the 'greenhouse, nursery, and floriculture' industry fell an average of 1.0% per year between 2007 and 2017, the strong global demand for this industry's products will reverse this trend in the coming decade. Production levels are expected to increase by 2.3% per year between 2018 and 2029, which means the



### RESEARCH HIGHLIGHTS

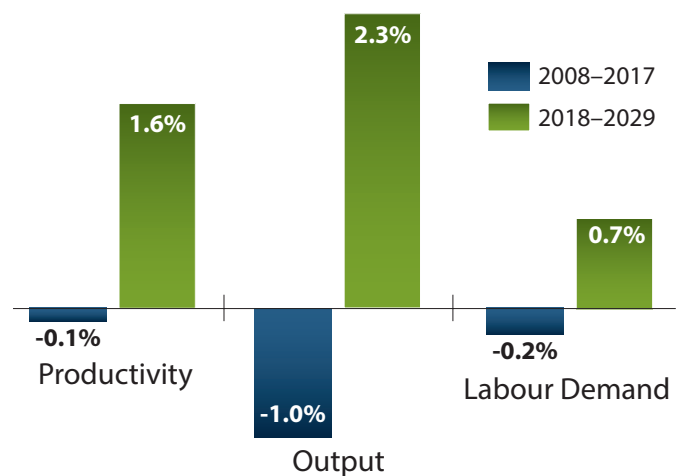
- **53%** of 'greenhouse, nursery, and floriculture' producers were not able to find all the workers they needed in 2017, compared to 47% for all agriculture.
- **58%** of 'greenhouse, nursery, and floriculture' producers expect employment at their farm to rise over the next five years, while only 24% expect to see a decline.

'greenhouse, nursery, and floriculture' industry will see above-average growth relative to the overall agriculture sector.

To achieve the level of output required to meet the market demand for industry products, the industry will need to increase its workforce to 59,500 workers, which means it will need to fill an additional 4,700 jobs by 2029. This is a growth rate of 0.7% per year over the forecast period.

### Productivity, Output, and Labour Demand Trends

(average annual percentage change)



## Labour Forecast

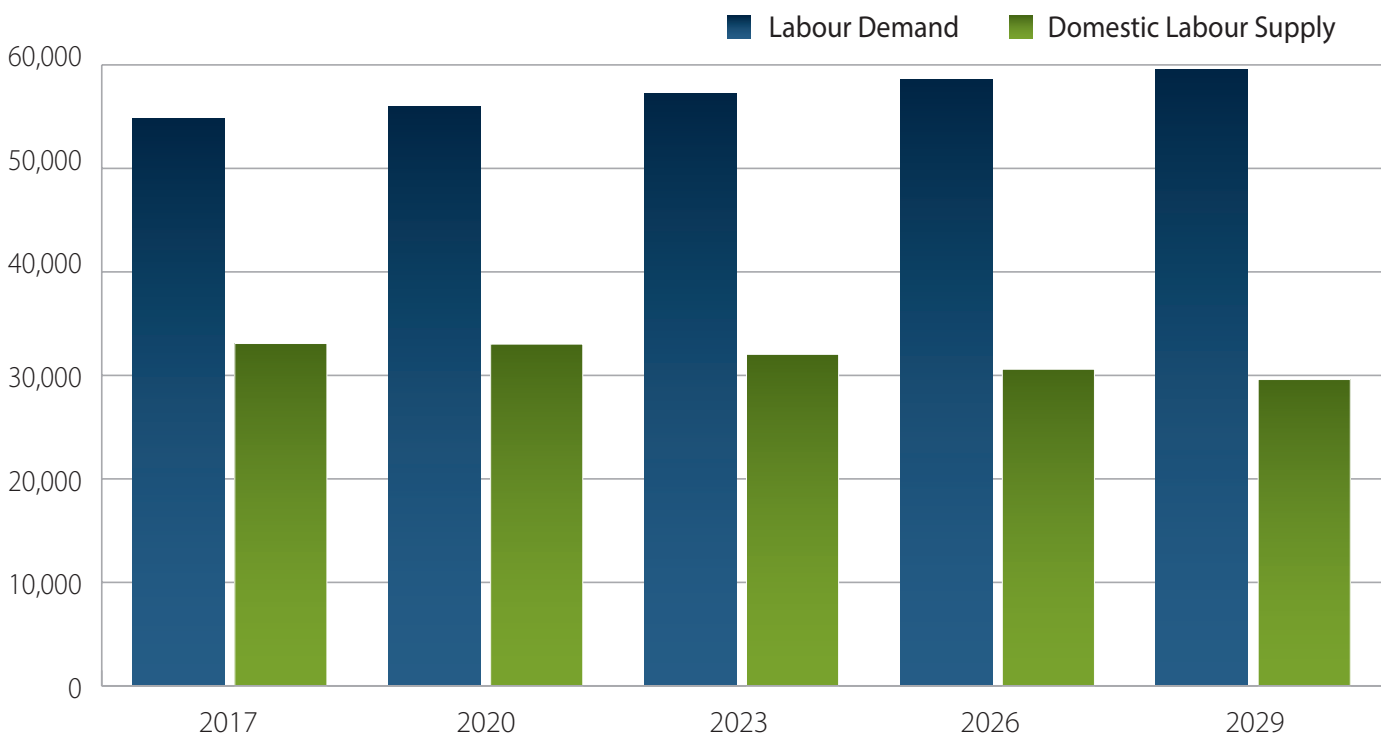
While the market demand for product and the industry's demand for labour will steadily rise, the labour force is predicted to shrink, resulting in a widening labour gap and an increased risk that the industry will miss productivity targets and lose sales. After a period of decline in the first decade of the 2000s, the 'greenhouse, nursery, and floriculture' workforce has rallied. With 52,000 self-employed, paid labour, and foreign worker positions supporting the industry in 2017, it is the agriculture sector's largest employer.

The number of jobs required to support the industry's production requirements is expected to grow by an average of 0.7% per year between 2018 and 2029.

While the industry needed 54,800 workers in 2017, the need will grow to 59,500 workers by 2029, which amounts to 4,700 additional jobs to be filled.

Over the same time period, the supply of domestic workers is expected to shrink, with 3,500 fewer Canadian residents available to work in the industry by 2029. As the need for workers grows and the pool of available domestic workers shrinks, the industry's labour gap will widen. In 2017, 21,700 jobs were either filled by foreign workers or left vacant due to labour shortages, and that number will rise to 29,900 jobs in 2029, which is equivalent to 50% of the total workforce needed. As a result, the industry is at risk of missing its production potential and losing sales.

### The Labour Gap Widens for the 'Greenhouse, Nursery, and Floriculture' Industry



## Regional Trends

While every region in the 'greenhouse, nursery, and floriculture' industry will face labour shortages, Ontario will be most seriously affected. Ontario accounts for the largest share of 'greenhouse, nursery, and floriculture' workers, with 48% of all industry workers located in this province. In addition, Ontario has the highest concentration of industry workers, with over one-quarter (26%) of all agricultural workers employed by this industry.

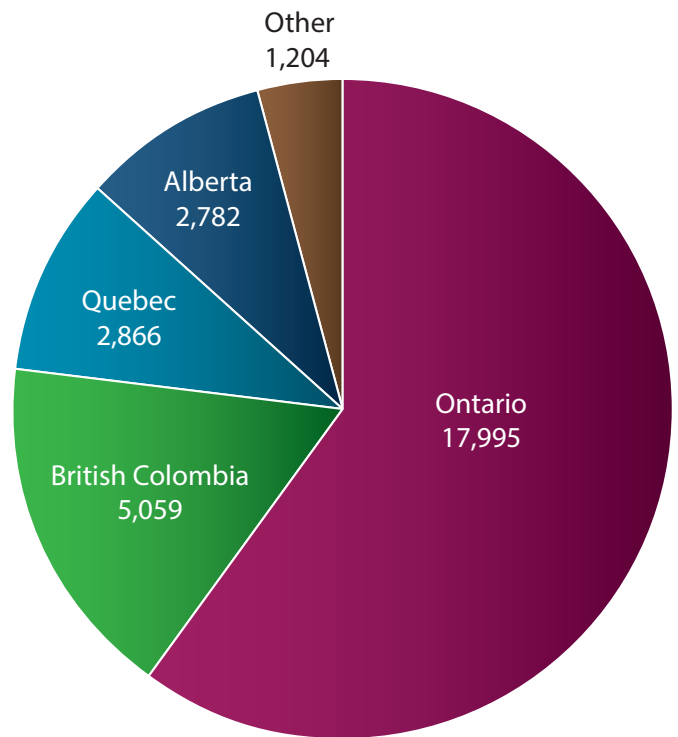
As the gap widens between the number of jobs waiting to be filled and the number of domestic workers available to fill them, Ontario's 'greenhouse, nursery, and floriculture' industry will be hit the hardest by labour shortages.

Between 2017 and 2029, approximately 4,300 additional jobs will become available in Ontario that can't be filled by the available domestic workforce. This means that more than three-fifths of the province's 'greenhouse, nursery, and floriculture' jobs (62%) will either be filled by foreign workers or go unfilled, much higher than the national ratio of 50%.

Ontario's 'greenhouse, nursery, and floriculture' operators are already heavily reliant on foreign workers to stay productive. In 2017, they hired 13,500 foreign workers, which represented just under two-thirds of all foreign workers employed within this industry. To fill the growing labour gap,



## Number of Industry Jobs at Risk by 2029



Ontario's reliance on foreign workers will continue to grow over the next 10 years.

## Demographic Trends

A high number of retirements will erode the available workforce between 2018 and 2029.

The supply of domestic labour for the 'greenhouse, nursery, and floriculture' industry has shrunk from 40,900 in 2007 to 33,100 in 2017. Over the next 10 years, this labour force will continue to shrink in every province, and retirement will be a key factor.

In fact, the industry is expected to see 11,900 retirements between 2018 and 2029, a number equivalent to 36% of the current workforce. However, this is still below the average for the entire agriculture sector, where 37% of the current workforce is expected to retire between 2018 and 2029.



## Financial Impact

In 2017, labour shortages impacted 'greenhouse, nursery, and floriculture' more heavily, in percentage terms, than most other agriculture industries. As the supply of domestic labour dwindles over the next decade, the costs will climb even higher.

An inability to fill 2,800 vacancies, which is equivalent to 8.3% of the total jobs needed to support the 'greenhouse, nursery, and floriculture' industry, cost the industry \$103 million in lost sales in 2018. This represents 5.9% of total sales. By comparison, the average across all agricultural industries was 4.7%.

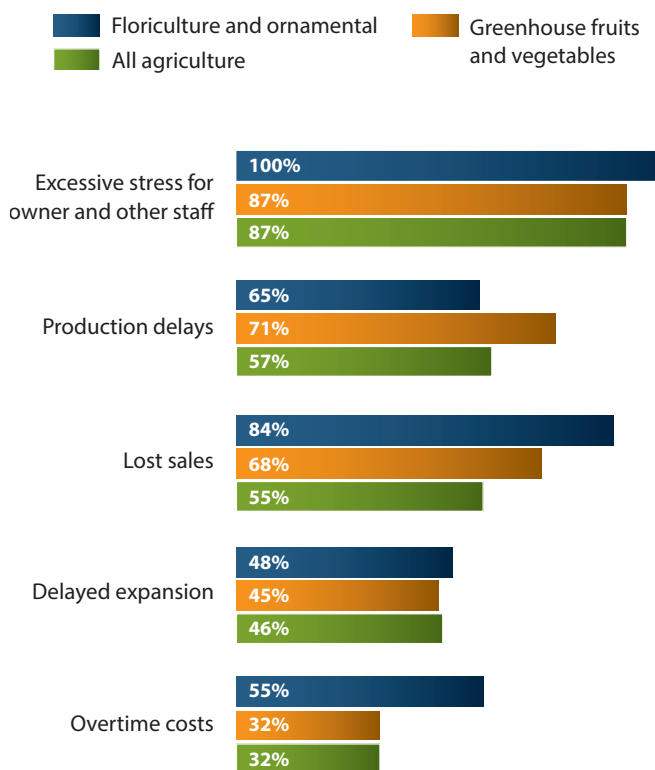
However, lost sales were not the only financial impacts that the labour gap caused. Of 'greenhouse, nursery, and floriculture' producers who reported labour shortages, 92% of respondents reported that labour shortages caused excessive stress for owner and other staff, while 72% said they caused production losses, and 70% said they caused production delays.

Overtime costs were another outcome of labour shortages, particularly among floriculture and ornamental producers. Of floriculture and ornamental producers who reported labour shortages, over half (55%) cited overtime costs, compared with 32% of greenhouse fruit and vegetable producers, and 32% of producers across all agricultural industries.

Labour shortages don't just impact the industry today, they also limit its future growth by preventing or delaying expansion plans. Just under half (45%) of 'greenhouse, nursery, and floriculture' producers impacted by labour shortages reported delaying expansion due to these shortages.

As the labour gap widens, these financial impacts could cost the industry significantly more in dollar terms and inhibit its ability to grow to its full potential.

## Impacts of Labour Shortages



\*Based on the responses of 31 greenhouse fruit and vegetable and 31 floriculture and ornamental operators who reported not having access to all needed workers.



## Labour Challenges

The 'greenhouse, nursery, and floriculture' industry employers face specific challenges in recruiting and retaining enough workers.

The ability of the 'greenhouse, nursery, and floriculture' industry to find and retain enough workers is impeded by perceptions of low wages, the high seasonality and variability in hours, and the physical work involved.

### Recruiting Workers

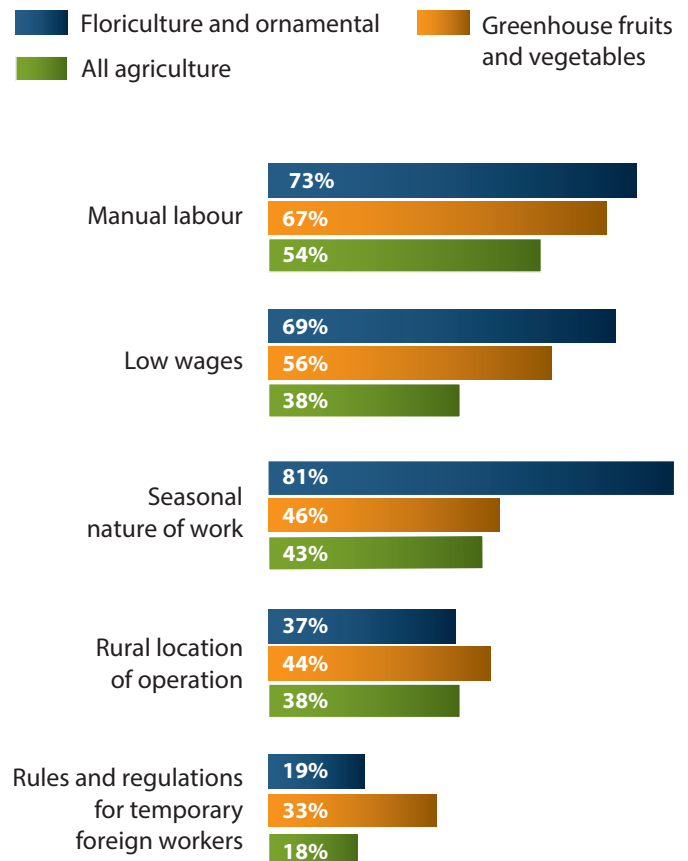
The 'greenhouse, nursery, and floriculture' industry is affected by many of the same recruitment issues facing the agriculture sector as a whole. However, it also faces a number of unique barriers. Employers are much more likely to cite perceptions of low wages as a recruitment barrier. Indeed, 62% cited it a recruitment problem, compared to 38% of producers across Canada. This represents the highest share of employers reporting this barrier among surveyed industries.

Manual work was another key barrier to recruitment, with 70% of 'greenhouse, nursery, and floriculture' producers identifying it as an impediment to hiring, well above the 54% of employers across agricultural industries.

On a positive note, industry employers were less challenged with finding workers with the right skills and experience. Of the industry employers surveyed, 6% reported a lack of essential skills impeded recruitment, while 15% cited a lack of experience in the sector. This compares with a respective 13% and 30% of agricultural employers across Canada.



## Challenges in Recruiting Workers



\*Based on the responses of 61 greenhouse fruit and vegetable and 67 floriculture and ornamental operators.

### Retaining Workers

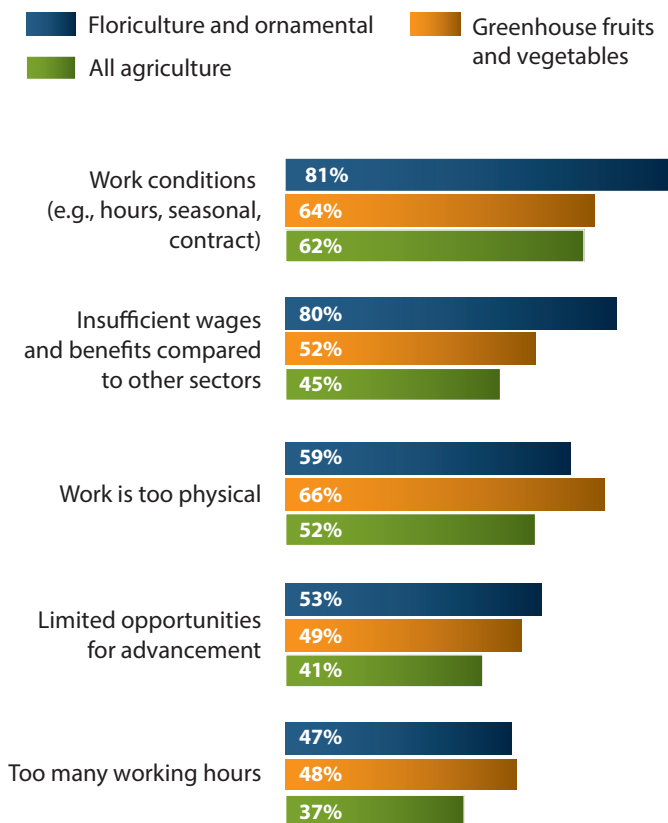
The 'greenhouse, nursery, and floriculture' industry has difficulties retaining workers. While the industry has an involuntary turnover rate that is on par with the national sector average of 2.5%, it has the third-highest voluntary turnover rate among agricultural industries, at 15.8%, which is well above the national sector average of 10.3%. It is interesting to note that voluntary turnover was higher for greenhouse fruit and vegetable producers, at 18.8%, compared with 12.2% among floriculture and ornamental producers.

The variability in hours, including seasonality and long hours in season, is the key factor contributing to retention challenges for this industry. In fact,





## Challenges in Retaining Workers



\*Based on the responses of 61 greenhouse fruit and vegetable and 64 floriculture and ornamental operators.



the 'greenhouse, nursery, and floriculture' industry has one of the most pronounced seasonal patterns within agriculture. At its seasonal peak, the domestic workforce is typically 1.9 times its size at its seasonal low and this ratio is significantly higher when counting the large number of seasonal foreign workers which work in the industry. Because the industry often needs a high volume of workers, often for shorter periods at peak times, the industry still faces above-average vacancy rates despite the large contingent of foreign workers. This inability to hire all the needed workers often results in excessive stress for owners and other staff, which negatively impacts retention.

Physical work is also a larger problem in this industry than in others, with 65% of operators citing it as a challenge, compared to 52% across the entire agriculture sector.

Within the industry, floriculture and ornamental operators are particularly affected by the issue of insufficient wages and benefits, with 80% reporting it as a retention issue, compared to 52% of greenhouse fruit and vegetable producers and 45% of all agricultural employers.

## Toughest Jobs to Fill

The 'greenhouse, nursery, and floriculture' industry will have the most trouble filling general farm worker, and nursery and greenhouse worker positions. Today, they account for 57% of the industry's workforce and 83% of the labour gap.

By 2029, the gap will widen further, with an additional 2,900 jobs for nursery and greenhouse workers and an additional 1,300 jobs for general farm workers either going unfilled or requiring foreign workers to fill them because enough domestic labourers are not available.

Managers in horticulture positions will represent 5% of the gap in 2029, with 1,400 jobs at risk of going unfilled. Moreover, the 'greenhouse, nursery, and floriculture' industry will have 570 finance, insurance, and related business occupations that it will be unable to fill with domestic workers by the end of the forecast.



## Conclusion

With a high reliance on foreign workers, a dwindling supply of domestic labour, and a growing market demand for its products, the 'greenhouse, nursery, and floriculture' industry faces significant labour challenges.

Even as production levels have dropped and the workforce has shrunk over the past decade, the 'greenhouse, nursery, and floriculture' industry remains Canada's largest agricultural employer. It is also one of the most reliant on foreign workers to achieve production targets.

While local and global market demand make this industry's production outlook bright, labour challenges threaten its profitability and growth potential.

Looking ahead to 2029, the domestic labour pool will continue to shrink, and the gap between the available workforce and the industry's labour requirements will widen. This will create an even greater reliance on foreign workers and result in more jobs going unfilled due to lack of workers, which will have a negative impact on sales, productivity targets, and the industry's ability to grow.

Although the industry has been successful in filling much of its labour gap with foreign workers, this level of reliance makes the industry vulnerable to policy changes. The Seasonal Agricultural Worker Program (SAWP) is exempt from many of the rule changes affecting the Temporary Foreign Worker



Program, but the Agricultural Stream has not been exempted. The rules and processes that govern the TFWP are under review by the various government departments. It is uncertain whether access to foreign workers in the sector will be disrupted in the future. This uncertainty could further reduce the available workforce and prevent the industry from achieving its growth potential.

While the industry enjoys a below-average retirement rate, and operations that tend to be located closer to larger cities with larger labour pools, it faces significant labour barriers including:

- ➔ 'Greenhouse, nursery, and floriculture' employers were much more likely to cite perceptions of low wages in the industry as a barrier to recruitment, especially those in floriculture and ornamental horticulture.
- ➔ Seasonal fluctuations in labour demand and the hard physical labour required on the job can make it harder to attract and retain workers.
- ➔ The industry has high voluntary turnover rates, which creates considerable cost and strain for employers.
- ➔ Labour shortages will heavily affect specific provinces, especially Ontario.

To meet these labour challenges, the industry has several strengths it could leverage:

- ➔ It could provide the right tools and training to support workers in labour-intensive roles.
- ➔ It could find ways to offset seasonal fluctuations, such as banking hours or partnering with employers whose seasonal peaks occur at different times of the year.
- ➔ Tapping into pools of workers who may only be interested in working part of the year (e.g. retired people) may help to address the sector's need for large numbers of workers for limited periods of time.

Finding solutions to the industry's considerable labour challenges will ensure that it can thrive in the years to come.



## About This Report

This report represents an update to the Labour Market Information (LMI) study that the Canadian Agricultural Human Resource Council (CAHRC) undertook between 2014 and 2016. The purpose is to re-assess the labour market, project supply and demand for agricultural workers from 2018 until 2029, and recommend potential solutions to labour issues.

The Conference Board of Canada, commissioned by CAHRC, constructed an economic model that forecasts agricultural labour demand and supply for each province, for 11 different commodity groups, and for 25 occupational groups.

The economic model was validated through several industry consultation activities conducted Canada-wide, including:

- **A large-scale survey** of 1,316 employers, 278 workers, and 110 industry stakeholders.
- **Eight webinars** focused on specific commodity groups, with 160 participants in total.
- An Advisory Group presentation.

This data was used to produce the following reports:

### Commodity-specific reports and fact sheets

Apiculture ■ Aquaculture ■ Beef ■ Dairy ■ Field Fruit and Vegetable ■ Grain and Oilseed ■ Greenhouse, Nursery, and Floriculture ■ Poultry and Egg ■ Sheep and Goat ■ Swine ■ Tree Fruit and Vine

### Regional reports and fact sheets

National ■ British Columbia ■ Alberta ■ Saskatchewan ■ Manitoba ■ Ontario ■ Quebec ■ New Brunswick ■ Prince Edward Island ■ Nova Scotia ■ Newfoundland and Labrador

For more information on the research, and to access additional commodity-specific, national, and provincial reports, please visit the CAHRC website at [www.AgriLMI.ca](http://www.AgriLMI.ca).

## About CAHRC

The Canadian Agricultural Human Resources Council (CAHRC) is a national, nonprofit organization focused on addressing human resource issues faced by agricultural businesses across Canada. CAHRC conducts industry research and develops products and services designed to help agricultural employers attract, retain, and develop the workforce they need to succeed.

For more information about the Council and its products and services for Canada's agriculture sector, please visit [www.cahrc-ccrha.ca](http://www.cahrc-ccrha.ca).





## Acknowledgements

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