AGRI-LMI
LABOUR MARKET INFORMATION

How Labour Challenges Will Shape the Future of the 'Swine' Industry:
Agriculture Forecast to 2029

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

Industry Overview

After a period of production decline, the 'swine'* industry, or hog industry, is now benefiting from a growing global market for pork products. However, the industry's workforce is continuing to shrink, creating a labour gap that will impact its ability to grow during the next decade.

The swine industry, which includes farm operations that primarily raise hogs and pigs, accounts for just 2% of the total agricultural workforce, but it is a profitable and growing industry with a high reliance on domestic labour. The hog industry is heavily concentrated in certain regions of the country. Ontario and Quebec account for two-fifths of the industry's workforce (40%), and the Prairies account for 39%.

Over the next decade, the industry faces a strong production outlook and a shrinking labour force, which could seriously affect its ability to reach its production potential.

Between 2007 and 2017, the industry saw the number of farms shrink by 42% and the workforce shrink by 56%. However, a rising demand for animal protein in emerging markets is driving increased production and requires a growing workforce. The industry's labour demand is expected to grow by an average of 0.6% per year, reaching 7,300 workers by 2029.

In 2017, the hog industry was unable to fill 150 jobs. By 2029, the industry is predicted to have 900 jobs that can't be filled by the available domestic workforce.

*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'.

'Swine' industry at a glance

In 2017:
- 6,700 people employed
- 150 jobs left unfilled
- 189 million in lost sales due to labour shortages

In 2029:
- 900 fewer domestic workers available
- 36% of the workforce lost to retirement
- 900 more jobs than the domestic workforce can fill

Production Trends

A growing demand for animal protein in global markets will reverse the hog industry's decline and create the need for a larger workforce to meet production targets and keep up with the market demand.

Between 2007 and 2017, the number of 'swine' farms in Canada shrank from 5,500 to 3,200, which is a reduction of 42%. During this time, the per capita demand for pork in North America declined, and many operators switched to a specialization in grains and oilseeds. The contraction of the hog industry reduced the demand for labour, which fell by an average of 6.6% per year—one of the most aggressive declines among agricultural commodities.

While domestic demand for pork products is expected to remain weak, the global demand will increase due to the growing disposable incomes in emerging countries, and the Canadian hog industry is expected to benefit from this trend. As a result, output is expected to rise by 2.2% per year between 2018 and 2029.

The industry's productivity levels—the output each worker can produce—will decrease from 9.8% per year to 1.6% per year. As such, it will need to expand the workforce to meet output targets. After seeing its output decline by 0.5% per year between 2007 and 2017, the global demand for pork products will boost outputs by 2.2% per year. To meet those levels of production, the industry will need to increase the size of its workforce by 0.6% per year, with a workforce of 7,300 needed by 2029.

Productivity, Output, and Labour Demand Trends
(average annual percentage change)
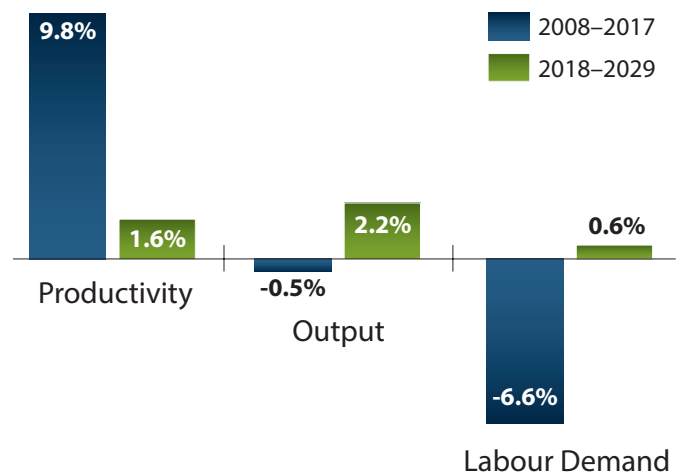
Labour Forecast

While a growing market for pork products will require a bigger workforce to meet output targets, the domestic labour force is predicted to shrink, with retirement being one of the key factors affecting the labour supply.

With the number of hog farms reduced by just under half over the past decade, the industry's workforce shrank from 8,750 workers in 2007 to just 7,400 in 2017.

The vast majority of the industry's workforce are Canadian residents, with foreign workers accounting for just 5.1% of the workforce. More than one in three domestic workers currently employed in the hog industry (36%) are expected to retire by 2029.

This will significantly contribute to the reduction in the size of the workforce, which is expected to shrink by 900 workers over the same period.

The Labour Surplus to Become Deficit for the 'Swine' Industry

Legend: ■ Labour Demand ■ Domestic Labour Supply
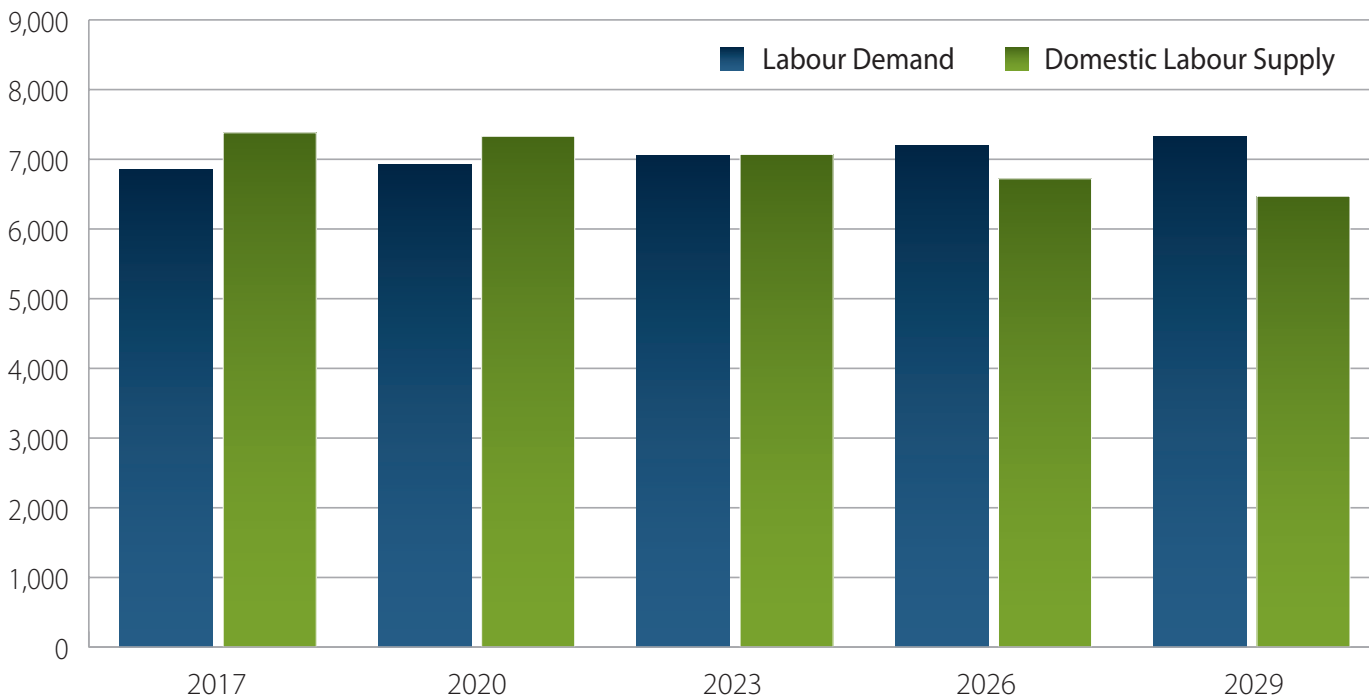
Regional Trends

Several provinces will be affected by labour shortages in the 'swine' industry, with Ontario, Quebec, and the Prairies impacted most heavily. Two-fifths (40%) of the industry's workforce is concentrated in Ontario and Quebec, with the Prairies accounting for another 39% of the workforce.

Almost every province will see the size of its workforce decline over the next decade, with an average decline of 12% across Canada. The provinces that will lose the greatest percentage of their workforce are Saskatchewan and Alberta, which will see declines of 23% and 20%, respectively. Manitoba and Quebec will be slightly less affected, with declines of 11%.

Alberta will account for the largest share of the gap between the number of jobs to be filled and the number of domestic workers available to fill them. Alberta's share is over one third (37%) of the total gap, leaving it with roughly 300 more jobs than it can fill with available domestic labour. Ontario and Quebec account for 29% and 23% of the total gap, leaving them with 250 and 200 jobs to fill, respectively.

Number of Industry Jobs at Risk by 2029

Other 94
Alberta 315
Quebec 202
Ontario 249
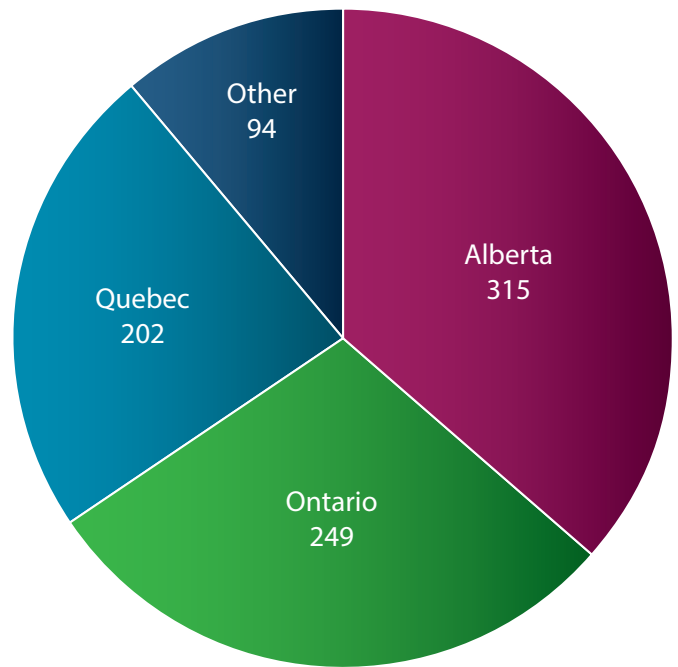
Demographic Trends

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

Retirements are the primary reason for the industry's shrinking labour supply. More than one in three domestic workers currently employed in the hog industry (36%) are expected to retire by 2029. This is slightly lower than the average for the agriculture sector as a whole, where 37% of the domestic workforce is expected to retire by 2029.

Financial Impact

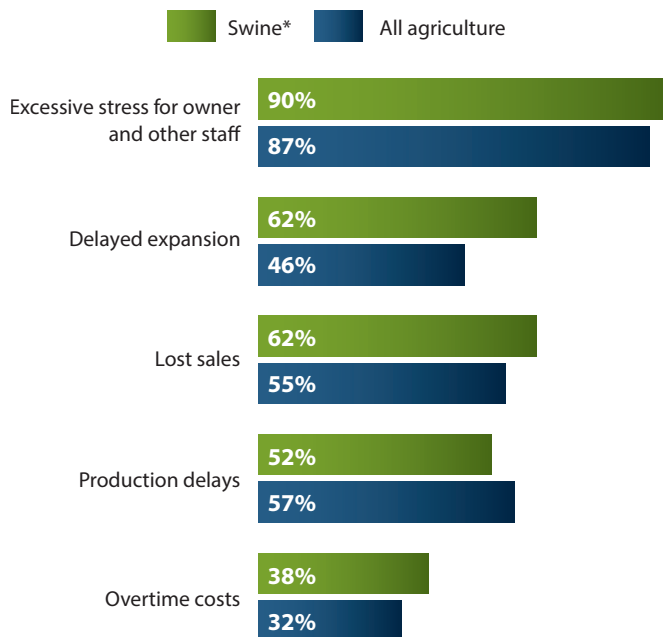Labour shortages cost the hog industry $189 million in 2018. As the labour supply dwindles and the market for pork grows stronger, the potential costs could be much higher in the future.

An inability to fill 150 vacancies in 2018 cost the industry $189 million in lost sales, or 4.2% of the industry's total sales. However, this was just one of the financial impacts that the labour gap caused. Of the 'swine' producers impacted by labour shortages, 90% reported excessive stress for owner and other staff, while another 38% of swine producers cited overtime costs, and 62% said they delayed expansion.

As the labour gap widens, these financial impacts could cost the industry significantly more in terms of production losses and lost sales, and inhibit its ability to grow and reach its full potential.

Impacts of Labour Shortages

Legend: Swine* (green), All agriculture (dark blue)

Impact	Swine*	All agriculture
Excessive stress for owner and other staff	90%	87%
Delayed expansion	62%	46%
Lost sales	62%	55%
Production delays	52%	57%
Overtime costs	38%	32%

*Based on responses of 29 swine producers who reported not having access to all needed workers.

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Labour Challenges

'Swine' producers face specific challenges in recruiting and retaining enough workers.

These tasks are impeded by a lack of skills or experience in the available workforce, workplaces in rural locations, the physical nature of work.
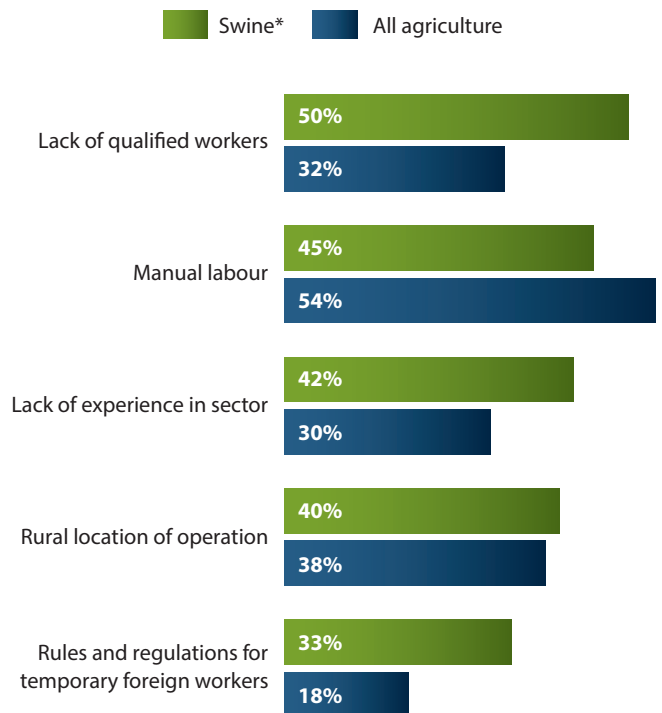
Recruiting Workers

The 'swine' industry experiences a different set of recruitment issues than the agriculture sector as a whole. A lack of qualified candidates is the top recruitment challenge for this industry, with half of 'swine' producers surveyed (compared to just 32% of all agricultural operators) reporting a shortage of qualified workers in their area as a recruitment challenge. This is the second-highest share reported share among agricultural industries, trailing only the 'dairy' industry.

'Swine' employers were also more likely be feel impeded by rules and regulations for foreign workers when recruiting workers. Indeed, one in three 'swine' producers (33%) cited it as a barrier to recruitment, compared to 18% across agricultural industries.

Challenges in Recruiting Workers

Legend: Swine* ▮ (green)   All agriculture ▮ (dark blue)

Challenge	Swine*	All agriculture
Lack of qualified workers	50%	32%
Manual labour	45%	54%
Lack of experience in sector	42%	30%
Rural location of operation	40%	38%
Rules and regulations for temporary foreign workers	33%	18%

*Based on responses of 60 swine producers.

On a positive note, 'swine' producers were much less likely to report seasonality was a barrier to recruitment. Specifically, only 2% of respondents reported that the seasonal nature of work didn't interest applicants, compared to 43% of producers Canada-wide.
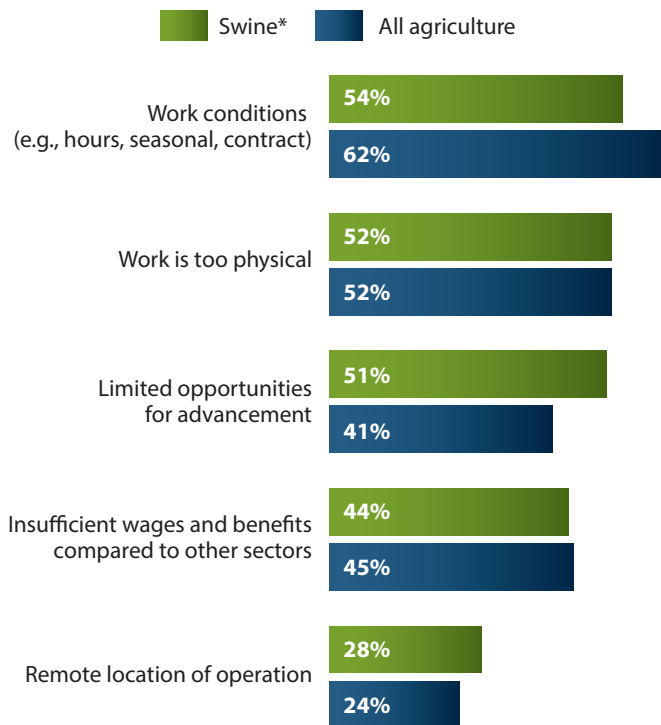
Retaining Workers

'Swine' producers are less challenged in retaining workers. The industry not only has a below-average involuntary turnover rate among agricultural industries of 1.3% (compared to the national average of 2.5%), it also boasts the second-lowest voluntary turnover rate of 4.6%, compared to the national average of 10.3%.

Limited opportunity for advancement is one of the industry's biggest retention challenges, with over half (51%) of 'swine' producers citing it as a

Challenges in Retaining Workers

Legend: Swine* | All agriculture

Work conditions (e.g., hours, seasonal, contract)
- Swine*: 54%
- All agriculture: 62%

Work is too physical
- Swine*: 52%
- All agriculture: 52%

Limited opportunities for advancement
- Swine*: 51%
- All agriculture: 41%

Insufficient wages and benefits compared to other sectors
- Swine*: 44%
- All agriculture: 45%

Remote location of operation
- Swine*: 28%
- All agriculture: 24%

*Based on responses of 61 swine producers.

barrier to retaining workers, compared to 41% of producers nationwide. The 'swine' industry is also more challenged by the remote location of their operations. Specifically, over one in four (26%) of 'swine' employers reported limited worker mobility to access the operation as a retention challenge, compared to 19% across agricultural industries.

It is interesting to note that 'swine' producers are less likely to report work conditions as a barrier to retention. Most notably, only 23% of 'swine' producers cited too many working hours a barrier to retention, compared to 37% industry wide.

Toughest Jobs to Fill

The 'swine' industry will have the most trouble filling general farm worker positions. Today, this position accounts for 39% of the industry's workforce. What is more, the position already faces a labour gap despite the 'swine' industry enjoying a current aggregate surplus of workers.

Between 2017 and 2029, the number of general farm worker positions that are predicted to go unfilled due to a lack of domestic workers will increase from 100 to 800.

Positions at the management level, including owner-operators and employed farm managers, will be easier to fill; as the number of farms continues to decline, the number of available management-level workers is predicted to exceed the need.

Conclusion

A growing demand for pork products is reversing the 'swine' industry's decline, but with a shrinking domestic labour force, the industry will struggle to reach its production capacity and take full advantage of its considerable global market potential.

While the hog industry saw a period of decline as the North American demand for pork products weakened, it is now entering into a growth period as the demand for animal protein increases in emerging global markets.

A strong market outlook will create growing pains for the industry as it struggles to find the workers it needs to meet output targets. Over the past decade, as farms have shifted away from animal production toward 'grain and oilseed' production, the 'swine' industry labour force shrank considerably, and the rate of retirement among workers will reduce the available domestic workforce even further. As a result, the industry's labour gap is expected to widen over the next 10 years, from a current surplus of 500 workers to a deficit of 900 workers by 2029. In other words, 12% of 'swine' jobs could potentially go unfilled due to a lack of available workers by 2029. Unless the gap can be filled, the industry will not reach its growth potential.

The industry enjoys several advantages that could help it attract and retain workers, including below-average seasonality (which creates a more stable environment for workers), and low turnover rates.

However, there are a number of labour challenges that must be overcome.

➔ Worker mobility and relocation are key retention issues, with 'swine' producers indicating that it's difficult to transport workers to and from the workplace and relocate available workers from other areas.

➔ People with the right skills and experience will remain in short supply, with more formal training potentially required to address the issue.

➔ Labour shortages for this industry are more likely to affect expansion plans, an issue of real concern for an industry facing robust growth.

Finding solutions to these labour challenges and increasing the pool of available domestic workers will ensure that the hog industry is better prepared to take advantage of an upcoming decade of growth.

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.

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.

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