



Agriculture Forecast to 2029

How Labour Challenges Will Shape the Future of the 'Aquaculture' Industry

The 'aquaculture'* industry is one of the smallest agricultural employers in Canada, but it's also the fastest growing. The rising global demand for fish protein is predicted to create a strong market for this export-reliant industry over the next 10 years.

Industry Overview

The 'aquaculture' industry¹ is one of the smallest employers in the agriculture sector. In 2017, the industry employed 4,650 people (including self-employed, paid labour, and foreign workers), which is equivalent to just 1.3% of total agricultural employment.

The main species grown by Canada's 'aquaculture' industry include salmon, mussels, oysters, and trout. Steelhead, arctic char, Atlantic cod, sablefish, geoducks, Atlantic halibut, quahogs, white sturgeon, tilapia, and scallops are also produced.

Canada's 'aquaculture' industry is geographically concentrated, with British Columbia and Atlantic Canada accounting for most of the industry's employment.

The industry is almost entirely made up of domestic workers; foreign workers account for only 0.1% of the workforce. By comparison, the number of foreign workers employed across the entire agriculture sector accounts for 17% of the workforce.

In 2017, the industry was unable to find enough workers, and 125 jobs went unfilled as a result of labour shortages. Those shortages resulted in production losses and delays, as well as \$34 million in lost sales.

* 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'.

¹ This report defines the aquaculture industry according to Statistics Canada's NAICS code 1125, which only covers employers involved in primary production; those involved in seafood processing activities (NAICS code 3117) are not included. As a result, the estimated size of the workforce in this report is smaller than some industry estimates.

In 2017, the 'aquaculture' industry employed 4,650 people

The industry was unable to fill **125 jobs**, which cost the industry **\$34 million**, or **2.4%** of sales.

By 2029, the industry will be unable to fill **470 jobs** with the available pool of domestic workers.

Although it is small in terms of employment, the 'aquaculture' industry has the most positive growth forecast of any in the Canadian agriculture sector. Output is expected to increase by an average of 3.9% a year, compared to 2.1% for agriculture as a whole.

However, the industry faces serious challenges in finding enough workers to take advantage of this growth potential. Over the forecast, the labour gap in Canada's 'aquaculture' industry is forecast to rise, increasing from a surplus of 970 workers in 2017 to a deficit of 470 jobs by 2029.

Labour Forecast

Aquaculture's labour issues are predicted to worsen over the next decade. The predicted growth in global demand for aquaculture products will drive the need for additional workers to



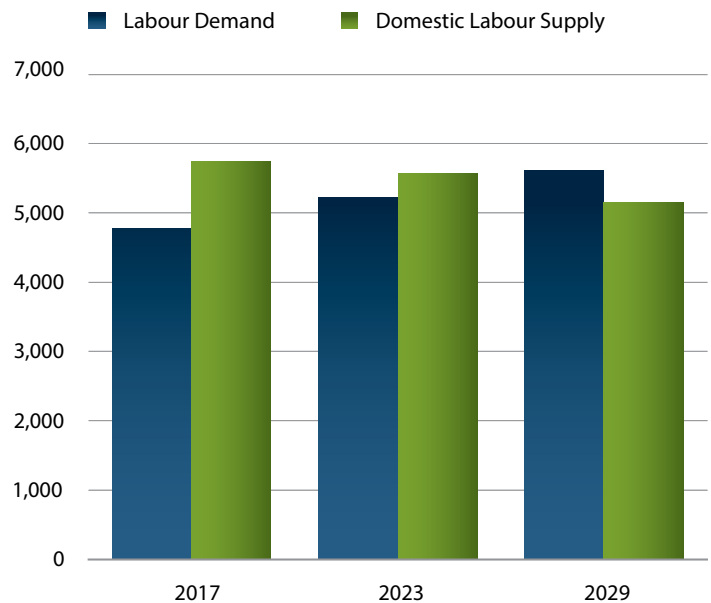
increase output and meet market demand. Indeed, the demand for workers within the 'aquaculture' industry is expected to rise by an average of 1.4% per year from now until 2029.

The supply of domestic labour, however, is predicted to decline over the same time period. The rising demand combined with falling supply will widen the gap considerably, resulting in a much higher number of jobs at risk of going vacant. By 2029, the number of jobs that go unfilled will increase to 470, which is equivalent to 8% of the total industry demand for workers.

Prince Edward Island will have the largest labour gap, although noticeable deficits are expected to emerge in British Columbia, and the other Atlantic Provinces.

From an occupational perspective, the 'aquaculture' industry will have the most trouble filling aquaculture and marine harvesting labourer jobs, with 680 jobs in this occupation predicted to go unfilled due to a lack of domestic workers by 2029. The second largest gap, at 650 positions, will occur in managers in aquaculture.

Labour Surplus to Become Deficit for the 'Aquaculture' Industry



Based on our 2018 survey of the industry's employers:

- 63% could not find enough workers;
- 35% of employers who experienced labour shortages lost sales as a result;
- 4% reported zero Canadian job applicants for job postings.



Meeting the Challenge

In the past, productivity gains have helped to offset the impact of labour challenges, but the growing need for animal protein in global emerging markets will place additional pressure on the 'aquaculture' industry's labour force. Combined with a declining labour supply, this is projected to significantly increase the number of jobs that go unfilled. This number is expected to reach 470 by 2029, which is equivalent to 8% of the total demand for workers.

To reverse this trend, the industry must overcome a number of unique labour challenges:

- Aquaculture's remote operations and the trend toward rural depopulation make it harder to find and retain workers.
- Aquaculture operators do not have access to foreign workers through SAWP or the Agricultural Stream of the TFWP.

- The industry has very high voluntary and involuntary turnover rates, which creates considerable cost and strain for employers.
- Labour shortages for this industry are more likely to affect expansion plans, an issue of real concern for an industry facing robust growth.

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

- It has a below-average retirement rate.
- The 'aquaculture' industry benefits from a work environment in which there are stable earnings and less demanding working hours.
- Tapping into pools of workers who may only be interested in working part of the year (e.g. retired fishers) may help to address the sector's need for large numbers of workers for limited periods of time.

Finding solutions to these labour challenges and increasing the pool of available domestic workers will be critical if the 'aquaculture' industry is to continue to grow in the years to come.

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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