

Sector Profile

Agriculture and Aquaculture

Atlantic Region

2023

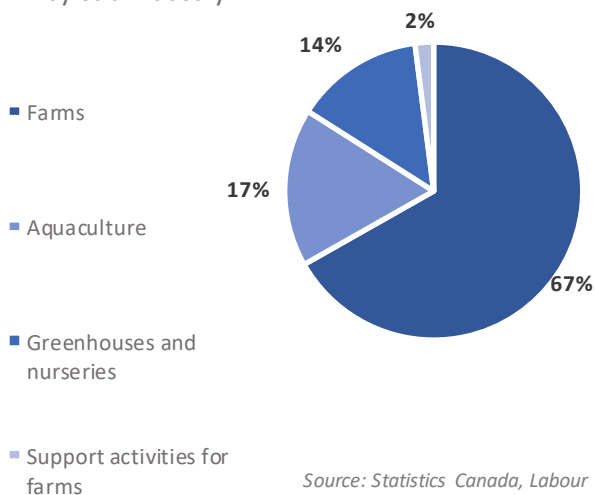


HIGHLIGHTS

- This industry's operations are typically located in rural and coastal communities and are often the primary source of income for residents who reside in these communities.
- Nearly one-third of the Atlantic region's agriculture and aquaculture industry was 55 years or older in 2022, significantly higher than the one-quarter average share for all-industries in the region.
- Agriculture and aquaculture GDP grew roughly 9% in the Region on a year-over-year basis in 2022. Growth of the cannabis industry was a large factor in this economic success.
- The outlook for the Agriculture and aquaculture industry is tempered over the 2023-2025 forecast horizon. This industry is projected to lag behind the average growth rate for all industries during this time period.

ABOUT THE INDUSTRY

Employment Share by sub-industry



Composition and Importance of the Sector

Atlantic Canada's Agriculture sector is diverse, known for its production of potatoes, maple syrup, fruits, berries and various other crops and livestock. Aquaculture has also become important in recent years, particularly salmon and shell fish production. This industry's operations are typically located in rural and coastal communities and are often the primary source of income among inhabitants in these areas.

The distribution of employment is spread among five sub-industries, with the largest share concentrated in farm operations (67%). Aquaculture (17%) and Greenhouses/nurseries (14%) hold a similar share of employment. Support activities for farms (2%) includes workers who provide support in growing crops and raising livestock. This includes activities such as grooming and caring for animals, planting seeds, etc.



Geographic Distribution of Employment

Agriculture represents nearly \$1.6B in economic activity for the Atlantic region and supports nearly 16,000 jobs. The latter figure has fallen in recent years as a result of factors like industry consolidation and automation. Labour shortages have also limited expansion opportunities leaving some companies struggling to fill vacancies.

The largest share of agriculture and aquaculture workers in the region in 2022 resided in New Brunswick (NB), thanks to a growing cannabis industry. On a year-over-year basis in 2022, the value of the cannabis industry was up by 75% in NB. NB also generates more income in aquaculture compared to the other three Atlantic provinces. Nova Scotia (NS) led the Atlantic region in dairy production in 2022, while Prince Edward Island (PEI) was the leading producer of potatoes. Newfoundland and Labrador (NL) has substantially lower levels of crop and animal production compared to the other Atlantic Provinces, but the NL aquaculture industry generated slightly more revenue than NS's to be the third best in Atlantic Canada in 2022.

	Employed 2022	Industry Share (%)
Atlantic Canada	15,600	1.3%
Newfoundland and Labrador	1,000	0.4%
Prince Edward Island	3,300	3.9%
Nova Scotia	5,100	1.1%
New Brunswick	6,200	1.7%

Source: Statistics Canada, Labour Force Survey

WORKFORCE

Workforce Characteristics

Labour shortages are common in this industry and employers across all four Atlantic provinces tend to rely on temporary foreign workers (TFWs) to fill job vacancies. Seasonality, negative perceptions about the industry (ex. long hours, hard manual labour, etc.) and lower-than-average wages often make it difficult for employers to attract and retain workers. Initiatives such as PEI's Farm Team Program, a program that helps farmers fill vacancies locally with students in need of summer jobs, also play a role in helping to attract new staff.

Nearly one-third of the Atlantic region's agriculture and aquaculture industry was 55 years or older in 2022, significantly higher than the one-quarter average share for all-industries in the region. While men and women give a near equal split in terms of employment in the Atlantic workforce, only 29% of the regional agriculture and aquaculture jobs were held by a woman. Efforts to shrink this gap are highlighted by programs like the recently launched Engaging and Advancing Women in Agriculture (EAWA) project. The project will develop, pilot, and document a framework through which producer associations can systemically address the underrepresentation of women in Canadian agriculture.

This industry also has a higher than average share of self-employment, with nearly one-third of those working in agriculture and aquaculture being self-employed. Workers in this field are more likely to have less than a high school education compared to the average Atlantic worker. Similarly, only 12% had a post-secondary degree, compared to 30% of all employees in the region.

Main Occupations

While careers in agriculture are quite diverse and require a variety of different skillsets, Managers and labourers account for the bulk of the industry's workforce.

Managers in agriculture are typically the owners/operators, or otherwise in charge of running the farm. Harvesting and livestock labourers, on the other hand, mostly carry out manual labour, both skilled and unskilled. Specialized livestock workers provide more skilled forms of care for the animals, such as training horses, breeding animals and health related care. This occupation can require a college certificate or other specialized training.

Top 5 largest occupations	Employed 2022	% Share of Industry
Managers in agriculture	3,950	25.5%
Harvesting labourers	2,050	13.2%
Livestock labourers	1,875	12.0%
Specialized livestock workers and farm machinery operators	1,200	7.7%
Aquaculture and marine harvest labourers	1,125	7.2%

Source: ESDC/Service Canada



RECENT HISTORY

Overall there were 15,600 Atlantic Canadians employed in agriculture in 2022. Compared to 2021, this represents a decline of 8% (or 1,300 jobs). From a longer term perspective, employment fell by an annual average of 0.8% over the last decade.

Despite the employment declines, agriculture and aquaculture GDP grew roughly 9% in the Region on a year-over-year basis in 2022. During the pandemic year of 2020, industry revenue was down by 10% compared to 2019 across the region. However, there was a sharp rebound of 30% in revenue between 2020 and 2021. Momentum continued to build in 2022 with large revenue increases which is mostly attributed to cannabis production (+47%).

The highest revenue generating agricultural crops/commodities, excluding cannabis, ranges between provinces. The exception being dairy products, which are a top three revenue generator in each of the Atlantic Canadian provinces. Between 2018 and 2022 the average top three crops/commodities produced by province are:¹

NL	PEI
Dairy (\$48M)	Potatoes (\$253M)
Eggs (\$20M)	Dairy (\$94M)
Floriculture/nursery/sod (\$9M)	Cattle and calves (\$34M)
NB	NS
Cannabis (\$239M)	Dairy (\$156M)
Potatoes (\$178M)	Fruit (\$73M)
Dairy (\$124M)	Eggs (\$46M)

The value of aquaculture in Atlantic Canada has been on the rise for most of the past decade, with particular exception to the pandemic year. Following the pandemic, however; the industry enjoyed a historical year in terms of revenue in 2021. Growth has since cooled, with a year-over-year decline of nearly 11% in 2022 compared to the 2021 revenue level. Post-tropical storm Fiona hit Atlantic Canada in late 2022, hampering the agriculture industry and significantly damaging aquaculture operations. It is estimated that up to \$70M¹ in damage was done to the Atlantic aquaculture operations.

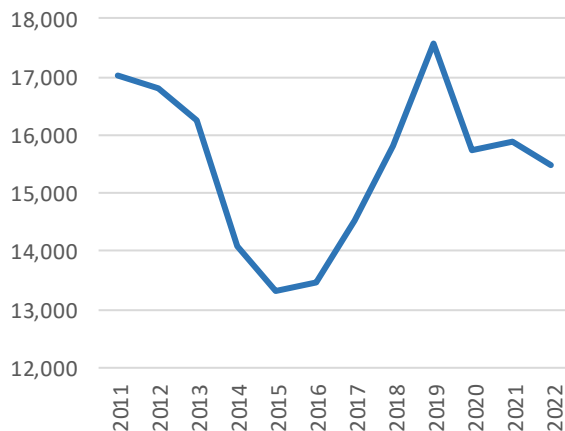
¹ <https://www.cbc.ca/news/canada/prince-edward-island/fiona-agriculture-aquaculture-damage-government-1.6623637>

² Government of Canada. Aquaculture statistics. [Aquaculture statistics \(dfo-mpo.gc.ca\)](https://www.dfo-mpo.gc.ca)

³ University of Dalhousie, Fall 2020.

⁴ SIM student featured in National Post & The Star - School of Information Management - Dalhousie University

Historical Employment Trend
Atlantic Canada



Source: Statistics Canada, Labour Force Survey

Nevertheless, this remains an important part of the Atlantic Canadian economy. According to Fisheries and Oceans Canada², aquaculture represents about 20% of Canada’s total seafood production and the Atlantic region accounts for roughly half of the nation’s output.

With respect to agriculture overall, one of the main challenges that operators throughout the industry have been facing is securing enough labour, particularly for planting and harvesting activities and aquaculture operations. Businesses have had to rely on TFWs and a new supply of immigrant workers overall. Further, government agencies who handle immigrant admittance to Canada only recently began to ease the significant backlogs in processing applications as a result of the Covid-19 fallout. As of June 2022, there were 2.4 million applications in the backlog nationally according to Immigration, Refugees, and Citizenship Canada.

Perhaps one of the benefits of adapting to the restrictions faced during the pandemic led to more operators adopting a model that involved selling directly to consumers, mainly through online purchasing platforms, pick-up and home deliveries. Combined, this has generated an uptick in support for local producers of food and beverages. More than ever, Atlantic Canadians want to know where their food was grown and processed and want to continue to support the local food and beverages sector. In a Fall 2020 study, over half of the 10,000 Canadians surveyed indicated that they would pay more for locally grown foods³.



OUTLOOK

The outlook for the Agriculture and aquaculture industry is tempered over the 2023-2025 forecast horizon. This industry is projected to lag behind the average growth rate for all industries during this time period.

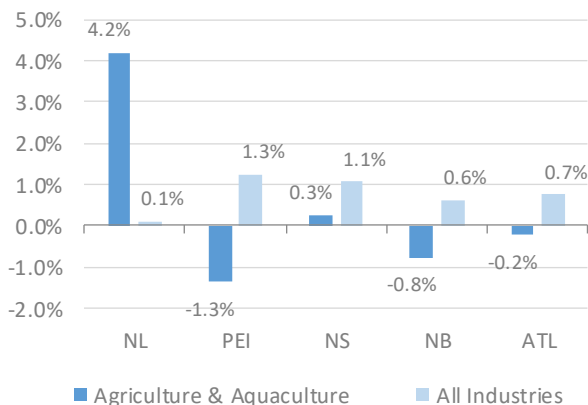
Agriculture and aquaculture is inherently at risk for a number of environmental impacts that may pose threats to the safe development of crops and livestock. For example, in November 2021, the outbreak of potato wart in PEI resulted in the Canadian Food Inspection Agency banning potato shipments from PEI to the US. Exports for table potatoes resumed in April 2022, but seed potatoes, which make up roughly 10% of the Island's annual output, are still banned in the US and the rest of Canada. Additionally, the detection of H5N1 flu (avian flu) at a NS farm in February 2022 led to the European Union, the US and eight other countries imposing trade restrictions on some poultry products from NS and NL.

Output is expected to increase at a faster pace than employment driven by continued investment in automation as it becomes increasingly difficult for operators to secure sufficient labour. These changes will result in a gradual shift away from unskilled labour and an increasing share of workers will need to be skilled in new technologies and methods. TFWs will continue to fill gaps where sufficient local labour is not available.

On a more positive side, employment in the industry is expected to be buoyed by a growing appetite for local products. In addition, maturing trade deals between Canada and its trading partners will continue to improve access to foreign markets. In NL, where the growth rate (4.2%) is expected to outpace the other Atlantic Provinces, efforts to improve food self-sufficiency have benefited the industry. NL exceeded its goal set in 2017 to reach a 20% level of food self-sufficiency, reaching 21% in 2022. NL is now fully self-sufficient in the production of milk, chicken and eggs, as well as beef and sheep production, which has more than doubled since 2016.¹

Projected Average Annual Employment Growth Rate (%),

Atlantic Provinces, 2023-2025



Source: ESDC/Service Canada

While the Atlantic region, in general, is aging at a greater pace compared to the rest of the country, this is especially true for the agriculture and aquaculture industry. In the past 10 years, the share of older workers (those aged 55 and over) has grown from roughly one-quarter to one-third. This far exceeds the share of older workers across the broader economy. On the bright side, the share of younger workers (aged 15 to 24 years) inched up to 15% in 2022 after averaging around 13% in the previous 10-year span.

The industry could see an improved growth rate if government and stakeholder initiatives are successful in attracting new workers to the industry, which would alleviate shortages. These efforts would include programs to bring more international workers, as well as incentivising more women and youth to seek employment in this field of work.

¹Government of Canada. Aquaculture statistics. [Aquaculture statistics \(dfo-mpo.gc.ca\)](https://aquaculture-statistics.dfo-mpo.gc.ca)

Note: In preparing this document, the authors have taken care to provide clients with labour market information that is timely and accurate at the time of publication. Since labour market conditions are dynamic, some of the information presented here may have changed since this document was published. Users are encouraged to also refer to other sources for additional information on the local economy and labour market. Information contained in this document does not necessarily reflect official policies of Employment and Social Development Canada.

The analysis in this report was finalized as of **August, 2023**.

Prepared by: Labour Market Analysis Directorate, Service Canada – Atlantic Region

For further information, you may contact us at: ATL-LMI-IMT-GD@servicecanada.gc.ca

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APPENDIX

Real GDP (2022) and Employment (2022) for Atlantic Canada

	Agriculture and Aquaculture			All Industries		
	Number	Share of Total	AAGR*	Number	Share of Total	AAGR*
Real GDP (M\$)	\$1,586.5	100.0%	3.9%	\$109,227.1	100.0%	1.0%
Newfoundland and Labrador	\$84.8	5.3%	-1.9%	\$30,150.3	27.6%	0.1%
Prince Edward Island	\$300.1	18.9%	2.2%	\$6,542.6	6.0%	2.5%
Nova Scotia	\$466.7	29.4%	2.6%	\$40,011.5	36.6%	1.5%
New Brunswick	\$734.9	46.3%	6.9%	\$32,522.7	29.8%	1.1%
Employment (000s)	15.5	100.0%	-0.8%	1175.2	100.0%	0.4%
Male	11.0	70.7%	-0.9%	596.0	50.7%	0.4%
Female	4.5	29.3%	-0.5%	579.2	49.3%	0.5%
15-24 years old	2.4	15.2%	-0.3%	158.7	13.5%	0.4%
25-54 years old	8.1	52.1%	-0.8%	734.4	62.5%	-0.2%
55 years and older	5.1	32.8%	-1.0%	282.1	24.0%	2.2%
Worked full-time	13.7	88.5%	-0.1%	990.6	84.3%	0.6%
Worked part-time	1.8	11.4%	-4.9%	184.6	15.7%	-0.4%
Self-employed	5.0	32.3%	-1.5%	123.2	10.5%	-1.0%
Employees	10.5	67.5%	-0.5%	1052.0	89.5%	0.6%
Permanent job	7.4	47.9%	0.8%	884.4	75.3%	1.0%
Temporary job	3.1	19.7%	-2.9%	167.6	14.3%	-1.4%
Less than high school	3.0	19.5%	-5.5%	95.5	8.1%	-3.9%
High school graduate	5.7	36.6%	1.5%	275.3	23.4%	-0.5%
Postsecondary cert. or diploma	5.0	31.9%	0.7%	456.3	38.8%	0.3%
University degree	1.9	11.9%	-0.5%	348.2	29.6%	3.3%
Newfoundland and Labrador	1.0	6.2%	-4.6%	232.5	19.8%	-0.3%
Prince Edward Island	3.3	20.9%	-2.3%	84.3	7.2%	1.5%
Nova Scotia	5.1	32.6%	-2.9%	484.9	41.3%	0.6%
New Brunswick	6.2	40.1%	3.5%	373.5	31.8%	0.5%

Source: Statistics Canada, Labour Force Survey - Custom Table; Table 36-10-0402-01

*Average annual growth rate for last ten years of available data (GDP 2013-22 and Employment 2013-22)

