POPULATION NB

Farm Population



PREPARED BY

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At first glance

Purpose

New Brunswick's agricultural sector faces growing concerns over an aging farm population and reliance on temporary foreign workers. Before developing policies that promote the agricultural sector, it may be important to assess the evolution of farming in NB over time in terms of farm operator demographics, number, size, and type of farms and farm income. As such, the objective of this report is to characterize New Brunswick's farm operators, farmland, and farm businesses. Using Statistic Canada data, this report evaluates changes over time in these dimensions of farming and compares them to neighbouring Atlantic provinces.

Major Points

- The proportion of NB farm operators aged 55+ increased by 21 percentage point from 2001 to 2016, making up 57% of the farm population and contributing to an aging farm population.
- The number of NB farm operator numbers decreased from about 4,300 to 3,000 between 2001 and 2016.
- Of all levels of educational attainment, the highest proportion of farm operators fall in the high school diploma/certificate category.
- Between 2001 and 2016, NB lost 779 farms. The number of small and medium farms has been decreasing as some consolidate into larger farms.
- Value per acre of farmland has been increasing. However, it is lower in NB compared to Newfoundland and Labrador, Prince Edward Island, and Canada as a whole.
- Net income for farm operators increased in NB between 2011 and 2019, along with cash receipts and operating expenses.
- The number of livestock and vegetable farms in NB decreased between 2011 and 2016.

Farm Population INTRODUCTION

New Brunswick's farm population is gradually aging, which may threaten the supply of farm operators available to grow provincial agriculture. As aging farmers retire, there may not be enough young farmers entering the farm business to compensate for the loss. Only ~7% of New Brunswick farms have viable succession plans, making the future of many farms questionable. With smaller farm families and an overall declining farm population, it is important to create policy incentives that encourage more Canadianborn individuals and immigrants to take advantage of New Brunswick's rural life, while also providing resources for young farmers to create more sustainable farms.

The onset of COVID-19 has highlighted the strain on agricultural production in New Brunswick. The ban on temporary foreign workers was a roadblock to many farms due to the projected 2,000 acres of land that would be left unplanted. With a lack of skilled farm workers within the province, the functionality of many NB farms relies on temporary foreign workers. Although the ban was eventually lifted, the vulnerable situation that New Brunswick was left in highlights the need for increased agricultural training and farmworkers.

In 2016, there was an ~11% decrease in the total acreage of farmland under production. Despite small farm consolidation into large farms, farm production did not grow. Moreover, around 90% of food produced in NB relies on imports – notably, around \$100 million in fresh field vegetables that NB residents consume yearly have to be imported. Reducing reliance on imports and taking full advantage of New Brunswick's available farmland are mechanisms through which the full value of the provincial agricultural sector may be realized.

New Brunswick's farm operator demographic, farm characteristics in terms of number, size and value of farmland, and farm business in terms of income have all been shifting. A well-supported farm population drives a flourishing agricultural sector; therefore, understanding how New Brunswick farm operators and farms are evolving is essential to develop policies that lift limitations on growth should NB want to expand its agricultural sector.

To this end, this report focuses on the evolution of three dimensions of New Brunswick (NB) farms:

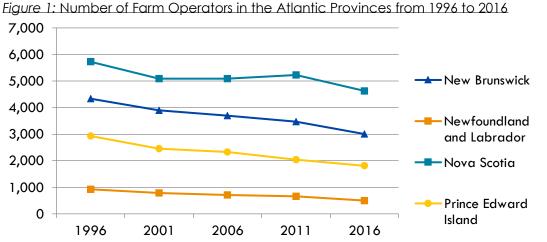
- Farm operators
- Farmland
- Farm business

Using Statistics Canada data, we evaluated farm operator trends over time and compared them to those of neighbouring Atlantic provinces by farm operator counts, age, family size, education, and hours worked per week. This report also examines whether NB farm operators are aging at the same rate as Atlantic farm operators. Farmland was evaluated by farm counts, size, and value per acre. Farm businesses were evaluated by net income, receipts, production type, and operating arrangement.



Key findings **RESULTS**

Farm Operators



Source: Statistics Canada. Table 32-10-0169-01 Number of farm operators by sex, age and paid non-farm work, historical data.

New Brunswick follows a similar trend compared to other Atlantic provinces in terms of a reduction in farm operators from 1996 to 2016. While the province has the second highest number of farm operators after Nova Scotia, NB still lost 1,330 farm operators during this time period, representing a 31% decrease.

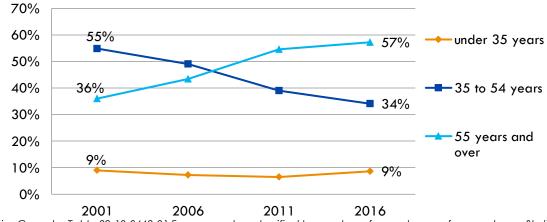
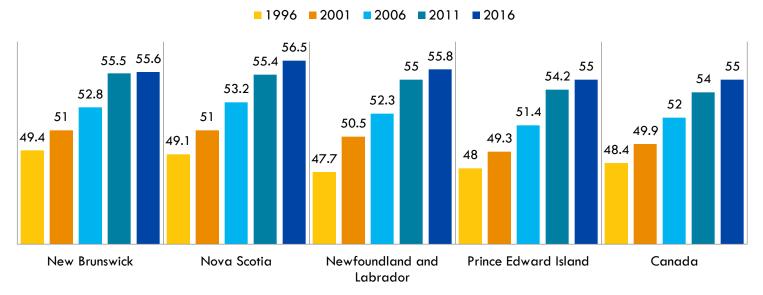


Figure 2: New Brunswick Farm Operator Age Distribution by Percentage from 2001 to 2016

Source: Statistics Canada. Table 32-10-0442-01 Farm operators classified by number of operators per farm and age. Statistics Canada, 2006 Census of Agriculture, Farm Data and Farm Operator Data, catalogue no. 95-629-XWE.

Figure 2 displays the aging NB farm population from 2001 to 2016. While proportion of farm operators aged 55 years and above have increased by 21 percentage points, the proportion of farm operators between 35 and 54 years old has also decreased by 21 percentage points. In 2016, the percentage of farm operators under 35 years of age returned to approximately the same level as 2001.



Source: Statistics Canada. Table 32-10-0169-01 Number of farm operators by sex, age and paid non-farm work, historical data

From 1996 to 2011, NB farm operators aged slightly faster than those in Canada and the Atlantic provinces. However, in 2016 the average age of NB farm operators (55.6 years) was similar to that of the other Atlantic provinces and only 0.6 years higher than in Canada as a whole.

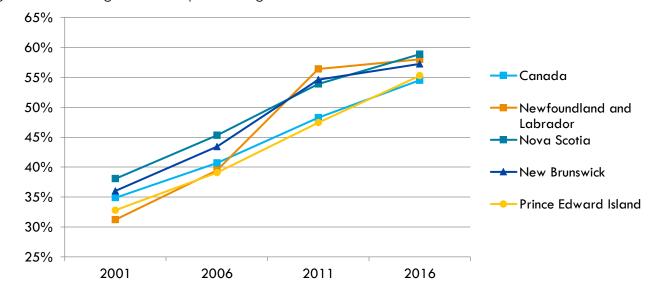
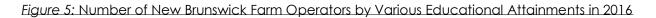
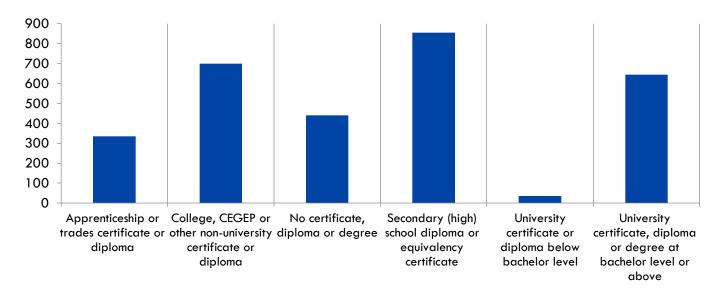


Figure 4: Percentage of Farm Operators Aged 55 and Above from 2001 to 2016

Source: Statistics Canada. Table 32-10-0442-01 Farm operators classified by number of operators per farm and age. Statistics Canada, 2006 Census of Agriculture, Farm Data and Farm Operator Data, catalogue no. 95-629-XWE.

Figure 4 shows that NB, along with the other Atlantic provinces, has followed the trend of an increasing older farm operator population. Yet, the province's farm operators aged 55 and above compose a smaller percentage of the farm operator population compared to Nova Scotia and Newfoundland and Labrador.





Source: Statistics Canada. Table 32-10-0011-01 Number of persons in the farm population and the self- employed labour force population classified by educational attainment, sex and age

The educational attainment of New Brunswick farm operators in 2016 is predominantly a secondary school level. The second highest is a university and college certificate, diploma, or degree followed by no certificate, diploma, or degree, and apprenticeship or trades certificate or diploma.

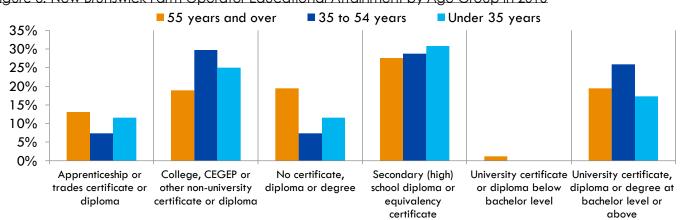
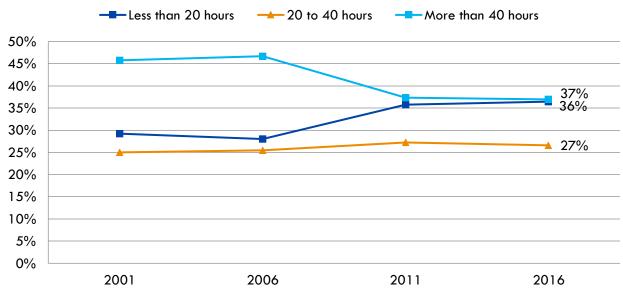


Figure 6: New Brunswick Farm Operator Educational Attainment by Age Group in 2016

Source: Statistics Canada. Table 32-10-0011-01 Number of persons in the farm population and the self-employed labour force population classified by educational attainment, sex and age.

Figure 6 divides farm operator educational attainments into age groups. Farm operators with the primary educational attainment of a secondary school diploma were mostly 35 years and under. Farm operators between 35 to 54 years made up the highest percentage in the university and college categories, while farm operators 55 years and above made up the highest percentage in the categories for no certificate or diploma, and apprenticeship or trades.

Figure 7: Percentage of New Brunswick Farm Operators by Average Number of Hours Worked per Week from 2001 to 2016



Source: Statistics Canada. Table 32-10-0444-01 Number of farm operators by average number of hours per week worked for the agricultural operation in the calendar year prior to the census. 2006 Census of Agriculture, Farm Data and Farm Operator Data, catalogue no. 95-629-XWE.

The percentage of New Brunswick farm operators working more than 40 hours per week decreased from 46% to 37% between 2001 and 2016. Meanwhile, the percentage of farm operators working less than 20 hours has increased from 29% to 36%.

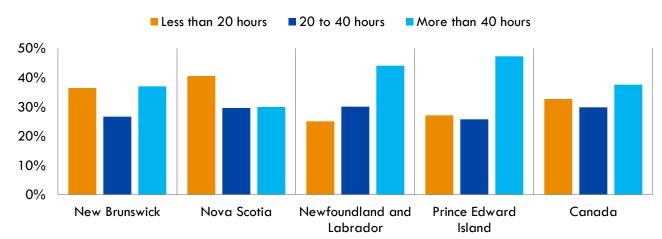


Figure 8: Percentage of Farm Operators in the Atlantic Provinces and Canada by Average Hours Worked per Week

Source: Statistics Canada. Table 32-10-0444-01 Number of farm operators by average number of hours per week worked for the agricultural operation in the calendar year prior to the census. 2006 Census of Agriculture, Farm Data and Farm Operator Data, catalogue no. 95-629-XWE.

In comparison to Newfoundland and Labrador, Prince Edward Island, and Canada, New Brunswick and Nova Scotia had a smaller proportion of farmers working more than 40 hours in 2016.

Farmland

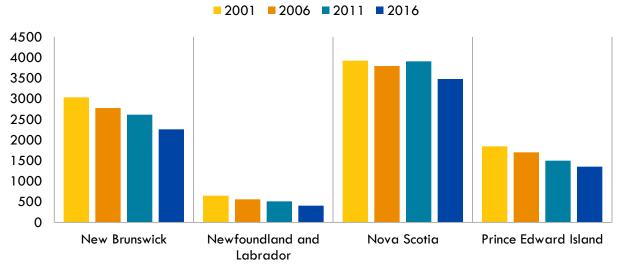


Figure 9: Number of Farms in the Atlantic Provinces from 2001 to 2016

Source: Statistics Canada. Table 32-10-0440-01 Total number of farms and farm operators. 2006 Census of Agriculture, Farm Data and Farm Operator Data, catalogue no. 95-629-XWE.

Much like the rest of Atlantic Canada, New Brunswick has a declining number of farms. Between 2001 and 2016, there were 779 fewer farms in the province.

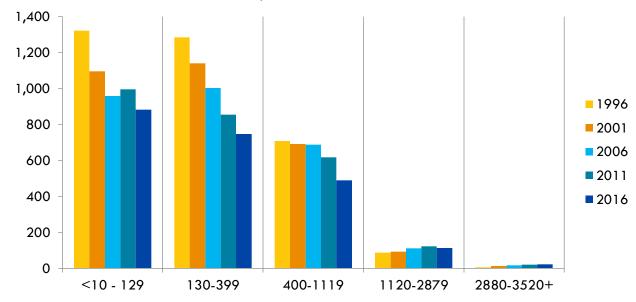
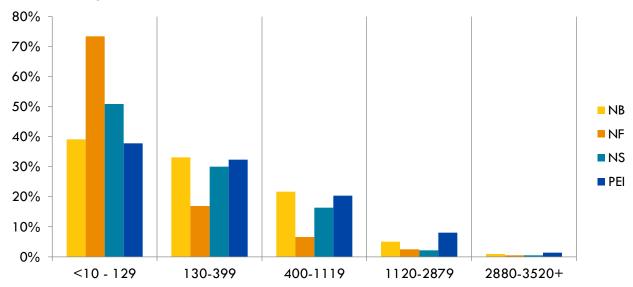


Figure 10: Number of New Brunswick Farms by Farm Size in Acres from 1996 to 2016

Source: Statistics Canada. Table 32-10-0156-01 Farms classified by size, historical data.

Figure 10 shows that smaller farms in New Brunswick have been decreasing, while larger farms that are 1,120 acres and above have been increasing. Between 1996 and 2016, there were 439 fewer farms that were below 10 acres to 129 acres, 536 fewer farms that were between 130 and 399 acres, and 218 fewer farms between 400 and 1119 acres. At the same time, there were 26 more farms between 1,120 and 2879 acres, and the province also had 22 farms above 2880 acres in 2016.

Figure 11: Percentage of Atlantic Province Farms by Farm Size in Acres in 2016



Source: Statistics Canada. Table 32-10-0156-01 Farms classified by size, historical data.

When comparing farm sizes across the Atlantic provinces, we see that NB has similar sized farms as Nova Scotia, although Nova Scotia has a higher percentage of large farms that are above 1,120 acres. New Brunswick has a higher percentage of farms between 130 and 1,119 acres compared to neighbouring Atlantic provinces. Notably, Newfoundland and Labrador's farm sizes are primarily below 10 acres to 129 acres.

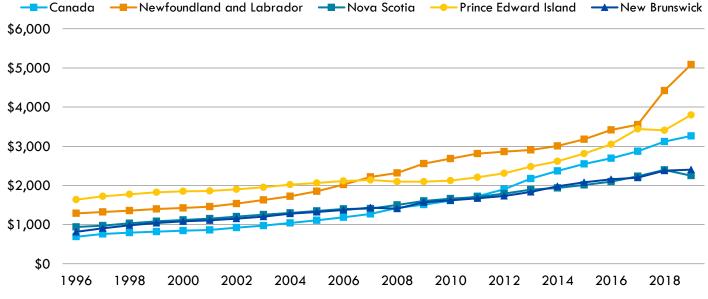


Figure 12: Value per Acre of Farmland and Buildings in the Atlantic Provinces and Canada from 1996 to 2019

Source: Statistics Canada. Table 32-10-0047-01 Value per acre of farmland and buildings at July 1.

All Atlantic provinces had an increase in value per acre of farmland and buildings between 1996 and 2019. New Brunswick and Nova Scotia shared an overlapping trend in the increase of value per acre of farmland and buildings. However, New Brunswick's 2019 value of \$2,400 per acre of farmland and buildings falls below that of Newfoundland and Labrador, Prince Edward Island, and Canada.

Farm Business

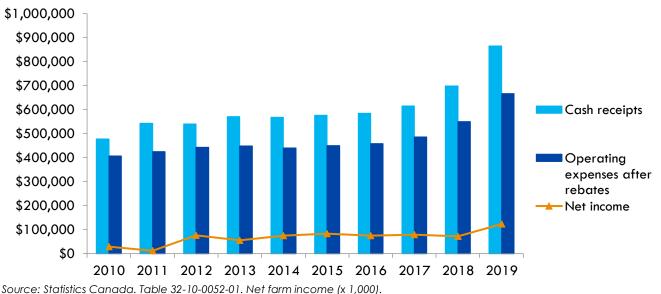
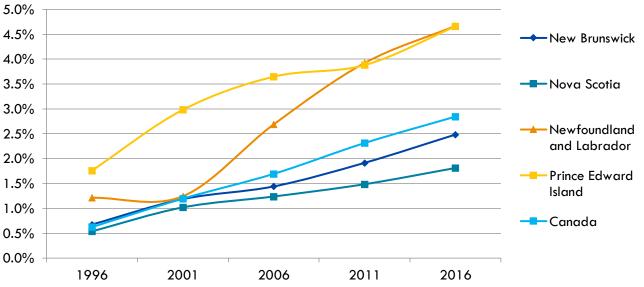


Figure 13: Net Income, Cash Receipts, and Operating Expenses of New Brunswick Farms from 2010 to 2019

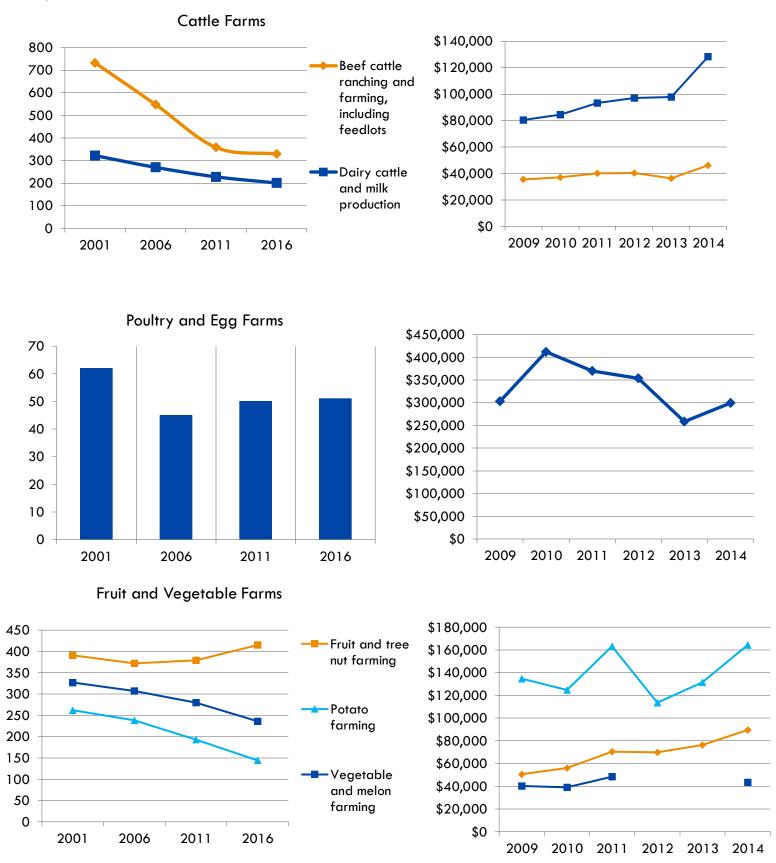
Between 2010 and 2019, New Brunswick farm cash receipts and operating expenses both increased. Figure 14 shows that, as a result, New Brunswick net farm income has also been gradually increasing, reaching \$123,519 in 2019.

Figure 14: Percentage of Farms by Farm Receipts of \$2 Million and Above in the Atlantic Provinces and Canada from 1996 to 2016



Source: Statistics Canada. Table 32-10-0157-01 Farms classified by total gross farm receipts, 2015 constant dollars, historical data.

The proportion of Atlantic farms and Canadian farms producing \$2 million and above has increased. In New Brunswick, 2.5% of farms have receipts of \$2 million and above, which falls below the levels of Newfoundland and Labrador, Prince Edward Island, and Canada.

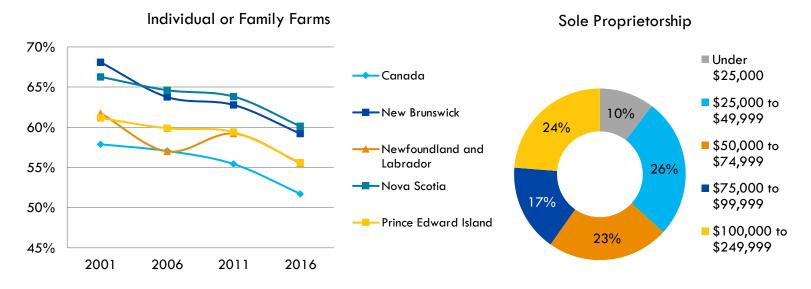




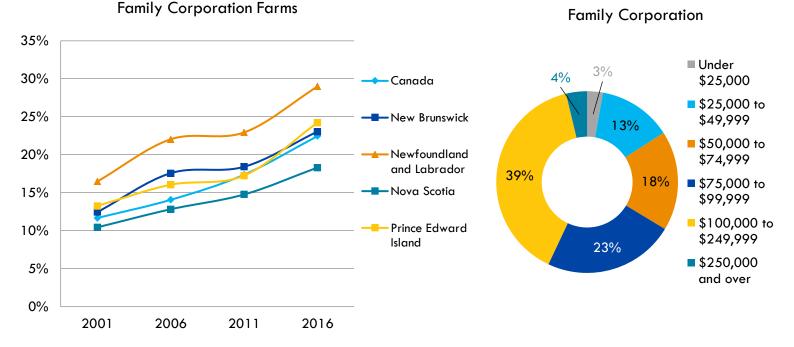
Source: Statistics Canada. Table 32-10-0166-01 Farms classified by farm type, historical data. Statistics Canada. Table 32-10-0072-01 Average total income of farm operators by farm type.

The graphs from Figure 15 show the changing number of NB farms by animal and crop farm types between 2001 and 2016, while also showing farm operator income between 2009 and 2014. Beef and dairy farms, poultry and egg farms, and vegetable and potato farms decreased. Fruit and tree nut farms and oilseed and grain farms increased.

Figure 16: Percentage of Farms by Operating Arrangement and Farm Household Income by Operating Arrangement in New Brunswick in 2016



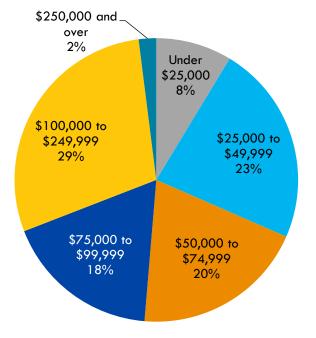
Oilseed and Grain Farms



Source: Statistics Canada. Table 32-10-0158-01 Farms classified by operating arrangement, historical data. Table 32-10-0035-01 Number of farms classified by operating arrangement and household income class.

Individual or family farms in New Brunswick, neighbouring Atlantic provinces, and Canada decreased between 2001 and 2016, while family corporation farms increased. The highest percentage of sole proprietorship farm households fell in the \$25,000 to \$49,999 income class in 2016, while family corporation households were mainly in the \$100,000 to \$249,999 income class,

Figure 17: New Brunswick Farm Operator Income for All Operating Arrangements in 2016



In 2016, the highest percentage (29%) of all farm households in New Brunswick, regardless of operating arrangement, had an income of \$100,000 to \$249,999.

The second highest percentage (23%) had an income of \$25,000 to \$49,999.

The third highest percentage (20%) earned \$50,000 to \$74,999.

Source: Statistics Canada. Table 32-10-0035-01 Number of farms classified by operating arrangement and household income class.



The bottom line

This report presents changes in New Brunswick's farm population in terms of farm operators, farmland, and farm businesses. By evaluating these shifts, economic and social policy incentives can be tailored to support long-term agricultural growth in the province.

New Brunswick's farm demographic has undergone many changes over time, which may give insight into the future of farming if it continues in the same direction. Not only has the number of farmers decreased by 31% between 2001 and 2016, but the proportion of older farmers also significantly increased. Farm operators aged 55 years and above increased by 21 percentage points while farm operators between 35 and 54 years old decreased by the same magnitude. Farm operators below age 35 relapsed to the same levels as 2001, while farmers aged 55 and over comprised the largest proportion of the population in 2016 – even higher than Canada as a whole. New Brunswick's aging farm population may be a concern, as there was a continuous loss of farmers between 2001 and 2016. Hours worked per week also decreased, as the percentage of NB farm operators working more than 40 hours per week decreased while farm operators working less than 20 hours increased, although this could be due to improved technology.

New Brunswick's geography has allowed the province to have the second highest number of farms in the Atlantic region. However, between 2001 and 2016, the province lost 779 farms. Small and medium farm numbers decreased as they consolidated into large farms, yet total acreage under production still decreased. New Brunswick's value per acre of farmland increased from 1996 to 2019, but it remains lower than that in Newfoundland and Labrador, Prince Edward Island, and Canada.

Net farm income has shown positive trends between 2011 and 2019 in nominal terms. NB also had the second smallest increase of farms producing \$2 million and above in receipts, while Newfoundland and Labrador had the highest increase despite having the highest number of small farms. This may be credited to the fact that Newfoundland and Labrador farms had the highest rate of direct marketing. Their growth may be used as an example to promote agricultural growth in New Brunswick. In correlation with the reduction of small farms, individual or family farms decreased while family corporation farms increased.

Farm number trends have varied by farm type. In New Brunswick, livestock farms – including cattle and poultry farms – declined between 2001 and 2016. Fruit and tree nut farming and oilseed and grain farming both increased, while potato and vegetable farms decreased. Farm operator incomes from each farm type may have their own nuances that open the opportunity for further research. For farms that have not consolidated, this is of particular concern, considering the heavy reliance on imports in the province – especially for fresh field vegetables. Providing resources for farmers to effectively increase production may help New Brunswick become more independent in its food production.

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