

11 FACTS ABOUT FARMING



1. Farming is the basis of modern civilization¹

The transition from hunting and gathering food, to farming is thought to have happened about 12,000 years ago, and it profoundly changed the course of civilization. As our hunter-gatherer ancestors gave up their nomadic lifestyles to cultivate the land, they built permanent settlements and communities that eventually led to modern towns and cities. While farmers focused on producing a reliable source of food, other people had the time to pursue activities and interests that became the occupations and hobbies of modern society.



2. Canadian farmers feed the world

The success of the Canadian agriculture sector depends heavily on our ability to export to other countries. As the fifth-largest agricultural exporter in the world (after the EU, U.S., Brazil, and China), Canada plays a significant role in feeding the world. In 2021 Canada exported more than \$82 billion in agriculture and food products.² Canada is the world's top producer of five commodities, producing more than **31% of the world's canola, 52% of the world's mustard, 40% of the world's flax, 39% of the world's pulses, and 70% of the world's maple products.**³ Ontario is home to 25% of all the farms in Canada which produce more than 200 different commodities.⁴ It is an agricultural powerhouse, producing **54% of Canada's soybeans, 60% of Canada's grain corn, more than 60% of the country's greenhouse products and 40% of Canada's poultry and eggs** and generating over \$46 billion of economic activity for the province in 2021.⁵



3. Farming produces economic, ecological and social benefits⁶

Farming is multifunctional, which reflects the multiple roles agriculture plays in contributing to society. It is first and foremost an industrial sector that operates in both local and global private sector markets, producing private goods for which farmers *are* compensated. Agriculture is a key driver of our economy – creating jobs and contributing to economic growth. Farming also provides public goods or collective social and ecological benefits (e.g., food security, ecosystem services, biodiversity conservation, rural community development, climate change mitigation) for which farmers *are not* compensated. As a provider of both private and public goods, agriculture simultaneously generates economic value, protects the environment, ensures food security, while also enhancing social equity.



4. Managing a farm takes many skills

Farmers are the epitome of entrepreneurs and 'jacks of all trades'. They need diverse skills that range from operating machinery, managing finances and other business risks, supervising staff, understanding global commodity markets, negotiating prices, complying with regulations, monitoring consumer trends, collaborating on research, all while being an expert in crop and/or livestock production.



5. There is more to farming than food

Have you ever seen a sticker with the message “If you ate today, thank a farmer”? This point could not be truer, but farmers produce much more than food. Beyond food, farmers produce animal feed, fuel, and fibre. Cotton, wool, leather, pharmaceuticals, vaccines, biofuels, industrial and specialty chemicals, plastics, paints, and cosmetics are value-added products of farming. Ornamentals and flowers are a key commodity for which Niagara is a leading producer.



6. Farmers are stewards of the land

Canadian farmers are world leaders in sustainable crop production – in fact, over the past 20 years, Canadian farmers have doubled production without increasing greenhouse gas emissions.⁷ As stewards of the land, farmers use a variety of sustainable production practices to enhance soil health and water quality, protect and restore ecosystems, and lessen the impacts of climate change. Such sustainable production practices include cover crops, conservation tillage, crop rotation, integrated pest management, soil testing, and nutrient management. Farmers continuously adapt their sustainable production practices as more is learned about the complexities of soil health, pest and nutrient management, and agri-ecosystems.



7. Science, research and innovation are the cornerstones of sustainable farming

Research and science have been spectacularly successful in driving progress in agriculture and are more important now than ever before. Scientific and technological advances are needed for mitigating climate change and protecting biodiversity and essential ecosystem services, while also maintaining productivity and competitiveness. The benefits of science and innovation in agriculture are clear, a recent meta-analysis estimated that each dollar invested in agricultural research generates long-term benefits of \$10 dollars.⁸ With the exciting advances on the horizon; from genomics and biotechnology to robotics and artificial intelligence, agricultural research, science and innovation will continue to create opportunities in the agriculture industry – generating benefits for society.



8. Farming is a family business

Contrary to popular belief, most farms in Canada are family businesses: 97% of Canadian farms are family-owned, with about 25% incorporated as family corporations.⁹ The trend towards incorporation is more a result of adopting professional management practices, rather than reflecting a change in the farm ownership structure. Incorporating a farm does not mean it is no longer family-owned; instead, it gives family farms opportunities to better manage risks, leverage tax advantages and secure financing, and helps to facilitate the transfer of farms from one generation to another.¹⁰



9. Managing farm labour is challenging

Labour is a vital component of a successful farm but working on a farm is different than working in any other job. At its core, farming is about managing biological processes and living organisms under conditions that are rarely under a farmer's control. The 'windows of opportunity' for planting and harvesting crops are very tight. Delays in harvesting can have grave consequences for the quality of crops, which is often linked to the price that farmers are paid. Livestock must be monitored and cared for 24 hours a day - every day. That means employees work under challenging conditions, often with irregular, inconsistent and unpredictable schedules. The labour challenges in agriculture are clear, in fact in 2017, the Ontario agriculture industry lost an estimated \$591 million in sales due to labour shortages. The Canadian Agricultural Human Resources Council predicts that by 2029, the Ontario agriculture sector will need more than 112,000 workers, but due mostly to retirement, more than 47,000 jobs will be unfilled.¹¹



10. The faces of farming are changing

Driven by demographics including age, education, gender and immigration, Ontario agriculture is changing and becoming more diverse. For example:

Farmers are getting older: From 2001 to 2021, the average age of a farmer has increased from 51 to 57. The number of young farmers (younger than 35 years old) decreased by 37%, while the number of older farmers (aged 55 or older) increased by 23%.¹²

There are more women in farming. Although the number of farmers in Ontario has decreased over time, the proportion of woman farmers increased significantly. In 2021, 31% of farmers are women, up from 27% in 2001.¹³ In fact, many scholars believe that women invented agriculture in response to climate change, almost 12,000 years ago.¹⁴

Farmers are highly educated. More than 50% of farmers have a post-secondary education.¹⁵

There are fewer farms. The 2021 Census of Agriculture reports that there are 1250 fewer farms in Ontario compared to 2016. Over the past 20 years the number of farms in Ontario has decreased by 20%.¹⁶

Farms are bigger. Since 2001, the average size of a farm in Ontario has increased from 226 acres to 243 acres. However, since 2011, farm sizes in Ontario have remained relatively stable, with a slight decrease from 2016 to 2021.¹⁷



11. Farmland in Ontario is disappearing

More than half of Canada's highest quality farmland is in Ontario, but in the last decade, Ontario has lost nearly 13% of its farmland to non-agricultural land uses like urban development.¹⁸ The 2021 Census of Agriculture reported that Ontario is losing 319 acres/day of farmland, significantly up from 175 acres/day in 2016.¹⁹ The loss of farmland poses a huge risk for local food production, food security, local economic development and jobs. The loss of farmland also has serious environmental and social implications. As agri-ecosystems, farms provide essential ecosystem services beyond food that are critical to the survival of people and other plants and animals. Moreover, farms contribute to the social cohesion, cultural identity and resiliency of rural communities.²⁰

Resources

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- ³ Real Dirt on Farming (2022). Farming in Canada - Real Dirt on Farming. Available at: <https://www.realdirtorfarming.ca/article/canadian-farms-farmers/farming-in-canada> [Accessed 26 July 2022].
- ⁴ Government of Ontario (2022). Ontario's local food report, 2021 edition. Available at: <https://www.ontario.ca/page/ontarios-local-food-report-2021-edition> [Accessed 26 July 2022].
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- ⁶ Global Agriculture (2022). Multifunctionality. Available at: <https://www.globalagriculture.org/report-topics/multifunctionality.html> [Accessed 26 July 2022].
- ⁷ Canadian Federation of Agriculture (2022). Environmental Sustainability and Climate Change | CFA-FCA. Available at: <https://www.cfa-fca.ca/issues/environmental-sustainability/> [Accessed 26 July 2022].
- ⁸ Lloyd, J., (2022). Rekindling the Slow Magic of Agricultural R&D. Issues in Science and Technology. Available at: <https://issues.org/rekindling-magic-agricultural-research-development-alston-pardey-rao/> [Accessed 26 July 2022].
- ⁹ The Real Dirt on Farming 2020/2021 Issue. <https://www.realdirtorfarming.ca/wp-content/uploads/2021/03/Dirt-Layout2020-LR-singles-2021.pdf> [Accessed 28 July 2022]
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- ¹¹ Canadian Agricultural Human Resource Council (2022). How Labour Challenges Will Shape the Future of Agriculture in Ontario | CAHRC-CCRHA. Available at: <https://prod.cahrc-ccrha.ca/resources/document/how-labour-challenges-will-shape-future-agriculture-ontario> [Accessed 26 July 2022].
- ¹² Statistics Canada (2022). Characteristics of farm operators, Census of Agriculture historical data. Available at: <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3210023001> [Accessed 26 July 2022].
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- ¹⁴ Naithani, S., 2022. The Origins of Agriculture. Available at: <https://open.oregonstate.education/cultivatedplants/chapter/agriculture/> [Accessed 26 July 2022].
- ¹⁵ Statistics Canada (2018). Canadian farm operators: An educational portrait. [online] Available at: <https://www150.statcan.gc.ca/n1/pub/11-627-m/11-627-m2018040-eng.htm> [Accessed 26 July 2022].
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The Niagara Agriculture Municipal Learning Network (NAMLN) is an initiative to build capacity within the municipalities of Niagara to support and promote a sustainable, competitive agriculture industry. NAMLN is led by the Niagara Community Observatory at Brock University with funding from the Canadian Agricultural Partnership through the Ontario Agri-Food Research Initiative of the Ontario Ministry of Agriculture, Food and Rural Affairs For more information about NAMLN, go to <https://brocku.ca/niagara-community-observatory/namln/>