

## Canadian Agriculture at a Glance

### The farm operator gender pay gap is narrowing

by Zong Jia Chen

Release date: December 8, 2023



---

## How to obtain more information

For information about this product or the wide range of services and data available from Statistics Canada, visit our website, [www.statcan.gc.ca](http://www.statcan.gc.ca).

You can also contact us by

**Email at** [infostats@statcan.gc.ca](mailto:infostats@statcan.gc.ca)

**Telephone**, from Monday to Friday, 8:30 a.m. to 4:30 p.m., at the following numbers:

- Statistical Information Service 1-800-263-1136
- National telecommunications device for the hearing impaired 1-800-363-7629
- Fax line 1-514-283-9350

## Standards of service to the public

Statistics Canada is committed to serving its clients in a prompt, reliable and courteous manner. To this end, Statistics Canada has developed standards of service that its employees observe. To obtain a copy of these service standards, please contact Statistics Canada toll-free at 1-800-263-1136. The service standards are also published on [www.statcan.gc.ca](http://www.statcan.gc.ca) under "Contact us" > "[Standards of service to the public](#)."

## Note of appreciation

Canada owes the success of its statistical system to a long-standing partnership between Statistics Canada, the citizens of Canada, its businesses, governments and other institutions. Accurate and timely statistical information could not be produced without their continued co-operation and goodwill.

Published by authority of the Minister responsible for Statistics Canada

© His Majesty the King in Right of Canada, as represented by the Minister of Industry, 2023

All rights reserved. Use of this publication is governed by the Statistics Canada [Open Licence Agreement](#).

**An [HTML version](#) is also available.**

*Cette publication est aussi disponible en français.*

---

# Canadian Agriculture at a Glance



## The farm operator gender pay gap is narrowing

by Zong Jia Chen

Results from the Agriculture–Population Linkage (this linkage combines data from the Census of Agriculture with the Census of Population) show that the gender pay gap (women’s earnings compared with men’s earnings) among Canada’s farm operators has been shrinking over the past two decades. In 2020, it was at nearly the same level as the gender pay gap among all people aged 16 and over in Canada.

The gender pay gap is a longstanding issue that exists in various industries across Canada, including the agricultural sector. Against the backdrop of the [growing proportion of women farm operators](#), this article provides analysis on the gender pay gap among Canada’s farm operators over time and explores the gender pay gap in 2020 by geography, farm type, revenue class, level of education, field of study, racialized group and population centre.

### Measuring the gender pay gap

In this article, the following formula is used to calculate the gender pay gap among farm operators:

$$\text{Gender pay gap (\%)} = \left( \frac{\text{Men's average annual earnings} - \text{Women's average annual earnings}}{\text{Men's average annual earnings}} \right) * 100$$

For example, a 10.0% gender pay gap indicates that women earned, on average, 10.0% less in wages, salaries and commissions than men in a given year.

Notes:

- In the formula above, “earnings” specifically refer to [wages, salaries and commissions](#).
- Farm operators with no wages, salaries or commissions (in other words, farm operators who are considered farm owners) are excluded from the gender pay gap analysis.
- The impact of some factors affecting the gender pay gap, such as the total hours worked annually by a farm operator, was not accounted for in this study. For example, non-paid activities, such as child rearing, could limit a farm operator’s time commitment to farm work and consequently reduce their annual wages, salaries and commissions.

## The farm operator gender pay gap has shrunk over the past 20 years

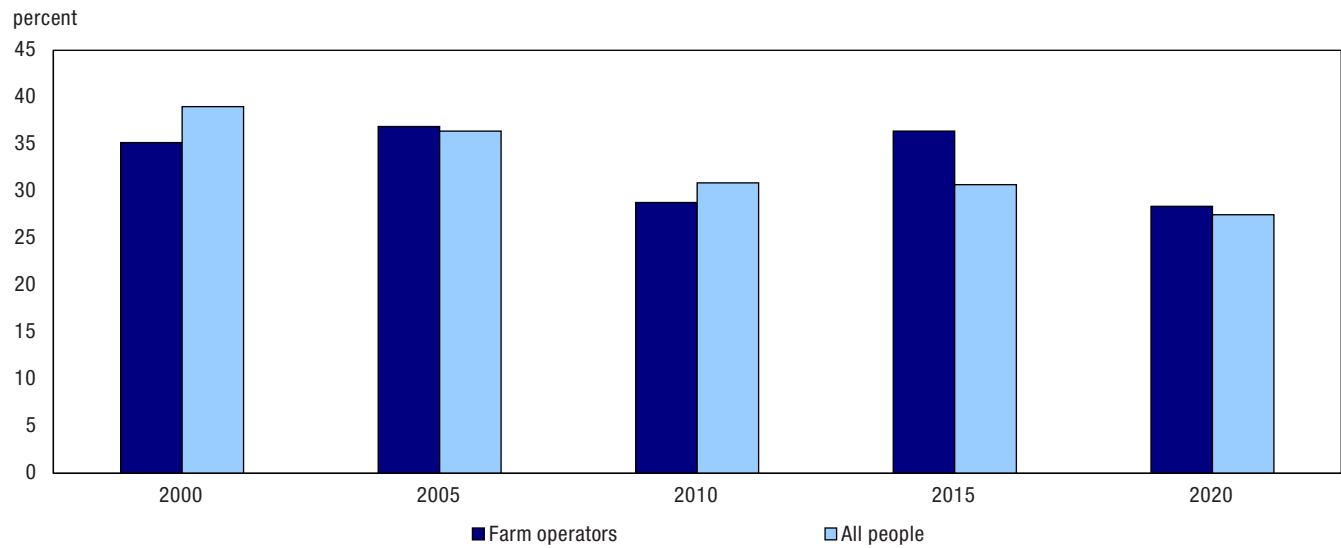
Despite fluctuations in the gender pay gap among farm operators over the past two decades, the overall gender pay gap has narrowed in Canada. In 2020, women farm operators earned, on average, 28.4% less in wages, salaries and commissions than men farm operators, down from 35.2% in 2000. By comparison, the gender pay gap observed for all people in Canada followed a similar declining trend, down from 39.0% in 2000 to 27.5% in 2020 (Chart 1).

## The gender pay gap is smaller among farm operators who work exclusively on the farm

In 2020, the gender pay gap among farm operators who worked on the farm was 20.4%. By comparison, the gender pay gap among farm operators who worked on and off the farm was 32.1%. This shows that there is a larger discrepancy in the gender pay gap for off-farm jobs.

Off-farm work entails work done for an off-farm job, a non-farm business or another farm.

**Chart 1**  
Gender pay gap among farm operators and all people, Canada, 2000 to 2020



**Note:** The age for farm operators is 15 years and over, whereas the age for all people is 16 years and over.  
**Sources:** Statistics Canada, Agriculture–Population Linkage, 2001 to 2021; and Centre for Income and Socioeconomic Well-being Statistics, 2001 to 2021.

## Farm operators in the Atlantic provinces face the smallest gender pay gap

In 2020, the gender pay gap among farm operators in the Atlantic provinces was the smallest (12.9%) in Canada, followed by Quebec (14.6%). By comparison, the gender pay gap among farm operators was largest in British Columbia, where women farm operators earned, on average, 37.7% less in wages, salaries and commissions than men farm operators (Table 1).

## The gender pay gap is smallest among farm operators working on dairy cattle and milk farms

In 2020, women farm operators working on dairy cattle and milk farms earned, on average, 5.7% less in wages, salaries and commissions than men farm operators. This gender pay gap was the smallest among all farm types, followed by vegetable and melon farms (18.9%). By contrast, farm operators working on greenhouse, nursery and floriculture farms had the largest gender pay gap (38.3%).

**Table 1**  
**Farm operators' gender pay gap by geography, 2020**

Geography	Gender pay gap percent
Atlantic provinces	12.9
Quebec	14.6
Ontario	29.0
Manitoba	20.2
Saskatchewan	30.1
Alberta	36.9
British Columbia	37.7
<b>Canada</b>	<b>28.4</b>

Source: Statistics Canada, Agriculture–Population Linkage, 2021.

## The gender pay gap is significantly smaller among farm operators working on farms with operating revenues of \$1,000,000 and over

Among farm operators, women operating farms with revenues under \$10,000 earned, on average, 27.9% less in wages, salaries and commissions than men in 2020. By comparison, women operating farms with revenues of \$2,000,000 and over earned 18.0% less than men. Notably, the gender pay gap was smallest (10.7%) among farms with revenues from \$1,000,000 to \$1,999,999 (Table 2).

## The gender pay gap is smallest for farm operators who reported a university certificate or diploma below the bachelor level

Average wages, salaries and commissions are positively correlated with level of educational attainment, and this is true for all farm operators, regardless of gender.

However, in terms of educational attainment, the gender pay gap was smallest among farm operators who reported having a university certificate or diploma below the bachelor level, at 23.2% in 2020. Conversely, women who reported having an apprenticeship or trades certificate or diploma earned, on average, just under half (49.2%) of the wages, salaries and commissions earned by men (Table 3).

In 2021, over one-quarter (28.2%) of women farm operators reported holding a bachelor-level credential or above—significantly higher than the rate among men farm operators (16.5%). Conversely, 5.0% of women farm operators did not have a certificate, diploma or degree, compared with 12.4% of men farm operators.

## The gender pay gap is smaller for farm operators with a background in an agriculture-related field of study

For comparative purposes, the top five fields of study most frequently reported by women farm operators in 2021 were selected for gender pay gap analysis. These five fields accounted for nearly three-quarters (73.5%)

**Table 2**  
**Farm operators' gender pay gap by revenue class, Canada, 2020**

Revenue class	Gender pay gap percent
Under \$10,000	27.9
\$10,000 to \$24,999	36.3
\$25,000 to \$49,999	30.9
\$50,000 to \$99,999	35.3
\$100,000 to \$249,999	24.7
\$250,000 to \$499,999	25.6
\$500,000 to \$999,999	27.9
\$1,000,000 to \$1,999,999	10.7
\$2,000,000 and over	18.0

Source: Statistics Canada, Agriculture–Population Linkage, 2021.

**Table 3**

**Average wages, salaries and commissions of farm operators and gender pay gap by educational attainment, Canada, 2020**

Educational attainment	Average wages, salaries and commissions		Gender pay gap percent
	Men	Women	
	dollars		
No certificate, diploma or degree	42,169	26,599	36.9
Secondary (high) school diploma or equivalency certificate	50,097	33,604	32.9
Apprenticeship or trades certificate or diploma	59,788	30,390	49.2
College, CEGEP or other non-university certificate or diploma	61,975	40,619	34.5
University certificate or diploma below bachelor level	60,142	46,186	23.2
University certificate, diploma or degree at bachelor level or above	91,703	60,255	34.3
<b>All educational attainments</b>	<b>60,571</b>	<b>43,378</b>	<b>28.4</b>

Source: Statistics Canada, Agriculture–Population Linkage, 2021.

of women farm operators reporting postsecondary credentials and for less than half (43.5%) of men reporting such credentials.

Among farm operators, women who reported that they had completed their highest postsecondary certificate, diploma or degree in an agriculture-related major field of study earned, on average, 17.9% less in wages, salaries and commissions than men in 2020. This was well below the overall gender pay gap of 28.4% among farm operators. Notably, nearly one-quarter (22.8%) of women farm operators reported business-related programs as their major field of study, and these women faced the largest gender pay gap (49.3%) of the top five fields of study in 2020 (Table 4).

## The gender pay gap is smaller among farm operators from racialized groups

In 2020, the average wages, salaries and commissions for farm operators from racialized groups (racialized farm operators) were \$56,765. Among racialized farm operators, men earned \$61,223 on average, while women earned \$48,855. As a result, the gender pay gap among racialized farm operators was 20.2%, while the gender pay gap was 38.8% among Indigenous farm operators and 28.3% among farm operators from other ethnocultural groups (Table 5).

**Table 4**

**Average wages, salaries and commissions of farm operators and gender pay gap by selected field of study, Canada, 2020**

Field of study	Average wages, salaries and commissions		Gender pay gap percent
	Men	Women	
	dollars		
Business, management, marketing and related support services	99,929	50,667	49.3
Health professions and related programs	96,799	50,156	48.2
Agriculture, agriculture operations and related sciences	52,415	43,032	17.9
Education	58,967	51,085	13.4
Personal and culinary services	52,630	26,885	48.9

Note: This table displays the top five major fields of study reported by women farm operators.

Source: Statistics Canada, Agriculture–Population Linkage, 2021.

**Table 5**

**Average wages, salaries and commissions of farm operators and gender pay gap by ethnocultural group, Canada, 2020**

Ethnocultural group	Average wages, salaries and commissions		Gender pay gap percent
	Men	Women	
	dollars		
Other ethnocultural groups (Caucasian in race or White in colour)	60,340	43,234	28.3
Racialized groups	61,223	48,855	20.2
Indigenous peoples	70,629	43,242	38.8

Source: Statistics Canada, Agriculture–Population Linkage, 2021.

## The gender pay gap among farm operators is smaller in rural areas

The gender pay gap was smallest among farm operators in rural areas in 2020, at 24.8%. By

comparison, farm operators in medium population centres faced the largest gender pay gap (43.6%). However, farm operators living in any size of population centre had, on average, higher wages, salaries and commissions than those living in rural areas. This was the case for both men and women (Table 6).

**Table 6**

### Average wages, salaries and commissions of farm operators and gender pay gap by population centre, Canada, 2020

Field of study	Average wages, salaries and commissions		Gender pay gap percent
	Men	Women	
	dollars		
Rural areas (population less than 1,000)	54,006	40,638	24.8
Small population centres (population between 1,000 and 29,999)	68,295	48,767	28.6
Medium population centres (population between 30,000 and 99,999)	89,435	50,474	43.6
Large urban population centres (population of 100,000 or more)	93,975	59,585	36.6

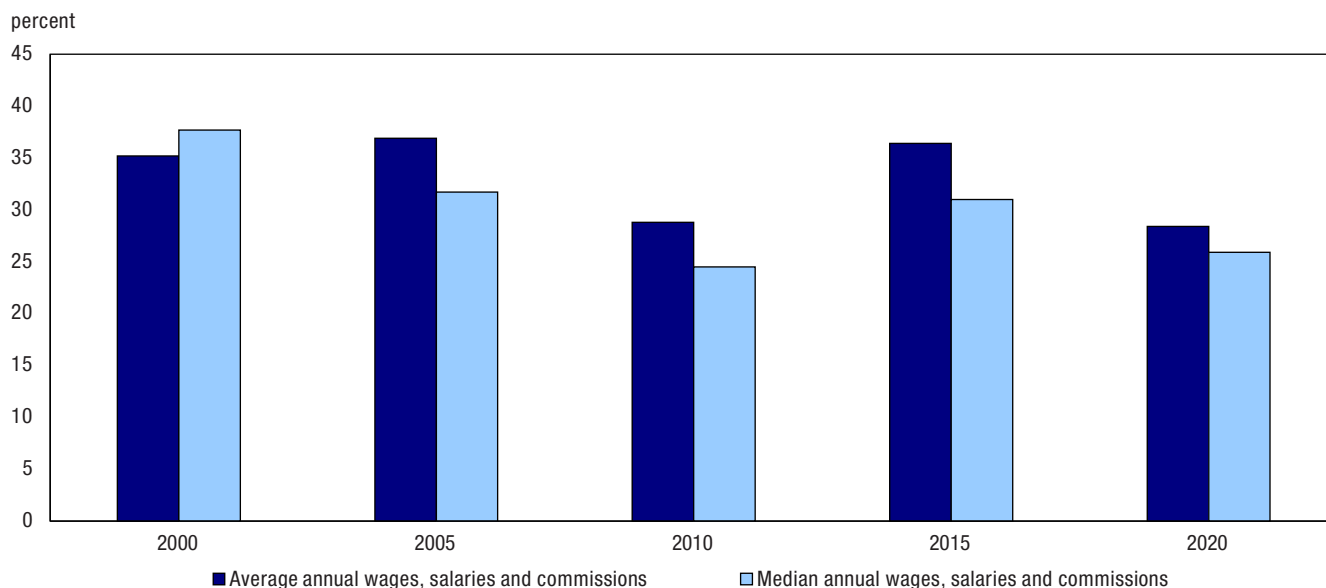
Source: Statistics Canada, Agriculture–Population Linkage, 2021.

## Robustness check

Most empirical studies of the gender pay gap focus on the employed adult population aged 25 to 54 (core working-age group). The rationale for this decision is that younger individuals (under 25 years) are often full-time students and older individuals (55 years and over) are often retirees. Consequently, their socioeconomic statuses are quite different than those of the core working-age group. This article differs in its focus, covering farm operators aged 15 and over to eliminate any selection bias. Nevertheless, a parallel “robustness check” test was conducted, based exclusively on farm operators in the core working-age group, and the results confirm a downward trend in the gender pay gap similar to the trend recorded for farm operators aged 15 and over in this study.

This article also explored using median annual wages, salaries and commissions. Using median annual earnings rather than average annual earnings eliminates any overrepresentation or underrepresentation of women farm operators across the earnings distribution. Analysis of the gender pay gap based on median annual earnings of farm operators showed an overall declining trend from 2000 to 2020. Additionally, the gender pay gap was larger when based on average annual earnings instead of median annual earnings, except in 2000. This shows that, at least in the last 15 years, the gender pay gap has been relatively wide among farm operators with high earnings, compared with farm operators with lower earnings (Chart 2).

**Chart 2**  
**Farm operators' gender pay gap, Canada, 2000 to 2020**



Sources: Statistics Canada, Agriculture–Population Linkage, 2001 to 2021.

## Note to readers

The estimates from the Agriculture–Population Linkage in this article exclude people residing in Canada’s three territories and [collective dwellings](#).

The wages, salaries and commissions in this article are before taxes.

## Definitions and concepts

### Farm definition

A significant conceptual change has been introduced for the 2021 Census of Agriculture: a “farm” or an “agricultural holding” (i.e., the census farm) now refers to a unit that produces agricultural products and reports revenues or expenses for tax purposes to the Canada Revenue Agency. Before 2021, a “farm” was defined as an agricultural operation that produced at least one agricultural product intended for sale. For more information, refer to the [Census of Population dictionary](#).

### Farm operator

The term “farm operator” refers to any person responsible for the management decisions in operating

a farm or agricultural operation. Also known as an agricultural operator, farmer, operator or rancher.

### Farm type

The type of farm is established through a procedure that classifies each census farm according to the predominant type of production. This is done by estimating the potential revenues from the inventories of crops and livestock reported on the questionnaire and determining the product or group of products that makes up the majority of the estimated receipts. For example, a census farm with total potential revenues of 60% from hogs, 20% from beef cattle and 20% from wheat would be classified as a hog and pig farm. The farm types presented in this document are derived based on the 2017 North American Industry Classification System. For more information, refer to the [Census of Population dictionary](#).

### Indigenous farm operators

This includes farm operators who identify as First Nations (North American Indian), Métis and/or Inuk (Inuit), and/or those who report being Registered or Treaty Indians (that is, registered under the *Indian Act of Canada*), and/or those who are members of a First Nation or Indian band.



## Major field of study

The “major field of study” concept refers to the predominant discipline or area of learning or training of a person’s highest completed postsecondary certificate, diploma or degree, classified according to the Classification of Instructional Programs (CIP) Canada 2021. For more information, refer to the [Census of Population dictionary](#).

## Men

This gender category includes men (and/or boys) and may include some non-binary persons as well.

## Population centre

A population centre has a population of at least 1,000 and a population density of 400 persons or more per square kilometre, based on population counts from the 2021 Census of Population. All areas outside population centres are classified as rural areas.

## Racialized group

The concept of “racialized group” is derived directly from the detailed “visible minority” variable in the census. The variable “visible minority” comes from the *Employment Equity Act* and refers to whether a person is a visible minority. The act defines visible minorities as “persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour.” The visible minority population consists mainly of the following groups: South Asian, Chinese, Black, Filipino, Arab, Latin American, Southeast Asian, West Asian, Korean, and Japanese.

## Women

This gender category includes women (and/or girls) and may include some non-binary persons as well.