



PRT 277408

The Honourable Robert Black, Senator  
Chair  
Standing Senate Committee Agriculture and Forestry  
c/o Ferda Simpson  
The Senate  
Ottawa ON K1A 0A4

Dear Senator Black:

Please find attached, in both official languages, the information requested by the Standing Committee on Agriculture and Forestry following the appearance of Agriculture and Agri-Food Canada senior officials before the Committee on February 14, 2023.

I trust that the members of the Committee will find this information useful in their study regarding the status of soil health in Canada.

Sincerely,

Christine Okrainec  
Director  
Parliamentary Relations and Portfolio Coordination

Attachments

## Question 1:

**Senator Jaffer:** I have a question for Mr. St-Pierre, but first I have a question for you, Mr. Valicenti, and that was on collecting data. You said you collect data for gender analysis. I imagine that's gender-based analysis plus. My experience with the government has been that gender-based analysis plus does not mean much in the sense that there's not much data collected for Black or Indigenous people.

Can you please give us the data that you've collected on this issue so we can see exactly how the data is collected? Maybe we can work together to improve collection of that data. Will you do that?

**Mr. Valicenti:** I can certainly go back and see what we have in the context of data. I would just say that on the environment side, some of our programming is still fairly early in its infancy, like a year or two years old. And, as I mentioned, we try to use third-party delivery agents to support us in the delivery and collecting of data. We can certainly look at that.

I can say that it is an area we want to focus attention on. You're right, it is the "plus," to be clear. It is part of the survey work we'll be doing, as well as the evaluation of the programs midway and towards the end. We can certainly look. I will say that especially in this area vis-à-vis other programs that we deliver, I would say that the data is very preliminary, but we are looking at it as an area of focus as we go through the next few years in the area of environment and environmental sustainability.

**Senator Jaffer:** With the greatest of respect, the agriculture department is not new; there must be data collected over the years. I would like to see some form of data that you've collected. I know when we asked Justice, we were shocked. They say gender-based analysis plus, but the "plus" doesn't exist. So I'd like to see that.

I want to ensure you make a serious effort and work with you to make sure that we put systems in place for gender-based analysis plus. Farmers are from many different walks of life, especially Indigenous farmers. Just the other day we heard that. That's why I think it's very important that we look at the data, so if you could please provide that to the chair.

## **Response from AAFC:**

### **AAFC's Capacity for Conducting GBA Plus**

GBA Plus is a tool to advance diversity, equity and inclusion outcomes by applying an intersectional lens to assess the specific needs and circumstances of the people impacted by our policies, programs and initiatives. By applying GBA Plus, Agriculture and Agri-Food Canada (AAFC) identifies and mitigates potential barriers, and capitalizes on opportunities to enhance the reach and benefits of AAFC's initiatives for underrepresented and marginalized groups in the agriculture and agri-food sector.

Underrepresented and/or marginalized in the agriculture and agri-food sector include, but are not limited to Indigenous Peoples, women, youth, racialized persons, persons with disabilities, 2SLGBTQI+ communities, and official language minority communities. When possible, we take an intersectional lens to consider other factors such as region (geography), income, religion, etc.

AAFC continues to enhance capacity across the department for conducting GBA Plus. The department has an Assistant Deputy Minister GBA Plus Champion who provides leadership and coordination in the promotion, implementation, and monitoring of GBA Plus in the development of effective policies, programs, and initiatives. The department's GBA Plus Responsibility Centre includes GBA Plus Focal Points who lead on the GBA Plus processes for the department. The Focal Points work with the GBA Plus Branch Advisor Network to enhance capacity across the department.

AAFC continues to develop and refine tools to guide analysts through the application of GBA Plus. For example, AAFC has an assessment template to guide policy, program and initiative leads through mandatory GBA Plus processes for Cabinet documents (i.e., Budget proposal, Memorandum to Cabinet, Treasury Board submission). Through these mandatory processes, this template helps guide analysts to identify direct and indirect beneficiaries, use statistics to understand the representation of the beneficiaries, and assess the impacts and explore solutions, all in an effort to mitigate barriers or unintended impacts. GBA Plus is an iterative analysis that is built upon throughout the Cabinet processes. For example, at the Treasury Board submission phase, GBA Plus includes developing data collection and reporting plans. In addition to the mandatory processes, the Department is exploring opportunities to develop other tools to mainstream GBA Plus throughout all departmental initiatives.

### **Data Sources**

GBA Plus is an evidence-based tool, and AAFC is committed to improving the quality and availability of disaggregated data to better understand the range of diverse impacts of a policy, program or initiative. The Department uses data and analysis from a variety of sources depending on the initiative's focus to both understand the demographic representation of the affected populations as well as assessing the impacts on those populations. For example, AAFC uses Statistics Canada (StatCan) data (e.g. on the agriculture and agri-food sector specifically, and the economy as a whole) and AAFC program data (e.g. self-identification data provided by applicants on program applications). AAFC also uses qualitative data, such as client journey mapping exercises with AAFC program participants, targeted outreach and roundtables with diverse groups in the sector, external peer-reviewed research papers, internal white papers, and case studies and reports from industry organizations.

The following sections go into more detail on the types of data available for GBA Plus at AAFC.

#### **Sector and Economy Data from Statistics Canada**

When conducting GBA Plus, analysts often begin with a look at general sector data to determine the composition of the direct client base for their initiative. StatCan collects vast amounts of data through its national Census of Population and Census of Agriculture, as well as surveys and other data sources (see Annex A, Table 1 for a summary of available data sources). Various disaggregated data points are available through StatCan's Gender, Diversity and Inclusion Statistics portal. For agriculture specifically, StatCan creates the Agriculture-Population Linkage (a linkage between the two national censuses), which provides disaggregated data on farm operators and farm families.

AAFC continues to develop products to make this data more easily accessible across the department. For example, the department developed a set of Value Chain Profiles compiling statistics to show the representation of women, Indigenous Peoples, persons with disabilities, visible minorities/racialized

persons, and youth throughout the agriculture and food value chain (see Annex A, Table 2 for a sample of the data). While the majority of the available disaggregated data are related to primary agriculture (e.g. farm operators and employees), these profiles also identify data available in other sections of the value chain, including agricultural inputs, food and beverage manufacturing and production, food wholesale and retailers.

The department also uses disaggregated sectoral data for other demographic characteristics as needed, including disaggregation by region, farm type, and farm revenue size. Tables 3 and 4 (Annex A) show examples of regional disaggregation of sectoral data. In response to the Senator's question on Indigenous farmers in British Columbia, Table 5 (Annex A) shows the breakdown compared to Canada as a whole. As of 2016, there were 815 Indigenous farm operators in British Columbia, representing 3.1% of operators in the province. This is above the national share (1.9%). Fruit and tree nut farming is a smaller subsector, with 70 farm operators in BC reporting an Indigenous identity, representing 1.4% of operators. This is below the national share for the subsector (2.5%).

#### AAFC Program Data

One of the ways we source data for GBA Plus for AAFC's programs is by collecting self-identification data on program applications. AAFC collects data to better understand who is accessing our programs and explore potential barriers, including by assessing trends in applications being approved, rejected, or withdrawn, and assessing the representation of underrepresented and marginalized groups in the sector compared to the number accessing AAFC programs.

A significant amount of AAFC's programming for the sector is established through the five year agricultural policy framework, developed and launched in partnership with provincial and territorial ministers. The framework includes cost-shared programs (jointly funded with a 60:40 ratio for federal:provincial/territorial governments) and federal-only programs.

Under the current framework, the Canadian Agricultural Partnership (CAP) (2018-2023), AAFC started collecting data for GBA Plus across some programs that provided initial insight into program reach for underrepresented and marginalized groups. Applicants were asked to respond to the following two questions when applying for funding: "Does the mandate of your organization focus on any of the following groups (select all that apply)" and "Select any of the following groups who will directly benefit from the intent of this project's activities." Applicants were able to choose between the following options for both questions: Indigenous, persons with disabilities, visible minorities, women, youth, not applicable, and decline to identify. Overall, there was a high willingness from applicants to respond to these questions, as there was a very low rate of "Decline to Identify" responses out of all applications. For example, only 3.21% of applicants declined to identify for the mandate question, and 3.10% declined to identify for the expected beneficiary question.

Outside of the CAP framework, AAFC is also collecting data for GBA Plus in other federal Grants and Contributions programs. The data collection approach varies between programs. Some programs collect according to the above mentioned questions on applicant organization's mandate and expected project beneficiaries. For example, the Agricultural Clean Technology (ACT) Program's application collected data for both questions. For the ACT Adoption Stream, 30.83% of approved applications selected that their organization's mandate focused on at least one of the underrepresented and marginalized groups between 2018 and August 2022. Other programs collect information based on tailored additional

questions. For example, the Youth Employment and Skills Program piloted the question “Is your organization majority owned (50% or more) by one or more of the following groups (select all that apply).” Since the addition of this question in 2020 and as of September 2022, 15.41% of applicants have indicated that their organization is majority owned by women. The Indigenous Agriculture and Food Systems Initiative allows for disaggregation of Indigenous self-identification data, with the three possible responses being ‘First Nations’, ‘Inuit’, and ‘Metis’ (more than one may be selected). The most common response to this question was First Nations, at 90.83%.

Learning from these efforts, AAFC is further enhancing data collection across its initiatives, including through the upcoming framework, the Sustainable Canadian Agricultural Partnership (Sustainable CAP) (2023-2028). Advancing diversity, equity and inclusion outcomes has been a priority through the development of Sustainable CAP. Federal, provincial and territorial (FPT) governments agreed to the following guiding principle for the framework, “work to address barriers to participation and consider the needs of underrepresented groups such as youth and women, and strengthen relationships with Indigenous Peoples to better support sector participation.” In support of this guiding principle, FPT governments will collect data to enable analysis on the reach of Sustainable CAP programs. While some provinces and territories were already collecting some GBA Plus data, efforts under Sustainable CAP will support a consistent approach to data collection, measurement and reporting by FPT governments. For cost-shared programs, AAFC will work with those provinces and territories that will be collecting GBA Plus data for the first time. AAFC will also support provinces and territories by performing baseline analysis of applicant self-identification data on underrepresented and marginalized groups.

AAFC is also enhancing data collection in support of GBA Plus for federal-only programs by refining questions that will be consistently applied across programs to improve the quality and availability of disaggregated data to better understand the range of diverse impacts. These changes will also be applied to all federal-only programs outside of the Sustainable CAP framework that launch after March 31, 2023.

In addition to the questions on the organization’s mandate and expected beneficiaries of project proposals, the new application form will also include questions related to the ownership of the applicant (e.g., majority ownership, representation), as well as information on how applicants integrate diversity and inclusion considerations into their work (e.g. through diversity, equity and inclusion plans etc.). Data collection under Sustainable CAP will also build on the list of options available for self-identification. Under CAP, applicants were able to select from the following list: Indigenous, persons with disabilities, visible minorities, women, youth, not applicable, decline to identify. Under Sustainable CAP, options will be expanded to disaggregate Indigenous Peoples (First Nations, Inuit, Métis) and include 2SLGBTQI+ communities. There are also questions for applicants to self-identify as an official language minority community. This enhanced data collection for GBA Plus will allow for more in-depth research and analysis that can provide a better understanding of the experience of underrepresented and marginalized groups, the reasons behind barriers and challenges they face, and inform program design and delivery decisions.

Annex A: Statistics Canada Data Samples

Table 1: Summary of Sources of Quantitative Data

	Units of observation	Frequency	Gender	Age	Indigenous identity	Visible minority status	Immigration status	Persons with disabilities	Official Language Minority Communities (OLMC)
Census of Population (COP)	Individuals, families, and households	5 years	x	x	x	x	x		x
Census of Agriculture (CEAG)	Farm businesses and farm operators	5 years	x	x					x
Census of Agriculture-Population linkage (Ag-Pop linkage)	Farm operators, farm households, and farm businesses	5 years	x	x	x	under discussion	x	under discussion	x
2017 Canadian Survey of Disability (CSD)	Individuals	5 years	x	x	under discussion		under discussion	x	
Labour Force Survey (LFS)	Individuals	Monthly	x	x	x (off-reserve)	x	x	under discussion	
Linked File Environment (LFE)	Businesses, primary owner/manager, and employees	Depends on data source.	x	x	Under development	Under development	x	Under development	
Canadian Employer-Employee Dynamics Database (CEEDD)	Businesses, business owners, and employees	Annual	x	x			x	under discussion	

Table 2: Demographics of the agriculture and agri-food value-chain, 2016\*

Demographic	Primary agriculture		Total primary agriculture	Food processing	Total Primary Agriculture and Food Processing	Food wholesale, retailing, and services	Total Canadian economy
	Farm operators	Farm workers					
<b>Women</b>	28.7%**	37.1%	30.2%	40.9%	36.8%	55.8%	48.3%
<b>Indigenous Persons</b>	1.9%**	3.3%	2.4%	3.2%	2.8%	4.4%	3.9%
<b>Visible Minorities</b>	2.8%	14.1%	8.1%	27.7%	17.0%	27.7%	20.8%
<b>Young Persons (&lt;35 years of age)</b>	9.2%**	44.0%	27.1%	30.2%	28.6%	57.6%	34.9%
<b>OLMCs</b>	3.5%	3.6%	3.6%	6.6%	5.0%	5.8%	6.2%
<b>Persons with Disabilities</b>	17.0%		17.0%	n/a	n/a	n/a	16.2%

Sources: Statistics Canada, 2016 Census of Population, 2016 Census of Agriculture & 2017 Canadian Survey on Disability

\*This information will be updated to 2021 once all required data are available (currently the only 2021 data available are for the share of women farm operators and young farm operators).

\*\*Includes all farm operators, including those whose primary source of employment is off farm (2016 Census of Agriculture).

Table 3: Employment demographics for primary agriculture, by province and territory, 2016\*

Province	Total Employed**	Women	Indigenous Persons	Visible Minorities	Youth (<35 years of age)	OLMCs
Newfoundland and Labrador	2,000	36.1%	8.7%	1.4%	22.4%	0.0%
Prince Edward Island	4,000	22.0%	1.2%	2.3%	27.1%	1.8%
Nova Scotia	7,000	32.1%	3.1%	2.4%	26.8%	1.7%
New Brunswick	7,000	30.9%	3.1%	2.7%	25.6%	32.3%
Quebec	65,000	31.9%	1.5%	3.5%	27.5%	6.5%
Ontario	91,000	35.4%	1.3%	8.2%	30.4%	3.5%
Manitoba	27,000	27.3%	5.1%	5.0%	26.6%	4.0%
Saskatchewan	47,000	26.8%	2.8%	2.0%	20.7%	1.7%
Alberta	56,000	32.8%	2.7%	4.6%	23.8%	1.7%
British Columbia	39,000	46.6%	4.1%	34.5%	24.2%	1.4%
Territories	180	38.9%	22.2%	0.0%	37.8%	7.4%

Sources: Statistics Canada, 2016 Census of Population

\* This information will be updated to 2021 once all required data are available (currently the only 2021 data available are for the share of women farm operators and young farm operators).

\*\*Includes all those whose primary source of employment is in the farming industry (2016 Census of Population).

Table 4: Employment demographics for food processing, by province and territory, 2016

Province	Total Employed**	Women	Indigenous Persons	Visible Minorities	Youth (<35 years of age)	OLMCs
Newfoundland and Labrador	10,000	41.6%	8.1%	0.8%	18.7%	0.1%
Prince Edward Island	3,000	39.5%	2.9%	3.6%	27.4%	3.6%
Nova Scotia	10,000	34.4%	8.9%	3.3%	27.4%	7.3%
New Brunswick	13,000	45.0%	4.0%	5.3%	25.5%	47.8%
Quebec	75,000	37.8%	1.5%	15.6%	32.7%	10.4%
Ontario	95,000	42.7%	1.7%	34.9%	30.0%	2.5%
Manitoba	11,000	35.7%	7.2%	44.8%	29.2%	2.5%
Saskatchewan	6,000	33.1%	8.4%	27.0%	30.7%	0.8%
Alberta	22,000	40.1%	2.9%	47.0%	30.5%	2.0%
British Columbia	31,000	47.3%	5.7%	45.8%	31.4%	1.2%



<b>Territories</b>	140	28.6%	46.4%	0.0%	53.6%	6.1%
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Sources: Statistics Canada, 2016 Census of Population

\* This information will be updated to 2021 once all required data are available (currently the only 2021 data available are for the share of women farm operators and young farm operators).

\*\*Includes all those whose primary source of employment is in the food processing industry (2016 Census of Population).

Table 5: Number and share of Indigenous farm operators at the national level and in British Columbia, 2016

	BC		Canada	
	Number	Share	Number	Share
<b>All farms</b>	815	3.1%	5,160	1.9%
<b>Fruit &amp; tree nut</b>	70	1.4%	295	2.5%

Source: Statistics Canada, 2016 Census of Agriculture – Census of Population Linkage

The above table is an example of the information generated by AAFC, using the Census of Agriculture-Population linkage data. Similar information is available for other demographic characteristics, regions, farm types, and farm revenue size.

- As of 2016, there were 815 Indigenous farm operators in British Columbia, representing 3.1% of operators in the province. This is above the national share (1.9%).
- Fruit and tree nut farming is a smaller subsector, with 70 farm operators in BC reporting an Indigenous identity, representing 1.4% of operators. This is below the national share for the subsector (2.5%).

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## Question 2:

**Senator Jaffer:** I want to address you, Dr. Saindon, rather than pick on Mr. Valicenti all the time, because you're sort of the head. I come from B.C. and I'm very much aware there are many Indigenous farmers and racialized farmers in my province. I don't need an answer from you now, but I'm suggesting to you that it is maybe time that we get proper data about what they do and how to support them. If you can, send me something, because I'm not going to let it go. If you can send me something, I would really appreciate it, because I've had the same kind of issue with the Justice Department and others that until we ask the questions, there hasn't been the support.

I am a farmer in Abbotsford and there are large blueberry farms around. Blueberry, strawberry and other farms are owned by South Asians. I want to know what kind of data is being collected for soil purposes from those areas, please.

## Response from AAFC:

- Soil surveys include information such as soil texture, soil drainage, and soil classification and do not include data on individuals and farmers such as socio-economic indicators. Legacy soil surveys can be found on AAFC's CanSis site: <https://sis.agr.gc.ca/cansis/publications/surveys/bc/index.html>
  - While soil surveys and recent national soil grids cover the Abbotsford B.C. area, there has been no targeted soil data collection work done by AAFC science teams in that region.
  - Additional resources may be available through the Province of British Columbia at the following link: <https://www2.gov.bc.ca/gov/content/environment/air-land-water/land/soil/soil-information-finder>
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### **Question 3:**

**Senator C. Deacon:** What I would love to do in round two is learn more about the specific things you're doing to make sure the markets start to work in Canada, that farmers can sell the carbon credits they should be able to earn — we measure through good satellite and other techniques. I want to learn about what you're doing now to catalyze those markets.

### **Response from AAFC:**

- Environment and Climate Change Canada has launched Canada's Greenhouse Gas (GHG) Offset Credit System. The Federal GHG Offset Credit System is designed to encourage cost-effective domestic GHG emissions reductions and removals from activities that go beyond business-as-usual, are not required by regulation and are not already incentivized by carbon pollution pricing.
- For agriculture, several protocols are listed to be developed (Enhanced Soil Organic Carbon, Livestock Feed Management, Anaerobic Digestion and Livestock Manure Management), which could provide opportunities for farmers to generate offset credits through the adoption of climate-smart agricultural practices that are not currently considered to be common practice.
- To support the protocol development process, Technical Expert Teams have been established, which include scientists from Agriculture and Agri-Food Canada, industry stakeholders, and academia, to provide advice on the latest science, and members of the public will have an opportunity to comment on the draft protocols prior to final publication.