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2022 Qualitative Research on Consumer and Producer Views Towards Sustainability in Agriculture

Final Report

Prepared for Agriculture and Agri-Food Canada

Supplier name: Earnscliffe Strategy Group
Contract number: 01B68-220910/001/CY
Contract value: $193,795.17
Award date: December 29, 2021
Delivery date: March 11, 2022

Registration number: POR 065-21
For more information on this report, please contact Agriculture and Agri-Food Canada at:
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Ce rapport est aussi disponible en français.

Canada

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This public opinion research report presents the results of focus groups and in-depth interviews conducted by Earnscliffe Strategy Group on behalf of Agriculture and Agri-Food Canada. The research was conducted in February and March 2022.

Cette publication est aussi disponible en français sous le titre : Recherche qualitative sur les points de vue des consommateurs et des producteurs sur la durabilité en agriculture - 2022

Agriculture and Agri-Food Canada
1341 Baseline Road
Ottawa, ON K1A 0C5

Catalogue Number: A22-671/1-2022E-PDF
International Standard Book Number (ISBN): 978-0-660-42816-1
Agriculture and Agri-food Canada Number: 13116E

Related publications (registration number: POR 065-21)

Recherche qualitative sur les points de vue des consommateurs et des producteurs sur la durabilité en agriculture - 2022 – rapport final.

978-0-660-42818-5

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Executive summary

Earnscliffe Strategy Group (Earnscliffe) is pleased to present this report to Agriculture and Agri-Food Canada (AAFC) summarizing the results of the qualitative research undertaken to understand consumer and producer views towards sustainability in agriculture.

Budget 2019 committed $25 million over five years under the Food Policy for AAFC to “make Canadian food the top choice at home and abroad”, under what is now known as the AgriCommunication Initiative. The objective of this initiative is to increase appreciation and pride in the contribution of farmers and the food industry and enhance public trust between Canadians and farmers.

Previous public opinion research (POR) conducted by Earnscliffe in 2020 (Buy Canadian Promotional Campaign Baseline Survey) and 2021 (Canadian Agri-Awareness Initiative Focus Groups) suggests there may be a disconnect in perceptions between the agricultural sector and Canadian consumers who are not exposed to agricultural practices.

The objective of this research is to understand perceptions of consumers and producers on environmental sustainability in the agriculture and food sector in Canada. This involved exploring changing consumer preferences and expectations around agricultural sustainability, including the unique challenges facing consumers from northern and remote communities. It also involved exploring producer perspectives and efforts toward sustainability and environmental stewardship. The results from this research will be used to inform the direction of the AgriCommunication Initiative as well as future program and policy development. The total contract value for this research was $193,795.17 including taxes.

To meet the research objectives, Earnscliffe conducted a series of 24 online discussion groups with consumers (12) and producers (12), and twenty (20) in-depth interviews with consumers living in northern, remote communities. Consumers were defined as Canadian adults (18+) who have joint/sole responsibility for grocery shopping in their households. Producers were defined as farmers or ranchers with at least $10,000 in annual farming sales. Five regions of the country were studied: British Columbia, Prairies (Alberta, Saskatchewan, Manitoba), Ontario, Quebec (in French), and Atlantic (Newfoundland and Labrador, New Brunswick, Nova Scotia, Prince Edward Island).

Within each region, one group was conducted with youth consumers (participants 18 to 34 years of age), one group with adult consumers (participants 35 years of age and older), and two groups with producers. Additional discussion groups were held with those residing in official language minority communities (OLMCs): French speakers residing outside of Quebec and English speakers residing in Quebec, for each consumer and producer audience. The interviews were conducted with a mix of youth and adult consumers (as defined above) living in one of the 121 northern, remote communities supported by Nutrition North Canada. The focus groups were conducted online between February 22 and 25, 2022 and the in-depth interviews were conducted between February 14 and March 16, 2022. The groups took on average 90 minutes and the interviews were 30 to 40 minutes in length.

Qualitative research disclaimer

It is important to note that qualitative research is a form of scientific, social, policy, and public opinion research. Focus group research is not designed to help a group reach a consensus or to make decisions, but rather to elicit the full range of ideas, attitudes, experiences, and opinions of a selected sample of participants on a defined topic. Because of the small numbers involved, the participants cannot be expected to be thoroughly representative in a statistical sense of the larger population from which they are drawn, and findings cannot reliably be generalized beyond their number. As such, results are directional only.

The key findings of this research are presented below.

Key findings

Views toward Canada's agriculture and food sector

- Consumers' reflections on Canada's agriculture and food sector were generally positive and included images of varied farmlands, as well as the concept of local, farmers and farmers' markets. More critical images tended to focus on rising food prices.

- Consumers' familiarity with Canada's agriculture and food sector varied widely. Many consumers from northern or remote communities struggled to conjure up any real images or thoughts about Canada's agricultural and food sector, while some participants in the focus groups had personal experiences on farms. Most, however, admitted that Canada's agricultural and food sector was not something they thought about often.

- Producers tended to mention the positive aspects of their work when they reflected on Canada's agricultural and food sector, although their unaided reflections included some challenges. They often cited the vast and varied crops produced by Canadian producers and the diversity in terms of farming practices and the important role producers perform in food production and feeding Canadians. Negative images were also offered, however, including the sense that the sector is not a priority, in danger, challenged in a variety of ways beyond their control (such as, changing weather patterns, government policy and regulation) and offers meagre earnings.

- For both consumers and producers, the term sustainable agriculture tended to be defined in terms of longevity (for example, regeneration, renewability, replenishment, consistency), although for some it meant or included an environmental aspect.

- For consumers, the concept of sustainability seemed to correlate readily with environmental stewardship. The correlation with social responsibility (in terms of the availability of food for generations to come) was evident but less pronounced. Very few, if any, perceived a correlation with economic profitability. Worth noting is that while consumers recognized the correlation between sustainability and environmental stewardship, many expressed that the terms were not interchangeable. They explained that sustainability implied something long

term. The concept also raised the issue of economic profitability, the importance of which was more pronounced among producers than consumers.

- When asked how important environmentally sustainable agriculture is to them personally, whether a consumer or producer, nearly all deemed it important to some degree (with most saying very important).
    - For consumers, it is important to have an abundance of healthy, local, foods to eat over the long term.
    - For producers, environmentally sustainable agriculture was inextricably tied to their own long-term economic prospects and therefore, a fundamental characteristic of their work. They also often spoke of a need to stay up to date with respect to technological advances in farming practices, production, relying on contemporary research and development, avoiding over-production (or under-production), and reducing inputs.
- Interestingly, for producers, this question often elicited conversation around the challenges they face to be more sustainable. These include pressures from consumers to be more sustainable in their practices, with a market that does not take sustainability into account, and the lack of sustainability in other parts of the agriculture sector in Canada. They argued that these issues are not just at the production level, but producers are continually held accountable.

Environmentally sustainable agriculture practices

- By and large, both target audiences felt most producers in Canada at least try to be environmentally responsible. Consumers often explicitly distinguished between smaller, family-owned operations, and factory or mega farms, indicating they had more favourable impressions of the environmental sustainability of the former than the latter. Within producer groups, some acknowledged there are “some” producers who unfortunately, do not always operate using environmentally sustainable practices.
- Producer recognition of the term beneficial management practices was limited to non-existent, though once provided with examples, producers had little difficulty naming specific practices they employ to be more environmentally sustainable. In fact, most seemed to be employing a variety of these practices as a matter of course (such as, crop rotation, continual cover, reduced tillage, innovative drainage, compaction prevention/reduction, rotational grazing). Interestingly, they did not think of these practices as environmentally sustainable practices so much as the way they farm. Indeed, these practices are already deeply engrained in their operations. They do these things because it is better for the sustainability (environmental, social, and financial) of their business.
- Conversely, the vast majority of consumers had a difficult time naming (unaided) farming practices that are better for the environment/environmentally sustainable.

- When presented with a list of five environmental farming practices, reactions were mostly positive, and the vast majority indicated that knowing these practices were being implemented increased their trust in producers.

- Producers were open to implementing more sustainable practices, particularly if a few important barriers were removed, namely cost, labour and time. More information on the effectiveness of a specific approach would be helpful in making the transition.

Consumer preferences and shopping behaviours

- When asked what criteria consumers consider when making purchase decisions, they cited price/being on sale; the appearance and perceived quality of the product; and the ingredients and healthy features. Where the product originated from was also mentioned, although this appeared to be for certain foods and sometimes at certain times (seasonal) or places (farmers' markets). Price was a common concern for consumers, and many complained about the rising cost of food.

- Buying local (meaning the food was grown or produced nearby) also seemed to be very important to many consumers, especially for produce. "Locally produced" seemed to imply environmental and sustainably produced food. For many, "locally produced" implies the items did not travel as far to get to market, which is better for the environment.

- Although several consumers indicated they look for sustainably produced food, most expressed difficulty identifying sustainably produced food when grocery shopping.

    - Most tended to look for organic (meaning natural/grown without chemicals) more than any other certification or claim; though, when prompted, others mentioned having seen non-GMO, free-range, grass-fed, or natural on products before.

    - Consumers in northern or remote communities appeared to have less of an ability to be selective based on environmental responsibility, given the very narrow range of options.

- Consumers seemed to be torn as to the credibility of certifications or claims of sustainability on food products and wished there was a way to know for sure. Some assumed products with these claims likely had to pass some test of credibility; while others seemed to think marketers can say just about anything with very little retribution.

- Producers also held conflicting views. Some used these certifications to market their farming practices while others seemed to think these claims were marketing tools rather than evidence of sound practices.

- Consumers were asked if they would be willing to pay higher prices, have less variety of foods, or sacrifice convenience to support environmental sustainability in food. Some said they are more willing to sacrifice for environmentally sustainable foods than others, though many were resistant to paying more.

- Producers suggested that although there is interest in organic foods, most consumers are not willing to pay the higher prices they necessitate or buy the imperfect looking products. Some also shared their view that organic is not well understood by consumers and that employing the practice required to be “officially” organic does not result in a product that is noticeably healthier or more sustainable.

- Some producers also suggested that although many consumers say they want more options (like organic or more sustainable options), they ultimately choose the cheapest option. For some producers, this was a source of added frustration, because the producers want to provide the products consumer claim they want to buy, but the sense was that too often, consumers do not follow through with the act of paying the necessary premium, or accept the imperfections, to purchase food produced in the most environmentally sustainable ways.

- With respect to having less variety, some consumers would be prepared, and do currently, try to eat in season. It seems youth consumers are also more likely to accept less variety than adult consumers in order to support sustainability in agriculture. The majority would sacrifice convenience, particularly by reducing packaging and processing.

Environmental actions

- Most consumers indicated they are taking actions to reduce their environmental impact such as: using reusable shopping and produce bags for some, choosing products with less packaging, reducing food waste, buying local, growing a personal garden and composting. In some groups, a few participants said they had made dietary changes for environmental reasons.

  - Overall, youth consumers seem more likely to note specific environmental and humanitarian actions they take or changes they have made, including making changes to their diet and food sharing (with friends and strangers) to limit food waste and save money.

  - Similarly, producers also seemed to be trying to find ways to reduce their packaging though they have been either limited by the cost or the adverse impact on the quality or appearance of the packaging on their product.

- Consumers defined food waste as throwing out food that has gone bad or is unwanted. There was also near consensus that food waste is a problem in Canada, but there was more debate over who is most responsible for that waste. The vast majority felt consumers were responsible for food waste, however, several also criticized grocery stores and restaurants.

  - Producers agreed with consumers that there is a food waste problem in Canada. Producers felt food waste was attributable to consumers unwilling to buy anything but the most perfect looking produce, grocery stores who discard meat or dairy past the date of expiration, or restaurants who refuse to use food products based on appearance.

- To reduce food waste, and specifically to avoid wasting money, consumers eat leftovers; freeze foods to be used later; do not rely solely on the expiry or best before dates listed on food; compost; and, do not buy as much food in bulk.

Communications and advocacy

- Consumers were cognizant of their lack of awareness of agriculture practices, though many said explicitly that they were interested in knowing more. Topics of interest include: the processes and practices producers use; whether producers felt the industry was environmentally sustainable; the economics of farming; and, what motivates producers.

- There was consensus among producers that consumers were misinformed about the agriculture industry and its processes. They do not have the time or resources to educate the public but enjoy speaking with and educating their customers.

    - Many producers feel education needs to be in schools, while others felt it was producer groups who should be responsible for it. Only a few producers felt the Government of Canada should play a role in educating the public. Producers hope for a more consistent application of regulations from the government.

- In terms of advocacy, producers expressed the need to challenge the spread of misinformation by media or documentaries. Producers also want consumers to be better informed about the buzzwords used by marketers.

Research Firm:

Earnscliffe Strategy Group (Earnscliffe)
Contract Number: 01B68-220910/001/CY
Contract award date: December 29, 2021

I hereby certify as a representative of Earnscliffe Strategy Group that the final deliverables fully comply with the Government of Canada political neutrality requirements outlined in the Communications Policy of the Government of Canada and Procedures for Planning and Contracting Public Opinion Research. Specifically, the deliverables do not include information on electoral voting intentions, political party preferences, standings with the electorate or ratings of the performance of a political party or its leaders.

Signed: Date: March 11, 2022

Stephanie Constable
Principal, Earnscliffe

Introduction

Earnscliffe Strategy Group (Earnscliffe) is pleased to present this report to Agriculture and Agri-Food Canada summarizing the results of the qualitative research undertaken to understand consumer and producer views towards sustainability in agriculture.

The 2019 budget committed an investment of $25 million over five years for Agriculture and Agri-Food Canada (AAFC) under the Food Policy to "make Canadian food the top choice at home and abroad", under what is now known as the AgriCommunication Initiative. The objective of the AgriCommunication Initiative is to increase appreciation and pride in the contribution of farmers and the food industry and enhance public trust between Canadians and farmers. The AgriCommunication Initiative has been informed, at least in part, by public opinion research (POR) and is comprised of two main components:

- To promote sustainable agriculture through sector-led initiatives; and,
- To increase the sector's understanding of changes in consumer demand.

POR continues to play a crucial part in the AgriCommunication Initiative by providing a better understanding of Canadians' preferences and perceptions of the food sector.

Previous AAFC POR has shown that while public trust in farmers is high (73%), only 53% of Canadians agree that Canadian farming is environmentally responsible and just over half (54%) are familiar with farming. This suggests there may be a disconnect in perceptions between the agricultural sector and Canadian consumers who are not exposed to agricultural practices.

This research was designed to help identify ways to bridge this gap by better identifying the perceptions of consumers and producers on sustainability and the sector. In addition, more insight is needed to better understand the unique challenges, changing preferences and views of consumers from northern, remote communities.

The objective of this exploratory research was to delve deeper into changing consumer preferences and expectations around agricultural sustainability and understanding producer environmental stewardship, in addition to achieving a better understanding of the views of consumers from northern, remote communities.

The main areas of focus for the research with consumers included:

- Consumer views and definition of sustainable agriculture;
- Identifying knowledge gaps and understanding of sustainable practices in the agriculture and agri-food sector (for example, defining sustainability, identifying myths);
- Views towards farming practices;
- Understanding responsibility and perceived importance of reducing food waste;
- Expectations and preferences for sustainable farming practices for the domestic market;
- Better understanding the unique challenges, expectations, preferences of consumers; and,
- Experience with the food system for consumers in northern and remote communities.

The overarching areas of focus for the research with producers included:

- Better understanding producers' definition of sustainable agriculture;
- Gauging the impact of changing consumer preferences on producers' business;
- Understanding what environmental stewardship activities producers are already implementing; and,
- Identifying potential opportunities and barriers to implementing more sustainable agricultural practices.

To meet the research objectives, Earnscliffe conducted a series of 24 online discussion groups with consumers (12) and producers (12). Consumers were defined as Canadian adults (18+) who have joint/sole responsibility for grocery shopping in their households. Producers were defined as farmers or ranchers with at least $10,000 in annual farming sales. Five (5) regions of the country were studied: British Columbia, Prairies (Alberta, Saskatchewan, Manitoba), Ontario, Quebec (in French), and Atlantic (Newfoundland and Labrador, New Brunswick, Nova Scotia, Prince Edward Island).

Within each region, one group was conducted with youth consumers (participants 18 to 34 years of age), one with adult consumers (participants 35 years of age and older), and two groups with producers. Additional discussion groups were held with those residing in official language minority communities (OLMCs): French speakers residing outside of Quebec and English speakers residing in Quebec, for each consumer and producer audience.

In addition to the focus groups, twenty (20) in-depth interviews were conducted with consumers (both youth and adult), as defined above, living in northern remote communities, supported by Nutrition North Canada. To be eligible for Nutrition North Canada, a community must be considered isolated and meet these requirements:

- lack year-round surface transportation (no permanent road, rail or marine access);
- be reliant on air transportation for more than 8 months each year;
- meet the territorial or provincial definition of a northern community;
- have an airport, post office, or grocery store; and
- have a year-round population according to the national census.

The focus group sessions were approximately 90 minutes in length and the interviews were 30-40 minutes in length. Participants were given an honorarium as a token of appreciation for their time ($100 for consumers and $250 for producers). Appendix A provides greater detail on how the groups were recruited. Appendix B provides the screener used for recruiting participants. Appendix C and D provide the discussion guides used for the focus groups.

The tables below show the composition and participant details of the focus groups and interviews.

Table 1: Focus group composition, schedule and number of participants

Group	Audience	Region	Time	Number of participants
Tuesday, February 22, 2022				
1	Producers	Atlantic Canada (EN)	10:00 am EST/11:00 am AST/ 11:30 am NST	7
2	Producers	BC (EN)	1:00 pm EST/10:00 am PST	9
3	Producers	Ontario (EN)	1:00 pm EST	7
4	Youth (18 to 34 years)	Atlantic Canada (EN)	4:00 pm EST/5:00 pm AST/5:30 NST	8
5	Youth (18 to 34 years)	Quebec (FR)	6:00 pm EST	6
6	Youth (18 to 34 years)	Ontario (EN)	6:00 pm EST	7
7	Youth (18 to 34 years)	British Columbia (EN)	8:00 pm EST/5:00 pm PST	7
Wednesday, February 23, 2022				
8	Producers	Quebec (FR)	10:00 am EST	8
9	Producers	Atlantic Canada (EN)	10:00 am EST/11:00 am AST/ 11:30 am NST	7
10	Producers	Prairies (EN)	1:00 pm EST/12:00 pm CST/ 11:00 am MST	7
11	Producers	British Columbia (EN)	1:00 pm EST/10:00 am PST	9
12	Adult (35 years+)	Atlantic Canada (EN)	4:00 pm EST/5:00 pm AST/5:30 NST	7
13	Adult (35 years+)	Quebec (FR)	5:00 pm EST	7
14	Adult (35 years+)	Ontario (EN)	6:00 pm EST	8
15	Youth (18 to 34 years)	Prairies (EN)	7:00 pm EST/6:00 pm CST/ 5:00 pm MST	8
Thursday, February 24, 2022				
16	Producers	Quebec (FR)	10:00 am EST	6
17	Producers	Ontario (EN)	10:00 am EST	5
18	Consumers	OLMC (FR)	5:00 pm EST/6:00 pm AST/ 6:30 pm NST/4:00 pm CST/ 3:00 pm MST/2:00 pm PST	7
19	Consumers	OLMC (EN)	6:00 pm EST	7
20	Adult (35 years+)	Prairies (EN)	7:00 pm EST/6:00 pm CST/ 5:00 pm MST	7
21	Adult (35 years+)	British Columbia (EN)	8:00 pm EST/5:00 pm PST	6
Friday, February 25, 2022				
22	Producers	OLMC (EN)	10:00 am EST	6
23	Producers	OLMC (FR)	1:00 pm EST/2:00 pm AST/ 2:30 pm NST/12:00 pm CST/ 11:00 am MST/10:00 am PST	9
24	Producers	Prairies (EN)	1:00 pm EST/12:00 pm CST/ 11:00 am MST	9

Table 2: Interview participant demographic details

Demographic detail	Number of participants
Gender	
Male	6
Female	14
Age	
18 to 34 years	3
35 to 49 years	5
50 to 64 years	8
65 years or older	4
Province	
Alberta	1
Newfoundland and Labrador	6
Northwest Territories	2
Nunavut	8
Ontario	3

Qualitative research disclaimer

It is important to note that qualitative research is a form of scientific, social, policy, and public opinion research. Focus group research is not designed to help a group reach a consensus or to make decisions, but rather to elicit the full range of ideas, attitudes, experiences, and opinions of a selected sample of participants on a defined topic. Because of the small numbers involved, the participants cannot be expected to be thoroughly representative in a statistical sense of the larger population from which they are drawn, and findings cannot reliably be generalized beyond their number.

The participant quotes throughout this report are written verbatim to capture exactly what participants said during the focus groups and interviews.

Detailed findings

This qualitative report is divided into five sections: views toward Canada's agriculture and food sector; environmentally sustainable agriculture practices; consumer preferences and shopping behaviours; environmental actions; and communications and advocacy.

For this report, the findings have been interwoven and present the similar and contrasting perspectives of consumers and producers throughout. Unless otherwise noted, findings in this report are common across all audiences; only noteworthy differences are mentioned. Finally, with respect to consumers, throughout the report those 18 to 34 years of age are referred to as "youth consumers", and those 35 years and older are referred to as "adult consumers."

Quotations used throughout the report were selected on the basis of bringing the analysis to life and providing unique verbatim commentary from participants across the various locations.

Views toward Canada's agriculture and food sector

Discussions began with an initial context setting conversation to understand consumer and producer views related Canada's agriculture and food sector as well as the concept of sustainable agriculture.

Perceptions of Canada's agriculture and food sector

Consumers

As consumers reflected on Canada's agriculture and food sector, they generally conjured up positive images of varied farmlands and products (for example, grains, fruits/berries, vegetables, meat, and dairy), as well as the concept of local and farmers/farmer's markets. Some of the most common singular terms used were "farm," "farming," "vast" and "diverse." While, not the predominant view, some more critical images tended to focus on rising food prices. For a few participants, the notion of "sustainability" was conjured up when they considered Canada's agriculture and food sector.

It is worth noting that there was a noticeable variance among consumers in terms of their familiarity with Canada's agriculture and food sector. Many consumers from remote, northern communities struggled to conjure up any real images or thoughts about Canada's agricultural and food sector. In some cases, even the terms "agriculture" and "food sector" were not fully understood. Given their lack of proximity to farming, this was perhaps not all that surprising. Even among consumers in less remote communities, many appeared to be quite unaffected by the conversation, admitting that Canada's agricultural and food sector was something they did not often think about.

> "Not really sure. It's about food." – Consumer from a remote, northern community

Beyond the initial limitations of their awareness and familiarity with Canada's agriculture and food sector, several consumers from remote, northern communities often had difficulty

answering any of the questions on farming practices and the idea of sustainable agriculture. For some, sustainable agriculture spoke to the ability to secure one's own food sources or being self-sufficient by way of hunting, fishing and/or gathering.

> "People rely on it...and live off the land. It needs to be there. Food in the stores are very expensive. For the health as well. Hunting, fishing, and gathering. It's almost like a cure." – Consumer from a remote, northern community

> "We gotta eat and everything is so expensive up here, so we have got to get the gardens going up here, and hunting and gathering." – Consumer from a northern, remote community

Producers

Producers also tended to reflect on the positives associated with their work when they reflected on Canada's agricultural and food sector, although their unaided reflections were not all positive. Consistent with consumer views, they often cited the vast and varied crops produced by Canadian producers. The positive images also included diversity in terms of farming practices and the important role they perform in food production and feeding Canadians. The more critical perceptions, however, included the sense that the sector is not a priority, in danger, challenged in a variety of ways beyond their control (for example, changing weather patterns, government policy and regulation) and offers meagre earnings.

> "[Agriculture] should be a priority for the people of Canada and our government, but I just don't think it is. And I think the whole crisis going on in PEI is a shining example of how it's not a priority – food in this country and how much people take it for granted. And there's a lot of words spoken, but not a lot of action taken." – Producer, Atlantic Canada

Perceptions of sustainable agriculture

With respect to sustainable agriculture, consumers and producers alike, tended to reflect on the concepts of "regeneration", "renewability", "replenishment", "consistency", "self-sufficiency", "adaptation", and "environmental friendliness".

Consumers

Consumers, in general, were more likely to use words like "organic", particularly consumers in Quebec, or "pesticides", suggesting "sustainable" inferred limited pesticide use. Some also mentioned being aware of specific farming practices, providing examples like crop rotation and water conservation, as ways agriculture can be done more sustainably. It seemed those living in smaller urban or rural centres living in closer proximity to farms were more familiar with such practices.

Few consumers from northern, remote communities could explain what they thought the term "sustainable agriculture" meant. Roughly half suggested that it meant being able to farm

continually, and a few mentioned something related to responsible use of the land. Several, however, indicated they had only heard of the term or were not familiar with it.

> “It means regeneration, continuity, quality of the soil.” – Youth consumer, Quebec

> “I’ve heard the term maybe once, but other than that it has no meaning to me.” – Consumer from a remote, northern community

The concept of sustainability seemed to correlate with environmental stewardship readily, for consumers; the correlation with social responsibility (in terms of the availability of food for generations to come) was evident but less pronounced, but very few, if any, perceived a correlation with economic profitability. Worth noting, while consumers recognized the correlation between sustainability and environmental stewardship, many expressed that the terms were not interchangeable. They explained that sustainability implied something long term.

Despite the fact many consumers were not sure they completely understood the term, the overwhelming majority indicated they felt environmentally sustainable agriculture was important; mainly for the reasons stated above. This conversation also spurred some comments about the importance of being self-sufficient and for Canadians to decrease their reliance on imported foods. This included multiple mentions of eating foods that are in season.

Having said that, while many consumers stated (and some implied) they felt environmentally sustainable agriculture is important, it is not something they actively seek out when grocery shopping, or is trumped by other purchase considerations (mainly price).

> “So, it is important, but when I'm actually doing the shopping, I'm thinking about prices, and about volume and things like that. I'm not necessarily taking it all the way back to the sustainable part. Overall, it is very important, but just the way I thought about it was, in my day to day, I don't think of it like that.” – Adult consumer, Ontario

When asked how they might recognize sustainable agriculture, the vast majority of consumers were able to offer a perspective, though many were not entirely confident in their responses. Consumers cited the ability to feed the population, the continuous availability of a variety of foods, the reduction of fertilizers and pesticides, and visual indicators (for example, healthy fields, soil and crops, rotating crops). A handful of participants said they would recognize sustainable agriculture through succession of farms from one generation to the next.

> “When I think about sustainable agriculture, it's like being able to produce enough food for our ever-growing populations. There's a world hunger issue and being able to supply enough food to every mouth, essentially.” – Youth consumer, British Columbia

For consumers from remote, northern communities, many were able to offer an opinion on what sustainable agriculture looked like, with the rest declining to answer or explaining they did not

know. Among those who did provide a response, having the availability of fruits, vegetables and meat and preserving foods were the most common mentions.

> "Preserving. Can be frozen, dried. Everybody continues to do it. Even more today, more hunting and more fishing." – Consumer from a remote, northern community

> "I wish I knew! We can barely get a greenhouse together here. No idea. Maybe vertical farming, see where that leads us." – Consumer from a remote, northern community

Producers

Beyond the top-of-mind mentions cited above, producers more readily spoke of the importance of sustainable agriculture and the interconnectedness of sustainable agriculture to environmental stewardship, but also social responsibility and economic profitability. They spoke of a tension, and a delicate balance they need to manage on all three dimensions to ensure a successful business. They explained that if too much focus was placed on one dimension over another, their business would collapse or be unsustainable.

> "We are all aware of this. It's the basis of everything. It's an obvious choice. We have to go in that direction." – Producer, Quebec

> "If you break a link, the chain is no good. It can't just be only one of those things or it doesn't work in the long term. I think it's circular." – Producer, Ontario

> "Sustainability is very important for farmers. It comes down to soil health because that directly affects what you're producing. Soil affects their [bison] feed, the pastures they eat, and therefore the quality of meat." – Producer, Prairies

> "Being sustainable is how we sustain our business. It's why we look after the land. It's also about economics, people. Everything ties together." – Producer, Prairies

While producers also pointed to vast, lush, fields of abundant products as examples of sustainable agriculture, the conversation often veered to their sense of a need to stay up to date with respect to technological advances in farming practices, production, relying on contemporary research and development, avoiding over-production (or under-production), and reducing inputs.

Interestingly, this question often elicited conversation around the challenges they face to be more sustainable. These include pressures from consumers to be more sustainable in their practices, with a market that does not take sustainability into account, and the lack of sustainability in other parts of the agriculture sector in Canada. They argued that these issues are not just at the production level, but producers are continually held accountable. As one

producer in British Columbia noted (below), there are limitations as to what they can do when they are so heavily reliant on other infrastructure systems and supply chains.

> "We've just experienced here in the Lower Mainland, that we were rationed feed, because we don't have sustainability of our larger infrastructure systems. And we rely on an incredibly fragile supply chain. So, I think when we're talking about when I think about sustainability, from a 35,000-foot view, structurally, are the systems in place there to even be able to imagine what a sustainable system might look like? And then as we get down into the nitty gritty, it needs to be practical, it needs to be applicable, it needs to be profitable for farmers, and ecologically safe." – Producer, British Columbia

> "Cheaper production is happening at the cost of the environment." – Producer, Atlantic Canada

Environmentally sustainable agriculture practices

A primary objective of this research was to explore the awareness and perceptions of agriculture activities and practices. We also gauged the importance of environmentally sustainable farming practices among consumers and producers.

Impact of agricultural activities on the environment

Participants in both audiences were asked what impact, if any, agriculture has on the environment. Without indicating either way, the vast majority of participants perceived the term "impact" as negative, however, some producers indicated they felt their present practices had a positive impact on the environment, especially when compared to past practices. Participants in both groups noted that the impact is also widely dependent on the type of farming, where you go and what methods are being used.

Consumers

Few consumers felt strongly that agricultural activities had a negative impact on the environment. Overusing chemicals and pesticides and raising livestock, especially cattle, appeared to be the practices most commonly perceived to negatively impact the environment. However, many admitted to not knowing or not having thought about it. The impacts beyond environmental that consumers were most preoccupied with included the use of antibiotics and mistreatment of animals.

When asked their level of concern over these impacts, the majority were either not concerned or had not considered if they should be concerned.

> "I feel concerned but am not sure why." – Youth consumer, Ontario

A few consumers said they were aware of negative impacts that agriculture activities have on the environment and were concerned about it. There appears to be slightly higher awareness

and concern of the impact of these activities on the environment in British Columbia and Atlantic Canada, where perhaps, the impact has been experienced more directly or personally.

> "I grew up in an area that was prone to flooding and through bad land management and development, it got worse and worse and worse. So, I think whenever something is done, whether it's building or farming, it needs to be done sustainably so it doesn't have a huge impact on the land around it because it can affect people's lives big time." – Adult consumer, Atlantic Canada

Producers

When discussing the impact agriculture activities has on the environment, producers were quick to begin citing the practices they currently use that do not negatively impact the environment. There were also mentions that the question highlights the kind of negative attention farmers and the industry receives from media and others. A few also began to mention how consumers are disconnected from farmers today.

> "Why is it farmers are responsible for solving climate change?" – Producer, British Columbia

Producers were asked to contemplate whether producers do enough to fight climate change. While some producers confessed to knowing "some" producers who do not always act in the best interest of sustainability, they generally felt that most producers are doing everything reasonable and practical they can.

> "It's not that we don't want to, but we can't do it all ourselves. If we had incentive to do it, then we would. But we are only doing it out of the goodness of our heart." – Producer, Atlantic Canada

> "I would say one of the most important things from our perspective would be that more growers use an integrated pest management strategy. I don't think in a lot of cases, guys are, generally speaking, just going out there and spraying willy nilly. But I think, at least in my area, I do see times where unnecessary passes of pesticides are going down. And I'm not always privy, of course, to what everyone is doing." – Producer, Prairies

Perceptions of Canadian farming practices

By and large, both target audiences felt most producers in Canada at least try to be environmentally responsible, however, some participants in both audiences expressed difficulty in providing an overall assessment. For producers, that often stemmed from not being able to assess other producers' practices, and for consumers it was due to a lack of awareness.

> "I don't know what they are doing, so I can't say if they are doing enough. I think they are doing their best with the resources they have." – Adult consumer, British Columbia

Consumers

Among consumers who provided an opinion in either direction, there was a tendency to give Canadian farmers the benefit of the doubt on whether they are environmentally responsible. Apart from those who had pre-existing knowledge of regulations that pertain to agricultural practices, few participants were able to provide much of an explanation for their positive perception. Instead, many described it as a feeling.

> "I think they're doing what they have to do. When you ask, 'Are they doing enough?', it implies they're supposed to be doing something more?" – Youth consumer, Atlantic Canada

> "I would think so. Just a gut feeling. I think they try to preserve the land. They try not to use too many pesticides or waste the land." – Consumer from a remote, northern community

Some consumers distinguished between smaller, family-owned operations and factory or mega farms, though few provided practices that differed between those types of farms, and instead focused on their intuition.

> "I think they [producers] are becoming more environmentally conscious. I watched a « La semaine verte » episode, and the projects they show, and how farmers are greener, it's impressive. Especially the small farmers." – Adult consumer, Quebec

To stimulate a discussion about possible perceptions consumers may have about agriculture practices and food, consumers were shown nine statements (Exhibit 2).

Exhibit 2: True and false statements about agriculture and food shared with consumer participants

Greenhouse gas emissions from the agriculture sector are rising
Farmers use too many pesticides
Organic foods are healthier than other foods
Genetically modified foods are less healthy
Sustainably produced food is too expensive
Canadian farming is environmentally responsible
The agriculture sector is one of the larger contributors of greenhouse gas
Organic farming is no better for the environment than non-organic farming
Canadian grown/produced foods are better for the environment than imported foods

When asked whether they agree or disagree with each of the nine statements, consumer opinions were diverse. Overall, there was greater consensus over Canadian grown or produced foods being better for the environment, organic foods being healthier, or at least more environmentally friendly. Opinion was evenly divided on whether genetically modified foods are

less healthy and on whether sustainably produced food is too expensive. On statements about the overuse of pesticides, the environmental responsibility of Canadian farming and whether greenhouse gas emissions from the agriculture sector are one of the largest contributors, participants tended to be divided. Some agreed with the statement while others could not offer a perspective one way or the other.

> "I think we need more organic farming in our food. Unfortunately, there are too many large groups that have interests in selling pesticides." – Adult consumer, Quebec

That said, the majority of participants were unsure of at least one of the statements shared with them. Even on the topic of organic farming, which nearly all participants seemed to be at least somewhat aware of, there was uncertainty about its true benefits (more specifically, is it healthier, better for the environment, both or neither?). As mentioned earlier, participants favoured Canadian produced food over imported foods. Some considered the practices used in production and others narrowed in on the impact of greater transportation distances on the environment.

> "What exactly does organic food mean? And does that always mean healthier or not?" – Youth consumer, British Columbia

Producers

Though awareness and understanding of the term, Beneficial Management Practices (BMPs) was limited to non-existent, once producers were shown a list of environmentally sustainable practices (Exhibit 3), they had little difficulty naming a variety of practices they employ. In fact, most seemed to be employing a variety of practices as a matter of course (such as, crop rotation, continual cover, reduced tillage, innovative drainage, compaction prevention/reduction, rotational grazing, pesticide risk reduction, etc.). Interestingly, they did not think of these as environmentally sustainable practices so much as the way they farm. Indeed, these practices are already deeply engrained in their operations. They do these things because it is better for the sustainability (environmental, social, and financial) of their business.

> "Watching when you're spraying, where you're spraying. Avoid drift." – Producer, Atlantic Canada

> "I'm an innovator myself, so every time I get a chance to improve my farming operations, it's always around sustainability." – Producer, British Columbia

> "We do most or all of this [environmentally sustainable practices]. The benefit, and I strongly believe in it even though yield is not as great, is that we're not using herbicides or pesticides. It works [crop rotation] because we're so diversified; one thing benefits while another doesn't." – Producer, British Columbia

> “I try to use as few chemicals as possible. If I need to use them, I do; if I don't, I don’t. I am the first to eat my produce. I eat them straight from the field. I never wash them.” – Producer, OLMC French outside Quebec

> *“*We’ve been doing most of this for the last thirty years.*”* – Producer, British Columbia

> “I’d be surprised if most growers aren’t doing half that list.” – Producer, Atlantic Canada

> “Well, I mean, as an organic grower, we do many of those things. Almost most of them, actually. And I have done many of these things from day one. As I mentioned earlier, reduction of tillage is something that I’ve just been working on the last five years.” – Producer, British Columbia

Exhibit 3: Sample BMPs shown to producers

Continual cover (for example, cover crops, perennial crops)
Reduced tillage (for example, no-till, strip till)
3 year+ crop rotation
4R nutrient management (for example, right place, time, source, rate)
Organic amendments (for example, manure, compost, biosolids)
Innovative drainage (for example, controlled drainage, retention ponds, wetlands)
Erosion control structures (for example, berms, wind rows)
Compaction prevention (for example, controlled tire inflation systems)
Compaction reduction (for example, controlled traffic)
Pesticide risk reduction (for example, IPM, Drift avoidance, resistance avoidance)
Reduced or no use of chemical fertilizers and pesticides
Rotational grazing and livestock incorporation
Silvopasture and agroforestry

Some producers indicated that the Government of Canada imposes sustainable farming practices particularly around the use of chemical fertilizers and pesticides. While most were not opposed to the regulations, some expressed frustration that they were at a disadvantage in the supermarket, to imported products produced elsewhere and not held to the same standards.

Awareness of sustainable farming practices among consumers

The vast majority of consumers had a difficult time naming (unaided) farming practices that are better for the environment/environmentally sustainable or suggesting practices producers should do more or less of. The most common practices volunteered included: rotating crops, vertical farming, and reduced pesticide use. A couple participants with claimed awareness, noted that burning cropland and tillage should be stopped. Participants from Ontario seemed to have lower (unaided) awareness of sustainable farming practices than participants from rest of Canada.

> "You wouldn't tell a fire fighter they need to use less water!" – Youth consumer, Atlantic Canada

> "Just more transparency. I feel like I have no idea what their practices are at all." – Adult consumer, Ontario

When presented with a list of five environmental farming practices (Exhibit 4), reactions were mostly positive, though awareness of the practices was low. The highest awareness was for rotating crops and converting crop lands. While most felt any attempts to improve practices had to be good, a few participants were skeptical of the effectiveness of some of the practices with questions around acid treatment of manure and converting croplands to grasslands. Perhaps highlighting more skepticism or mistrust, a handful of participants felt these practices were implemented for "other" reasons (for example, profitability), and just have the unintended consequence of helping the environment.

> "Anything that is going to reduce greenhouse gas emissions is a step in the right direction. I'm supportive of anything that does. The crop rotation and things like that are good, but I don't like the idea of modifying corn or food or whatever." – Consumer from a remote, northern community

Exhibit 4: Sample environmental faring practices shared with consumer participants

Rotating corn-based crops with legumes, such a beans, peas or lentils, to decrease nitrate in soil and run-off water.
Using special slow-release fertilizers that reduce the release of nitrate, a greenhouse gas.
Converting existing crop lands to grasslands. Grasslands have rich soils that allow them to store carbon, leading to reducing greenhouse gas emissions.
Growing easier-to-digest crops, such as alfalfa, in pastures to lower methane emissions from cattle.
Decreasing greenhouse gas emissions by adding acid treatments to cattle and pig manure storage tanks to decrease greenhouse gas emissions.

The vast majority of consumers indicated that knowing these practices were being implemented would increase their trust in producers. However, some noted it was a marginal improvement on a relatively trusting situation.

> "Would probably improve [trust]. They should know what they are doing. I'm not too sure about how much I trust them right now. I think I must trust them because I eat it." – Consumer from a remote, northern community

> "It would show care and foresight." – Youth consumer, British Columbia

Opportunities and barriers to enhance sustainable farming practices among producers

Producers were completely open to implementing more sustainable practices, if a few important barriers were removed, most commonly cost, labour (especially skilled) and time. A few producers named specific instances where decision makers in the government enforced or rejected practices that producers felt made it more difficult to be environmentally sustainable.

One producer shared an example where a long-standing practice he and his neighbour had established – where the livestock producer allowed his cattle to graze on the neighbour's property – was disallowed. The livestock producer explained the benefit of having access to additional pasture, and the produce farmer benefited from the manure produced in his fields. Some producers also indicated that gaining access to relevant information on how effective (including cost-effective) a specific approach would be for their operation would help remove a barrier.

> "I have done a lot of manure spreading. It'd be interesting to try some worm cast stuff, but that's quite expensive. They say it is supposed to be pretty good so I'm interested in experimenting with that." – Producer, British Columbia

> "Well, I think diverse crops is very important. Yet a lot of these fringe crops, you can't market them within a reasonable distance from where our farm is. You sometimes have to drive, you know, 500 miles to market them. And I think it's important that if you want people to use diverse crops, and use good rotation, that you have marketing provisions for those crops that are realistic for farmers." – Producer, Prairies

Consumer preferences and shopping behaviours

Discussions explored consumer preferences and shopping behaviours, especially as related to sustainably produced food.

Consumer purchase behaviours

Consumers

To understand the criteria that consumers consider when making purchasing decisions, including sustainability and certifications, participants were asked to describe how they make their purchasing decisions for a variety of food options. Overall, consumers described their choices being driven by the price of the item; the appearance and perceived quality of the product; the ingredients and healthy features of the food; or, where the product originated from.

While discussing the role price plays as one of the most important criteria, several participants noted that the rising costs of food is only making price even more of a deciding factor than in recent years. While all consumers cited this criterion, the influence that price plays was even more pronounced among youth and those in remote, northern communities.

> "Price is the most important factor for me. I buy in bulk. I check the specials." – Youth consumer, Quebec

In contrast to the sometimes tentative responses or no response to the questions on agriculture, with the questions about shopping for food and food security, participants from remote, northern communities were able to offer more detailed, informed opinions. When it comes to how they choose the products, participants from remote, northern communities were fairly consistent in beginning with the explanation that there is often little or no choice among products, so discussions about choosing between options or making trade-offs were much less relevant to their reality. Within the narrow range of options, if they do have a choice to make, some described choosing their usual/preferred type (for example, of an apple) or the least expensive option for meat. Some confused the question for choosing between subcategories (for example, 2% or 1% milk), size of package, or whether one piece of produce was spoiled already, and another was not.

> "We only have three different kinds of apples available if there are even apples in our store. I want nice and soft ones like Macintosh. Because they take so long to reach our community, they are (often) not so good. I try to look inside the plastic bags to see which ones are not rotten and are edible. Brand doesn't matter, just edible and not rotten." – Consumer from a remote, northern community

> "The cut, the price, how it looks. Does it look red for beef or greyish for chicken. The healthy appearance." – Consumer from a remote, northern community

Buying local, especially produce, seemed to be very important to many consumers, including those in remote, northern communities. Those in remote, northern communities, however, described local as being highly limited and highly seasonal. For both audiences, the quality of being local seemed to imply sustainably produced food. Many participants in the consumer focus groups spoke of their tendency to shop at farmers' markets from time to time, explaining that the products looked better, tasted better, were fresher and that being local implied they did not travel as far to get to market, which was better for the environment. This preference for local products speaks to the point made earlier, that consumers generally indicated trust in farmers and their products; and producers were generally proud of the quality and healthiness of what they produce.

When prompted, local implied different things to consumers but most tended to agree local inferred nearby; some used the within 100-mile diet reference. However, it also extended to other provinces and within Canada when they were thinking about our need to be self-sufficient and preferring/trusting Canadian foods over imported foods. Consumers from remote, northern

communities use the term local in some additional, unique ways, sometimes referencing food "from the land" and traditional foods (for example, caribou, moose and deer).

Producers

Producers were presented with a set of statistics from various public opinion research studies about consumer opinions and claimed behaviour (shown in Exhibit 5). It is important to note that the conversation about the consumer statistics was open-ended so not every producer reacted to each statistic. When presented with these statistics, producers tended to reflect on the success of their businesses and the loyalty of their customers. Perhaps the greatest skepticism expressed was around the suggestion that the majority of consumers have changed their diet or rejected a product if they did not believe it was produced sustainably. This did not align with their lived experience and the consumer demand they have witnessed for their products. It also caused them to question the reliability of the survey with some producers asking about the timing of the survey, wording of the questions, reliability of the sample, etc.

On the whole, while producers were definitely of the view that too many consumers hold unfair critical opinions, producers' lived experiences did not match up with the magnitude of the shift implied by the statistics shared.

> "These are broad and overstated. This is the way they [consumers] want to feel about themselves." – Producer, Quebec

> "We have a clientele. Our sales are increasing. Our food is fresh. They come for the taste. I don't see anyone cutting out meat." – Producer, OLMC (English speaking in Quebec)

Exhibit 5: Consumer behaviour statistics

38% of Canadian consumers say they always/often look for food produced using environmentally sustainable practices. (AAFC, May 2019)
56% say that they have changed what products and services they buy/use out of concern for climate change. (Ipsos, Oct 2021)
48% say they limit meat consumption to help fight climate change. (EDF, Sep 2021)
44% say they have boycotted a food product out of concern that environmentally sustainable practices were not followed. (AAFC, May 2019)
44% of those who rarely or never purchase items produced using environmentally sustainable practices say they do not buy these items because they are not confident they were produced sustainably. (AAFC, May 2019)

Note: participants were not provided the sources of each statistics.

There was also a sense from producers that despite what consumers may say, price ultimately dictates most final purchasing decisions. Many producers wanted consumers to face the behaviours outlined in these statistics along with a financial consequence to accurately determine what they chose. Two separate producers in different groups cited a research study that asked grocery store patrons what features were important to them and then used a mystery shopper technique to confirm what they purchased. These producers said that even though customers made a lot of claims, they ultimately chose the cheapest option. For some producers,

this was a source of added frustration, because the producers want to provide the products consumers claim they want to buy, but the sense was that too often, consumers do not follow through with the act of paying the necessary premium, or accept the imperfections, to purchase food produced in the most environmentally sustainable ways.

> "When it comes down to the wallet, the wallet speaks the loudest." – Producer, Ontario

> "Consumers want the pretty buzz words but aren't prepared to pay for it." – Producer, British Columbia

When asked to offer which consumer preferences impact the agriculture sector the most, many producers again expressed frustration. Producers restated that consumers are not educated, or are even misinformed, about agriculture and are far removed from where their food comes from. A few producers cited misinformation about the industry is driven by media, marketing (for example, fast food chain commercials), and documentaries on streaming services. That misinformation may have resulted in some impact to consumer preferences, though producers did not cite negative impact to their farms personally. However, producers believed it has resulted in a dehumanization of farmers (more specifically, that consumers do not picture the average producer or farmer when they think of where their food comes from).

> "How can you trust a place where you can't even go? All they hear is the (negative) lobby." – Producer, Atlantic Canada

> "We need to be proud of what we do. We would never spray something that would be dangerous to our grandchild, who are with us on the farm." – Producer, Prairies

> "Feels like it's a battle sometimes." – Producer, Atlantic Canada

Shopping for sustainably produced food among consumers

Some consumers seemed to be more willing to sacrifice cost for environmentally sustainable food than others, though many were resistant to paying more.

> "If it has something saying it's sustainably made on the box, it's a positive, but not the driver. Especially if it's expensive." – Youth consumer, Atlantic Canada

Although several consumers indicated they look for sustainably produced food, most expressed difficulty identifying those products when grocery shopping. Indeed, some participants were not able to name any ways they might identify a food that was produced sustainably. While not exclusive to adult consumers, when it comes to making purchase decisions, adult consumers were more likely to shop for sustainable food options than youth.

> "I think all of our grocery products are sustainable right now. Right? I mean, we were lucky to live in North America." – Adult consumer, Prairies

When asked, shoppers of sustainable food options, tended to buy organic or free-range products or local options. Many described making those choices primarily to have a better tasting product and/or one that has not travelled far.

> "If I'm shopping for produce in the grocery store, then yes, I look for those labels. But as I said, I tend to go more to the markets. So, the labels aren't there. I just know that it's coming from a small farmer that tends to be local." – Adult consumer, Atlantic Canada

In terms of certifications or claims, most tended to look for organic more than any other; though, when prompted, others mentioned having seen or sought out "non-GMO", "free-range", "grass-fed", or "natural" on products before. When asked, organic was interpreted by consumers as natural and grown without chemicals or pesticides. It is why those who look for organic, do so.

> "Once I learned the terminology on the egg cartons, I started buying free-range. And now I buy less eggs because they cost more." – Youth consumer, British Columbia

Those in northern, remote communities consistently described having very limited ability to be selective on the basis of environmental responsibility, given the very narrow range of options available. Several also added that the food they purchase has already been transported a great distance to get to them, so the impact is already bad. One or two did mention trying to grow what they can in their own garden and some talked about accessing food that has been hunted or caught.

> "If it's marked and identified, and if we go to local market, I try for that but there's not a lot of markings." – Consumer from a remote, northern community

> "We don't have very many options. Also, the cost could be more expensive. We buy what is cheapest and what is offered." – Consumer from a remote, northern community

Perceptions of sustainability claims and certifications

Consumers

Consumers seemed to be torn about the credibility of certifications or claims of sustainability on food products. At best, trust in the claims of the certifications is strained. Some assumed that products with these claims likely had to pass some test of credibility; while others seemed to think marketers can say just about anything with very little retribution. Some described "hoping" the claims are true but indicating some lack of confidence that they are.

> "You can put, within reason, anything on a package. I am a big proponent of researching things." – Adult consumer, British Columbia

> "Yes and no. We're sort of at the mercy of them. Is it really organic? I don't know. You have to reflect on your definition of organic – has the land been without chemicals for 20 years. I don't know. Depends on your definition of organic. I'm definitely skeptical. That's when I look at where it's grown. If it's from Columbia, do I believe it?" – Consumer from a remote, northern community

A fair number of consumers wished there was a way to know for sure. At least one suggested providing a QR code they could scan at the store. Others wanted to see a more regulated requirement they could rely on, or at least transparency on what the standards are that is required for each certification or claim.

Producers

Similar to consumers, there also seemed to be conflicting views among producers when it came to sustainability claims and certification systems. Some used these certifications to market their farming practices while others seemed to think these claims were marketing tools rather than evidence of sound practices.

For example, some producers claimed their operation was organic and others said they have opted to describe it as "near organic." Others explained that they had been organic in the past but abandoned the practice and went back to "traditional" farming because being truly organic was costly and very difficult, especially given the climate in Canada. Additionally, consumers were not willing to pay the price of organic or buy the imperfect looking products. Some also shared their view that organic is not well understood by consumers and employing the practices required to be "officially" organic does not result in a product that is noticeably healthier or more sustainable.

> "It's difficult to be fully organic, but we do everything we can to be environmentally friendly and sustainable." – Producer, British Columbia

> "Buzzwords. Trying to explain what those words mean can be challenging. We stick to what we know and do." – Producer, British Columbia

When asked how they describe or label their operation, producers offered a wide range of descriptors: innovative, practical, regenerative, quality, family, humane, Blue/Black Cow, ecological, and more. Many producers felt they were better served describing themselves in these ways, instead of using official claims or certifications.

> "Regenerative farming is kind of a buzzword at the moment. And so, we try and implement that into some of our marketing. The bison themselves are very regenerative animals, how they move on the land, graze and use their manure, or drop their manure in the pastures and trample it. It's all a big cycle of regeneration. It's the whole sustainable aspects that if it continues kind of on its own with minimal human interaction, and we take advantage of that, in producing the final product." – Producer, Prairies

Trade-offs to support sustainability in agriculture

Consumers

Consumers were asked if they would be willing to pay higher prices, have less variety of foods, or sacrifice convenience to support environmental sustainability in food.

While some claimed to be willing to sacrifice money for environmentally sustainable foods, many were resistant to paying more. Adult consumers were more likely to accept a higher price for a sustainable option than youth. Quite often, responses were qualified with the caveat that it would depend on the amount of price difference there was. Consumers from remote, northern communities were decidedly less inclined to pay more for their food, often because they describe food as particularly expensive for them already. Indeed, some consumers from remote, northern communities would offer examples of the high cost of particular items as evidence that even if there was an alternative product that was more sustainably produced, it is unlikely it would be affordable if it cost even more than the products currently available.

> "I want to support sustainably produced foods. And I want it to be more sustainable. Then that's the price I am willing to pay." – Adult consumer, British Columbia

With respect to having less variety, some would be prepared, and do currently, try to eat in season. Some participants spoke of freezing, canning, and preserving summer berries and vegetables to consume over the winter months. This was particularly relevant for some consumers from remote, northern communities where variety is limited most of the time. However, others were less willing to sacrifice variety for sustainability. It seems youth consumers are also more likely to accept less variety than adult consumers in order to support sustainability in agriculture.

Despite approximately half of consumers from remote, northern communities indicating they would be willing to have less variety if it meant supporting sustainability, for some, the sense was that selection couldn't possibly be any worse, so might as well say "yes".

> "It's an easy step you can take. I'd be willing to do that, make that sacrifice." – Youth consumer, Ontario

> "I think we do now. I don't need to have fresh raspberries today. I get raspberries in July and August. I get strawberries in season. We adjust our diet. Right now, our diet is heavily potatoes, carrots and turnip (it's that season). We go back to those other items (fresh berries) when we can." – Consumer from a remote, northern community

Where most consumers were willing to sacrifice was in terms of convenience, particularly as it relates to reduced packaging and processing. As detailed below, consumers did not see this as a sacrifice so much as an easy action they could take to reduce their environmental footprint. Some were also prepared to, and already do, meal plan, shop and cook more often to support

environmental sustainability in food. Indeed, some volunteered that they would prefer to be encouraged to do more meal planning.

Producers

As stated previously in this report, producers were generally of the view that most consumers are price sensitive. Producers accept that consumers have broadly stated a preference for organic products, but producers talked about finding few willing to pay the price of organic.

> "They want to eat organic at conventional prices." – Producer, Quebec

> "Local will trump organic a lot of the times." – Producer, Atlantic Canada

Environmental actions

Discussions with consumers and producers also explored actions that could be taken to reduce environmental impact when it comes to food choices and the topic of food waste.

Actions to reduce environmental impact

Consumers

Most consumers indicated that they are taking actions to reduce their environmental impact such as: using reusable shopping and produce bags, choosing products with less packaging, reducing food waste, buying local, growing a personal garden, and composting. Some consumers from remote, northern communities responded that they eat wild foods and meats as a way to reduce their environmental impact.

> "Buy as local as possible, in Canada, or in the province. For transportation, but also a lot of faith in the industry due to the regulations. I trust the system." – Youth consumer, British Columbia

> "Eat lots of our traditional food. I don't get much store-bought because it is expensive and I did not grow up on it." – Consumer from a remote, northern community

The majority of consumers could identify further actions individuals could take to be more environmentally sustainable, including planning ahead and cooking more often, composting waste and only buying what they need.

> "I think better utilization of the food we buy and prepare. You know what, we'll make a meal large enough to accommodate the family. Oftentimes, it's a little larger, so there were leftovers. We go to the trouble of putting it into a container, sticking it in the fridge with the very best intentions. And then, you know, five or six days later, I'm carrying it over to the composter. And now I'm running the dishwasher. And you know, there goes my hot water, there goes the fuel that was used to heat it, to wash a container, when I could have just

> got right to the chase and thrown it out to begin with." – Adult consumer, Atlantic Canada

Top-of-mind mentions of making diet changes to reduce environmental impact seemed to have only been made by a select few consumers. Once prompted, a few participants said they already had changed their diet, usually referencing a reduction or removal of meat or dairy consumption. When asked about willingness to change one's diet, responses were mixed, though youth consumers were more willing to consider it. Some participants said they would be willing to make some diet changes, while many were hesitant to do so. That said, most were not surprised to hear that 37% of Canadians who are on a specific diet are on a diet to reduce environmental impact, however many thought that number would be lower.

Overall, youth consumers seem more likely to note specific environmental and humanitarian actions they take or changes they have made, including making changes to their diet and food sharing (with friends and strangers) to limit food waste and save money.

> "I don't really consume a lot of dairy, like cow's milk. I pretty much eliminated that from my diet completely. It was mainly for a health thing, but I've now realized that I started drinking almond milk, and then I learned that almond milk production uses a lot more water. And so, I did a little bit of research about oat milk. And I sort of found my groove there. I like it because I like the taste and I also do like that even the packaging is sustainable, and it says right on it. This is made from recycled cardboard." – Youth consumer, British Columbia

> "If a veggie seems to be going bad or close to it, I'll blanch it, freeze it. If bread is close to going bad, I'll cut it up, blend it, turn it into breadcrumbs. You can freeze that as well. So just trying to be more conscious and figuring out ways to use those products later on.'" – Youth consumer, Prairies

Producers

Similarly, producers also seemed to be trying to find ways to reduce their packaging though they have been either limited by the cost (that consumers would not be willing to bear) or the adverse impact on the quality or appearance of the packaging on their product. For example, one producer mentioned that a certain type of packaging absorbed the moistness and diminished the colourful appearance of their produce which resulted in fewer sales. That producer explained that the recyclable plastic option does not impact the quality of the product, but costs five times more, which they believe the consumers would not tolerate.

> "We used to have to pack them in those with a plastic, Styrofoam-like backing and put plastic over them. But in the past couple of years, we started to send in 20-pound boxes, and they're in a plastic bag, and the customers pick out the cucumbers from the 20 pounds. This works very well, and all of the customers are happy." – Producer, Quebec

Perceptions of food waste in Canada

Consumers

Consumers defined food waste as throwing out food that has gone bad or is unwanted. Food waste was certainly something that has meaning to virtually all participants. Many expressed strong opinions about food waste with several describing frustrating experiences and efforts they have made to try to avoid waste – particularly because of the high cost of food, and for consumers from a remote, northern community, scarcity.

> "I've been trying to go through the fridge before I go grocery shopping. I try to use what needs to be used instead, because sometimes if you don't check your fridge before you go out, you tend to buy something that you already have." – Adult consumer, Ontario

> "It's a bad thing. I try to avoid it. The cost and it's shameful when people are starving." – Consumer from a remote, northern community

There was also near consensus that food waste is a problem in Canada, however, there was more debate over who is most responsible for that waste. The vast majority felt consumers were responsible for food waste, however, several participants also criticized grocery stores and restaurants. Few cited producers or processors, while many said "everyone" was responsible for food waste in Canada. When it came to the role consumers play, some noted that they were responsible for their personal waste as well as consumers' refusal to buy "imperfect" produce.

> "I just think of it as like, the amount that I would throw out that goes bad is like a drop in the bucket compared to I'm assuming the amount that gets thrown out commercially. And so, when I think of food waste, I think of that as being kind of the bigger issue." – Youth consumer, Atlantic Canada

> "I worked my way through high school, and university working at grocery stores. And you wouldn't believe the amount of milk that was bad dated, bakery items, produce that we would throw out into the garbage or into the dumpsters. And you would see in some locations, people doing dumpster dives, you know, to harvest the stuff that we were throwing out." – Adult consumer, Prairies

Consumers from remote, northern communities were perhaps more focused in their allocation of responsibility for food waste on grocery stores rather than on others, but several also pointed out that going up north, food sometimes spoils in transit or because of the extreme and fluctuating temperatures to which produce is exposed when travelling and "weather comes down," stranding a delivery somewhere for a period of time.

> "It all depends on what comes into the store. Our store might receive half-rotten stuff, so it's not even necessarily about the shelf-life. It could be transportation delays, like due to weather." – Consumer from a remote, northern community

> "It would seem to me that grocery stores would be the biggest. Then producers because not everything they make gets used. But it's from the individual on up." – Consumer from a remote, northern community

When participants considered food wasted by retail, restaurants and producers, many expressed frustrations that this "waste" was not provided to those who needed it (for example, food banks and soup kitchens) before it spoiled. In a few discussions, a few consumers noted using or being aware of food waste/sharing apps (for example, FoodHero), that allowed retailers to post the availability of discounted food that was close to expiration or spoiled. They spoke highly of these initiatives and suggested it made them feel something was being done to address the food waste in Canada.

> "People buy a lot of packaged food. It [fresh produce] expires on the shelves; it doesn't get used. Here if the lettuce starts to brown, the next day they discount it 50%, and it's still good. And expiry date does not mean it's a dead end, it's still consumable. As I drive past the local Walmart, their compactor bins are full. We need to give more to food banks. We need more soup kitchens that can do something with these vegetables. I look at carrot fields and we could go behind them when they harvest and glean what's left behind; that doesn't happen." – Adult consumer, Atlantic Canada

The actions that the majority of consumers take to reduce food waste, primarily to avoid wasting money, include eating leftovers; freezing foods to be used later; not relying solely on the expiry or best before dates listed on food; composting; and, not buying as much food in bulk.

Producers

Producers agreed with consumers that there is a food waste problem in Canada. However, producers felt that food waste was often attributable to consumers only willing to buy the most perfect looking produce, grocery stores who discard meat or dairy past the date of expiration, or restaurants who refuse to use food products based on appearance. Some producers mentioned the waste caused by retailers or processors who demanded unnecessary specifications that inevitably meant a perfectly good product was left unsold.

> "There's so much waste and that nobody really hears about it. You know, when you know so many people go hungry and yet we have the food production. We're just not using it. You know, it goes to waste." – Producer, Atlantic Canada

> "I feel like people just go to the grocery stores, it's convenient. But all the food has to be perfect. They're so far removed from it. As a producer, it's a problem. Usually a good portion is perfectly edible but there is so much waste and no one cares." – Producer, Atlantic Canada

Communications and advocacy

The topics of communication and advocacy were also explored in the groups to a certain degree.

Consumers

Consumers were aware of their lack of familiarity with agriculture practices, though many said explicitly that they were interested in knowing more. When asked what, if anything they would want to ask a Canadian farmer, the most common areas of inquiry included: the processes and practices producers use; whether producers felt the industry was environmentally sustainable; the economics of farming; and what motivated producers.

Other less common areas of interest were how consumers can support farmers; trends in how Genetically Modified Organism (GMO) use is evolving; what farmers themselves consume; and where farmers shop. Some consumers broadly said they want to know "everything."

> "I want to know everything, talk about how they do their job." – Youth consumer, Quebec

> "I would like to better understand their day to day, how they're reducing chemical use, what innovations they are employing." – Youth consumer, Prairies

> "What are the criteria to be certified organic?" – Adult consumer, Quebec

Producers

As stated above, there was consensus among producers that consumers were both uneducated and misinformed about the agriculture industry and its processes. Multiple producers noted that producers represent a very small percentage of the population, and the degrees of separation between consumers and farmers have dramatically increased over the past century. As a result, producers talked about their sector being more vulnerable to negative public opinion than had historically been the case.

Many producers said they enjoy speaking with their customers and that many consumers often felt better about their farming practices once they understood them. However, in terms of broader education of the public, producers felt they had neither the time nor the funds to do so. Many explained in order to run a profitable operation, they need to operate more vertically, taking on packing and processing, and direct-selling to consumers, in addition to production, which leaves them little time for anything else.

> "We need a relationship with the world around us and each other." – Producer, Atlantic Canada

> "They need to know we're losing farms and farmers. Their vision of the idea is from 100 years ago, which is fine, but they have to realize the implications.

> And if they're not willing to pay for that or appreciate what they've got, they'll lose it." – Producer, Atlantic Canada

> "The vast majority of us work in as environmentally sustainable manner as conditions allow. There are so many factors we have to contend with: climate, cost, legislation, limited time, resources and funds. We do our best." – Producer, British Columbia

When asked who bears responsibility for educating the public, responses were mixed. Many producers felt the education needs to begin in schools, while others felt it was producer groups that were responsible for education and advocacy. Some producers said everyone was responsible.

Only a few producers felt the Government of Canada should play a role in educating the public. Rather, what producers most wanted from the government was more consistent application of regulations, including requirements for imported goods to meet the same standards applied to Canadian goods; as well as knowledge-sharing; and research and development.

In terms of advocacy, producers expressed the need to challenge misinformation spread by media or documentaries (on Netflix and YouTube). In addition to misinformation, producers also want consumers to be better informed about the buzzwords used by marketers. Industries that seem to have been affected by these releases are meat and dairy. The awareness of the perception that cattle cause a significant amount of greenhouse gases was mentioned by consumers and producers. Most consumers who cited the claim did so with conviction, and a couple non-livestock producers did so as well. Conversely, livestock and dairy producers spoke of the claims as "misinformation," often passionately. This is just one example of a disconnect between what consumers and producers (and even subsets of producers) consider to be factual.

> "I think, in general, the public's gotta get out of their bubble. And, you know, come talk to us. We have to do a better job, obviously, talking to them and taking the time. They don't understand what we do. And we're trying, but I mean, we're a small voice in the midst of the big media corporations." – Producer, Prairies

On the broadest senses, producers wanted more respect and compassion for what they do, and acknowledgement of how hard it is to do it. They want to feel supported.

> "I want them to know that there is not a lot of money involved. The weather can destroy a year in a second. There's not a lot of support for growers. I don't think people realize how hard farming is." – Producer, Atlantic Canada

> "We all do the best we can, every day." – Producer, British Columbia

There is little doubt that consumers who live in remote, northern communities have unique experiences compared to those who live elsewhere in Canada. Furthermore, experiences among consumers in different communities served by the program are also diverse.

Participants were asked to describe the grocery store where they obtained the food they eat. Descriptions of the sight inside their grocery store were typically of "the usual" array of food, but consisted of a narrow range of choice, produce that is often close to (or already) spoiled, and very high prices.

> "Organized by section. Not a lot of choices. Some fruit we have options, like apples. Lots of times things are missing. Some things (sell) faster than others, like 3% milk which the babies need. Would like to see ground corn/corn meal to make corn bread but don't have it very often. Lactose-free milk (many aboriginal people cannot handle lactose, she says)." – Consumer from a remote, northern community

> "We have not many fruits or vegetables. Very little choice. There's meat and dried goods, canned food. Most times we don't get fresh. I would like to eat healthier food than what we get. More fresh produce and seafood. We don't even get salt beef here and I would like that. Maybe a live lobster in town." – Consumer from a remote, northern community

> "When I go to Yellowknife, the grocery stores there are so big and beautiful and have so much. It's like you're in heaven compared to up here. Up here it's just plain and simple." – Consumer from a remote, northern community

Most remote, northern participants said they could not recall any impact on availability caused by the pandemic, but some did indicate reduced availability, and a few offered the impression that prices went up or that transportation issues had arisen.

> "Didn't see any change but heard of it. People talk about shortages." – Consumer from a remote, northern community

> "Availability did change, but might not have been from pandemic, could have been other reasons like weather. In the middle of winter, the veggies freeze en-route to the store, for example. Have had access to all we need." – Consumer from a remote, northern community

> "Prices went up a bit. Chicken used to be $21, now $33 for my family. We will pay $600-$700 a month for four of us, basic stuff. Sometimes the store is missing things, so we have to stock up. This has worsened during the pandemic." – Consumer from a remote, northern community

Some participants claimed the pandemic had an impact on labour, but upon further probing, some of those answers were less certain.

> "Not sure if their employee shortage is due to that. They can't keep employees." – Consumer from a remote, northern community

When asked who is responsible for making sure remote communities have access to the food they need, responsibility tends to be placed upon the federal government, but is also often placed on retailers who decide what to bring in.

> "The federal government for sure, as well as the Nunavut government. They are already giving a federal allowance to decrease the price, but there is still a lot to be done. Like a program to help people know how to make their own food. Having more greenhouses up north and staff to teach them how to grow in there." – Consumer from a remote, northern community

> "It would have to be the stores, I guess. Sometimes there is stuff that is out-dated on the shelves." – Consumer from a remote, northern community

In terms of advocacy, when asked whether agriculture and food policies tended to be made with Northern residents in mind, the overwhelming view was that northern communities are not adequately considered (if at all) when food policies are created. At the same time, some did voluntarily mention policies to restrict pricing of produce or subsidize their purchase of produce.

> "Come to our community for a day or a week and you shall see the struggle we go through just to eat a basic meal." – Consumer from a remote, northern community

> "No, not considered. No buffer between us and the federal government." – Consumer from a remote, northern community

> "Well supported. And they can hold their own. There are even subsidies from the government. Would be double in cost if not for that. Good support that way." – Consumer from a remote, northern community

> "They probably don't consider northern communities. We're always left out, eh? It would have been nice to have a highway that can get food here, but there's nothing and it's 2022. They could use the COVID money to make a highway to Rankin Inlet." – Consumer from a remote, northern community

In the interest of gathering perspectives that we may not have uncovered through our line of questioning, all participants were offered the opportunity to provide final comments. Participants provided a variety of interesting suggestions and stories that provide further evidence of the unique perspectives in the north. One thing that emerged from the experience of both scheduling and conducting the interviews but was only stated explicitly by one or two is the

value in considering communicating in Indigenous languages when trying to raise awareness and knowledge of the Canadian agricultural and food sector.

> "There was a program sending chicken legs to the north-coast communities. It was good, but there are only so many ways you can cook chicken legs. It was so good. It didn't cost us a **cent** to get the chicken legs. That would be a great program to run again and just switch up the products once in a while. They got the numbers a bit wrong. Everyone had 11 packs of chicken legs and that's hard to store." – Consumer from a remote, northern community

> "I would also tell that person that Inuit have survived through so many different traumas in the last 50 years and one of the things it is related to is food. Some people go one or two weeks without a meal because the prices are too high or there is no food at the store. Inuit could do so much more if they didn't have to worry when their next meal is going to be. Hunger is a serious issue, and it makes people do things they wouldn't do if they had eaten a good meal." – Consumer from a remote, northern community

> "I see there's this more and more talk about climate change and I think it's something that is overstated and there is an agenda behind it. It seems like something is overstated and they want people to move and act and do our part." – Consumer from a remote, northern community

> "They have a food subsidy program that is complicated and not understood. They need more public awareness of what it is, and what they are doing to reduce prices. Their receipt does show the cost savings, but people don't understand it. Younger people don't believe the numbers and think the stores are ripping people off. He [the store owner] is in support of it but wants the government to better inform the people of the North so that they too can understand and support it." – Consumer from a remote, northern community

Conclusions

This research was borne out of research that showed changing trends in consumer views of Canada's agricultural and food sector. The research suggested the need to better understand both how consumers view the sector and how producers are impacted by or responding to shifting consumer views. While survey research had demonstrated a high degree of trust in farmers and Canadian food, it had also shown that environmental and health concerns appear to be reshaping consumer perspectives and behaviours when it comes to food.

This study set out to learn more about the nature of, and rationale for, consumer attitudes and behaviours. It was also conducted to understand how producers are impacted by, or responding to, these consumer attitudes and behaviours; in addition to what producers are doing to be environmentally sustainable and produce healthy, quality products for consumers. It also sought to determine whether there is a common understanding of terms such as sustainable agriculture and environmentally sustainable agriculture.

The study found that for consumers, the Canadian agriculture and food sector most often conjured up positive images related to its vastness, diversity, and ability to feed the country. While top-of-mind interpretations of the term "sustainable agriculture" were varied, there was a widely shared view among both consumers and producers that sustainable agriculture was closely linked to environmental stewardship. Though for producers the interconnectedness of sustainable agriculture was also closely linked to social responsibility and economic profitability.

There was also a fairly broad consensus among both consumers and producers that sustainable agriculture is important. That said, importance does not seem to change consumer purchase behaviours dramatically for most, which suggests the connection between perceived importance and claimed behaviour may be weak.

Time and again, consumers said these topics are not ones they spend much time contemplating. Again, this does not seem to signal a lack of importance, but rather we heard that consumers generally trust that those involved in the agriculture process, namely the farmers/producers as well as the Government of Canada, are doing at least the minimum. That said, there was a subset of consumers who hold some negative impression of producers. Often, these negative impressions are explicitly described as being restricted to large, "factory" farms. These individuals were usually concerned about the use of chemicals, greenhouse gases from cattle, the impacts of GMOs on foods, and the treatment of animals.

It is also true that credibility of the claims and certifications made by the agriculture industry were viewed with skepticism by consumers, although they often expressed these are the types of claims they would prefer were true.

What consumers say they want to know from farmers shows both an awareness of the limited knowledge consumers have and a keen interest in understanding and knowing more. It also signals a level of general curiosity about farms and farmers in general. And so, it appears consumers are open to receiving the information producers think they ought to have.

Many producers appeared both keen to have this discussion and frustrated by the topic. Given the opportunity to share what they wish consumers understood, there was no shortage of responses. It can be said that, overall, producers want to feel supported and have their commitment and hard work validated because they feel they are doing precisely the things consumers – and the planet – need them to do.

Instead, many expressed feeling under attack by media and marketers who are misinforming uneducated consumers and as a result, they feel there is an undeserved level of public negativity towards producers. In terms of a public education campaign, they understand that it will need to be comprehensive; many indicating that it needs to start in schools, but also producers and industry groups need to spread their messages. The main challenge currently is a lack of time and resources.

Producers also expressed frustration around some government regulations, particularly those that they felt disadvantaged them in the supermarket (such as imported products produced elsewhere not being held to the same standards). This seemed to be a major barrier for producers aspiring to be more sustainable given the increased cost to adhere to more stringent requirements in a competitive and price-sensitive environment.

Across regions and age groups, consumers demonstrated having views that were largely homogenous, but there were a few notable differences. Consumers in Quebec indicated a greater trust and interest in organic farming than consumers in other regions. There was also slightly higher awareness and concern of the impact of agricultural activities on the environment in British Columbia and Atlantic Canada.

Looking at the differences by age, adult consumers were more likely to shop for sustainable food options than youth and were more likely to be willing to pay a premium for it. Conversely, youth consumers were more likely to accept less variety in food options available to them to support sustainable agriculture in Canada. Youth consumers were also more likely to focus on the environmental benefits of sustainable agriculture practices, compared to adult consumers who were more likely to think about feeding future generations. And finally, youth consumers tend to offer up specific environmental and humanitarian actions they take or changes they have made, including making changes to their diet and food sharing.

Consumers from remote, northern communities had a unique perspective and experience when it came to agriculture and sustainability, often contrasting with what we heard among consumers in the focus groups. By and large, these consumers were not familiar with the terms or concepts in the same way that other Canadians were. Local food options were described as few and far between, and most of what they consume is considered “imported” whether from within Canada or abroad.

For many, sustainability related to relying more on hunting, fishing, and gathering, instead of agricultural production practices. Unlike what was heard in the focus groups with southern residents, food security is top-of-mind and a concern for many who are from remote, northern communities. While some consumers from remote, northern communities described having access to everything they need, that access was also bound to limitations like time of year,

delivery dates, high prices, weather conditions, and the final quality of products. Many consumers from remote, northern communities felt they need to be more self-sufficient, as they are fairly certain their communities are not considered (or not adequately considered) by the Government of Canada in the creation of agriculture or food policies. However, many recognized that they do benefit from subsidies that have been provided.

There were no discernible differences confirmed between producers across Canada. While not validated, we hypothesize that differences may be more apparent between different types of producers (for example, produce versus livestock) or size of operation, however, further research would be required to validate this.

In summary, this study delved much more deeply into how two sides of Canada's agricultural and food sector – consumers and producers – are thinking and behaving.

Having many conversations with both groups has shed valuable light on what they have in common and how they view each other – including apparent misconceptions. Setting aside the unique situation in remote, northern communities, this study has demonstrated each group does, indeed, have tremendous respect and appreciation for the other, and yet each group is also somewhat wary of the other and lacking in-depth knowledge about how the other thinks and behaves.

It was clear that consumers need and want to be able to feel more comfortable about the practices of large producers and perhaps also better understand how much of their food is actually coming from the kinds of small and medium operations they tend to feel are more likely to have consumers' best interest at heart.

On the other side of the equation, the producers we spoke to demonstrated a high degree of passion for their work and commitment to sustainable agriculture practices, because healthy products, environment, and soil are all fundamental to the sustainability of their operation, as well as the right thing to do.

Producers expressed a sense of being harshly judged by consumers, whose views, they believe, have been tainted by documentaries, media and even marketing claims that leave consumers mistakenly feeling that undesirable agriculture practices are widespread, rather than restricted to a few bad actors. At the same time, they described toiling in a sector that is capital intensive, has huge risks constantly looming, requires constant engagement and yields small margin.

Producers displayed frustration and disappointment at how they assume consumers feel towards them and a sense that if only the public knew how they really operated, the public would appreciate that producers are not just doing their best, they are approaching their work in exactly the way consumers would want.

These findings above add up to one of the more valuable insights generated by this research: there was more mutual respect and desire to have the best in each other confirmed than might be indicated from some of the raw statistics. Consumers can be concerned about the use of

pesticides, the treatment of animals and environmental damage caused by agriculture and still talk about farmers in positive terms and seek them out at markets or in the countryside when consumers want the highest quality, most delicious, safest and/or most environmentally sustainably produced food.

Farmers can feel victimized by, and vulnerable to, unfair trends based on misinformation, while still also respecting that consumers' intentions are to end up with quality food produced responsibly, but the consumers are themselves victims of, and vulnerable to, effective marketing campaigns and compelling documentaries whose agendas may not align with achieving the shared goals of consumers and farmers in Canada.

The two sides expressed sentiments that seem like they are somewhat stressed about needing to rely on the "mysterious" other for something extremely important, while independently stating objectives that are very well-aligned.

Appendix A – Focus group methodology report

Methodology

The following results are based on a series a series of 24 online discussion groups were conducted with consumers (12) and producers (12), totalling 174 participants. Consumers were defined as Canadian adults (18+) who have joint/sole responsibility for grocery shopping in their households. Producers were defined as farmers or ranchers with at least $10,000 in annual farming sales. Five (5) regions of the country were studied: British Columbia, Prairies (Alberta, Saskatchewan, Manitoba), Ontario, Quebec (in French), and Atlantic (Newfoundland and Labrador, New Brunswick, Nova Scotia, Prince Edward Island). Within each region, one group was conducted with youth consumers (participants 18 to 34 years of age), one group was conducted with adult consumers (participants 35 years of age and older), and two groups were conducted with producers. Additional discussion groups were held with those residing in official language minority communities (OLMCs): French speakers residing outside of Quebec and English speakers residing in Quebec, for each consumer and producer audiences

In addition to the focus groups, twenty (20) in-depth interviews were conducted with consumers (both youth and adult), as defined above, living in northern, remote communities supported by Nutrition North Canada.

The focus group sessions were approximately 90 minutes in length and the interviews were 30-40 minutes in length. Participants were given an honorarium as a token of appreciation for their time ($100 for consumers and $250 for producers). Appendix B provides the screener used for recruiting participants, and Appendix C and D provide the discussion guide used for the focus groups.

The tables below show the composition and logistical details of the focus groups and interviews.

Focus Groups

Group	Audience	Region	Time	Number of participants
Tuesday, February 22, 2022				
1	Producers	Atlantic Canada (EN)	10:00 am EST/11:00 am AST/11:30 am NST	7
2	Producers	BC (EN)	1:00 pm EST/10:00 am PST	9
3	Producers	Ontario (EN)	1:00 pm EST	7
4	Youth (18 to 34 years)	Atlantic Canada (EN)	4:00 pm EST/5:00 pm AST/5:30 NST	8
5	Youth (18 to 34 years)	Quebec (FR)	6:00 pm EST	6
6	Youth (18 to 34 years)	Ontario (EN)	6:00 pm EST	7
7	Youth (18 to 34 years)	British Columbia (EN)	8:00 pm EST/5:00 pm PST	7
Wednesday, February 23, 2022				
8	Producers	Quebec (FR)	10:00 am EST	8
9	Producers	Atlantic Canada (EN)	10:00 am EST/11:00 am AST/11:30 am NST	7
10	Producers	Prairies (EN)	1:00 pm EST/12:00 pm CST/11:00 am MST	7
11	Producers	British Columbia (EN)	1:00 pm EST/10:00 am PST	9
12	Adult (35 years+)	Atlantic Canada (EN)	4:00 pm EST/5:00 pm AST/5:30 NST	7
13	Adult (35 years+)	Quebec (FR)	5:00 pm EST	7
14	Adult (35 years+)	Ontario (EN)	6:00 pm EST	8
15	Youth (18 to 34 years)	Prairies (EN)	7:00 pm EST/6:00 pm CST/5:00 pm MST	8
Thursday, February 24, 2022				
16	Producers	Quebec (FR)	10:00 am EST	6
17	Producers	Ontario (EN)	10:00 am EST	5
18	Consumers	OLMC (FR)	5:00 pm EST/6:00 pm AST/6:30 pm NST/4:00 pm CST/ 3:00 pm MST/2:00 pm PST	7
19	Consumers	OLMC (EN)	6:00 pm EST	7
20	Adult (35 years+)	Prairies (EN)	7:00 pm EST/6:00 pm CST/ 5:00 pm MST	7
21	Adult (35 years+)	British Columbia (EN)	8:00 pm EST/5:00 pm PST	6
Friday, February 25, 2022				
22	Producers	OLMC (EN)	10:00 am EST	6
23	Producers	OLMC (FR)	1:00 pm EST/2:00 pm AST/ 2:30 pm NST/12:00 pm CST/ 11:00 am MST/10:00 am PST	9
24	Producers	Prairies (EN)	1:00 pm EST/12:00 pm CST/ 11:00 am MST	9

Interviews

Gender	Age (years)	Province or Territory	Community	Date and time
Female	65+	ON	Deer Lake	February 14, 2022 9:00 EST
Male	50 to 64	NT	Fort McPherson	February 14, 2022 12:00 EST/10:00 MST
Female	50 to 64	NL	Postville	February 15, 2022 5:00 EST/6:00 AST
Female	50 to 64	NL	Postville	February 15, 2022 6:00 EST/7:00 AST
Male	65+	NL	Nain	February 16, 2022 1:00 EST/2:00 AST
Female	50 to 64	NT	Inuvik	February 16, 2022 3:00 EST/1:00 MST
Male	35 to 49	ON	Poplar Hill/Upper Hill Reserve	February 16, 2022 4:30 EST
Female	18 to 34	NU	Coral Harbour	February 16, 2022 8:00 EST
Female	50 to 64	NL	Nain	February 17, 2022 12:00 EST/1:00 AST
Female	65+	ON	Bear Lake	February 22, 2022 1:00 EST
Male	65+	NU	Iqaluit	February 28, 2022 9:00 EST
Female	50 to 64	AB	Fort Chipewyan	February 28, 2022 2:00 EST/12:00 MST
Female	50 to 64	NL	Nain	March 2, 2022 12:00 EST/1:00 AST
Male	35 to 49	NU	Igloolik	March 2, 2022 12:00 EST/1:00 AST
Female	35 to 49	NU	Iqaluit	March 4, 2022 11:00 EST
Female	35 to 49	NU	Iqaluit	March 2, 2022 12:00 EST
Female	50 to 64	NU	Cambridge Bay	March 2, 2022 1:00 EST
Female	18 to 34	NU	Clyde River	March 2, 2022 2:00 EST
Female	35 to 49	NL	Postville	March 2, 2022 4:00 EST/5:00 AST
Male	18 to 34	NU	Arviat	March 16, 2022 4:15 EST/5:15 AST

Recruitment

Participants were recruited using a screening questionnaire (included in Appendix B). For each group we recruited eight (8) participants, for 6-8 to show up. Note that in groups 23 and 24, an additional recruit was included (bringing the total to nine) as there was some concern for resulting show-rate.

Our fieldwork subcontractor, Quality Response, and their selected suppliers reached out to members of their respective databases first via email and follow-up with telephone calls to pre-qualify participants. This is the approach employed most often. They then conducted telephone recruitment to supplement in each market.

For recruitment in Atlantic Canada and Ontario, Quality Response relied on their own proprietary database of approximately 35,000 Canadians with profiling on a range of attributes including standard personal demographics, household composition, medical background, technology usage, financial services, health and wellness, business profiles, and other relevant criteria. Their database is constantly being updated and replenished and operates out of their own, onsite telephone room in Toronto, Ontario. Potential group participants are recruited to their database via mixed-mode: following a proprietary telephone survey, online, referral, social media and print advertising. Initial contact is often made via email or online pre-screening for speed and economies, followed up by personal telephone recruitment and pre-group attendance confirmation.

For recruitment in Atlantic Canada, Ontario, British Columbia and the Territories, Quality Response partnered with Metroline Research. Metroline's database includes approximately 4,500 Canadians. New participants are added to their database via referrals and online advertising. Metroline profiles their database for a variety of characteristics including but not limited to: location; marital status; occupation; income, etc.

For recruitment across Canada, Quality Research partnered with Red Ladder Inc. (Operating as Voice Your Opinion Canada). Red Ladder's database is comprised of approximately 31,000 residents of British Columba, 34,000 residents of Alberta and 25,000 residents of other locations across Canada. New people are added to their databases via referrals from current panelists and company website.

For recruitment in Quebec, Quality Response partnered with MBA Recherche. MBA Recherche's vast database includes approximately 35,000 Canadians across Quebec. They use Google ads, their website, telephone random digit dialing (RDD) lists, and referrals to recruit new participants.

For recruitment in Ontario, Quality Response also partnered with Brookson Research. Brookson Research's database is comprised of approximately 9,500 Canadians. New people are added to the database via phone, text, email and corporate website. The company does twice-yearly drives to refresh the database in English and French. The database is profiled by name, gender, age, contact information, city of residence, education, mother tongue, occupation and history attending market research sessions.

For recruitment in Quebec, Quality Response partnered with HF Management Inc. Located in Montreal, HF Management's database includes approximately 15,000 residents of Quebec. New people are added to their databases via referrals from current panelists.

For recruitment in the Prairies, British Columbia and the Territories, Quality Response partnered with Pele Research. Located in Manitoba and Saskatchewan, Pele Research's database includes approximately 3,000 Canadians per province. Pele Research profiles their database by name, age, gender, income, education, occupation, and phone number.

For recruitment in Western Canada, Quality Response partnered with Trend Research Inc. Trend Research's database is comprised of approximately 10,000 residents of British Columbia, 30,000 residents of Alberta, and 7,500 residents of Saskatchewan. New people are added to their databases via referrals from current panelists, advertising, phone recruits and the company website.

For recruitment in British Columbia and the Territories, Quality Response also partnered with Walmsley Research. Walmsley's database is comprised of approximately 5,500 residents of Vancouver. They rely on referrals and online advertisements to recruit to their database. In addition to a variety of demographics, their database is profiled for: age of children, occupation, spouse's occupation, health issues, etc.

Quality Response understands the nuances of qualitative recruiting and the importance of locating qualified, interested respondents. Their recruiting is undertaken in strict accordance with the Standards for the Conduct of Government of Canada Public Opinion Research – Qualitative Research.

Moderation

Two moderators were used to conduct the focus groups. Our team worked together to moderate the groups, debriefing, after each night of groups on the functionality of the discussion guide; any issues relating to recruitment, turnout, technology and key findings, including noting instances that were unique and that were similar to previous sessions. Together, we discussed the findings on an ongoing basis in order to allow for probing of areas that required further investigation in subsequent groups and before the final results are reported.

A note about interpreting qualitative research results

It is important to note that qualitative research is a form of scientific, social, policy, and public opinion research. Focus group research is not designed to help a group reach a consensus or to make decisions, but rather to elicit the full range of ideas, attitudes, experiences, and

opinions of a selected sample of participants on a defined topic. Because of the small numbers involved the participants cannot be expected to be thoroughly representative in a statistical sense of the larger population from which they are drawn, and findings cannot reliably be generalized beyond their number.

Glossary of terms

The following is a glossary of terms which explains the generalizations and interpretations of qualitative terms used throughout the report. These phrases are used when groups of participants share a specific point of view and emerging themes can be reported. Unless otherwise stated, it should not be taken to mean that the rest of participants disagreed with the point; rather others either did not comment or did not have a strong opinion on the question.

Generalization	**Interpretation**
Few	Few is used when less than 10% of participants have responded with similar answers.
Several	Several is used when fewer than 20% of the participants responded with similar answers.
Some	Some is used when more than 20% but significantly fewer than 50% of participants respondents with similar answers.
Many	Many is used when nearly 50% of participants responded with similar answers.
Majority/Plurality	Majority or plurality are used when more than 50% but fewer than 75% of the participants responded with similar answers.
Most	Most is used when more than 75% of the participants responded with similar answers.
Vast majority	Vast majority is used when nearly all participants responded with similar answers, but several had differing views.
Unanimous/Almost all	Unanimous or almost all are used when all participants gave similar answers or when the vast majority of participants gave similar answers and the remaining few declined to comment on the issue in question.

Appendix B – Recruitment screener

Online focus group summary

- 24 focus groups total.
- Recruit eight participants per focus group.
- Groups are 90 minutes long.
- Participants must have high-speed internet access and a webcam.
- Producers: $250 incentive.
- Consumers: $100 incentive.
- Consumers: All must have main or joint responsibility for grocery shopping in their households.
- Consumers: Must ensure good mix of other demographics (rural/urban, gender, income, etc.).
- Producers: Must ensure a good mix of operations, including products farmed, size of operation, organic, etc. as best as possible.

In-depth interview summary

- 20 total in-depth interviews with consumers from a remote, northern community.
- $100 incentive.
- Interviews are 30 to 40 minutes long.
- Mix of 121 northern communities.
- Ensure a mix of demographics age, gender, income, etc. as best as possible.

Group	Audience	Region	Time	Number of participants
Tuesday, February 22, 2022				
1	Producers	Atlantic Canada (EN)	10:00 am EST/11:00 am AST/11:30 am NST	7
2	Producers	BC (EN)	1:00 pm EST/10:00 am PST	9
3	Producers	Ontario (EN)	1:00 pm EST	7
4	Youth (18 to 34 years)	Atlantic Canada (EN)	4:00 pm EST/5:00 pm AST/5:30 NST	8
5	Youth (18 to 34 years)	Quebec (FR)	6:00 pm EST	6
6	Youth (18 to 34 years)	Ontario (EN)	6:00 pm EST	7
7	Youth (18 to 34 years)	British Columbia (EN)	8:00 pm EST/5:00 pm PST	7
Wednesday, February 23, 2022				
8	Producers	Quebec (FR)	10:00 am EST	8
9	Producers	Atlantic Canada (EN)	10:00 am EST/11:00 am AST/11:30 am NST	7
10	Producers	Prairies (EN)	1:00 pm EST/12:00 pm CST/11:00 am MST	7
11	Producers	British Columbia (EN)	1:00 pm EST/10:00 am PST	9
12	Adult (35 years+)	Atlantic Canada (EN)	4:00 pm EST/5:00 pm AST/5:30 NST	7
13	Adult (35 years+)	Quebec (FR)	5:00 pm EST	7
14	Adult (35 years+)	Ontario (EN)	6:00 pm EST	8
15	Youth (18 to 34 years)	Prairies (EN)	7:00 pm EST/6:00 pm CST/5:00 pm MST	8
Thursday, February 24, 2022				
16	Producers	Quebec (FR)	10:00 am EST	6
17	Producers	Ontario (EN)	10:00 am EST	5

18	Consumers	OLMC (FR)	5:00 pm EST/6:00 pm AST/6:30 pm NST/4:00 pm CST/ 3:00 pm MST/2:00 pm PST	7
19	Consumers	OLMC (EN)	6:00 pm EST	7
20	Adult (35 years+)	Prairies (EN)	7:00 pm EST/6:00 pm CST/ 5:00 pm MST	7
21	Adult (35 years+)	British Columbia (EN)	8:00 pm EST/5:00 pm PST	6
Friday, February 25, 2022				
22	Producers	OLMC (EN)	10:00 am EST	6
23	Producers	OLMC (FR)	1:00 pm EST/2:00 pm AST/ 2:30 pm NST/12:00 pm CST/ 11:00 am MST/10:00 am PST	9
24	Producers	Prairies (EN)	1:00 pm EST/12:00 pm CST/ 11:00 am MST	9

Respondent's name: Interviewer:

Respondent's phone number: (work) Date:

Respondent's phone number: (cell) Validated:

Respondent's email:

[for focus groups]
Hello/Bonjour, my name is _____ and I'm calling on behalf of Earnscliffe, a national public opinion research firm. We are organizing a series of discussion groups on issues of importance to Canadians, on behalf of the Government of Canada, specifically for Agriculture and Agri-Food Canada. We are looking for people who would be willing to participate in an online discussion group that will last up to 90 minutes. Up to eight participants will be taking part and for their time, participants will receive an honorarium of $[insert amount]. May I continue?

Yes [continue]
No [thank and terminate]

[for in-depth interviews]
Hello/Bonjour, my name is _____ . I am calling on behalf of the Earnscliffe Strategy Group, a national public opinion research firm. From time to time, we solicit opinions by talking with people. We are preparing to conduct a series of one-on-one interviews on behalf of the Government of Canada, more specifically for Agriculture and Agri-Food Canada. The format is a one-on-one interview, lasting between 30 to 40 minutes, with a research professional, and participants will receive an honorarium of $100 for their participation. May I continue?

Yes [continue]
No [thank and terminate]

[for all]
Would you prefer that I continue in English or French? Préférez-vous continuer en français ou en anglais? [if french, continue in french or arrange a call back with french interviewer: Nous vous rappellerons pour mener cette entrevue de recherche en français. Merci. Au revoir].

[for all]
Participation is voluntary and confidential. We are interested in hearing your opinions; no attempt will be made to sell you anything or change your point of view. All opinions expressed will remain anonymous and views will be grouped together to ensure no particular individual can be identified. But before we invite you to attend, we need to ask you a few questions to ensure that we get a good mix and variety of people. May I ask you a few questions? This will only take about 5 minutes.

Yes [continue]
No [thank and terminate]

Monitoring text:
Read to all: "This call may be monitored or audio taped for quality control and evaluation purposes."
Additional clarification if needed:

- To ensure that I (the interviewer) am reading the questions correctly and collecting your answers accurately;
- To assess my (the interviewer) work for performance evaluation;
- To ensure that the questionnaire is accurate/correct (i.e. evaluation of CATI programming and methodology – we're asking the right questions to meet our client's research requirements – kind of like pre-testing)
- If the call is audio taped, it is only for the purposes of playback to the interviewer for a performance evaluation immediately after the interview is conducted or it can be used by the Project Manager/client to evaluate the questionnaire if they are unavailable at the time of the interview – all audio tapes are destroyed after the evaluation.

[for all]
S1. Do you or any member of your household work for…

	Yes	**No**
A public opinion or marketing research firm	1	2
A magazine or newspaper, online or print	1	2
A radio or television station	1	2
A public relations company	1	2
An advertising agency or graphic design firm	1	2
An online media company or as a blog writer	1	2
The government, whether federal, provincial, or municipal	1	2
The agriculture and farming sector	1	2
Food manufacturing/food industry	1	2

[if agriculture/farming sector, screen for producer]
[if "yes" to any other of the above, thank and terminate]

[for producers]

S2. Are you an agricultural producer who holds or shares primary responsibility for making decisions for your agricultural operation?

Yes	Continue
No	Ask S2A

[for producers]

S2A. Is there someone else in your household who fits this definition [READ IF NECESSARY: Is an agricultural producer who holds or shares primary responsibility for making decisions for your agricultural operation]?

Yes	Ask to speak with this person and start from the beginning but skip questions S1 thru S2A.
No	Thank and terminate

[for producers]

S2C. Could you also please tell me which of the following categories your farm sales from the last year fall into? [read list]

Under $10,000	1	Thank and terminate
$10,000 to $49,000	2	Ensure a good mix
$50,000 to $99,000	3	
$100,000 to $149,000	4	
$150,000 to $199,000	5	
$200,000 to $249,000	6	
$250,000 to $499,000	7	
$500,000 or more	8	
Don't know/No response	9	Thank and terminate

[for consumers]

S3. I am going to read you three statements. Please let me know which one most accurately reflects your role in your household.

a. I have the main responsibility of grocery shopping in my household.

b I share joint responsibility of grocery shopping in my household

c. I do not have main or joint responsibility of grocery shopping in my household.

[preference for a's. If c, thank and terminate]

[for all]

S4. Which province or territory do you live in? [producer: ensure a good mix]

Newfoundland and Labrador	1	
Nova Scotia	2	
Prince Edward Island	3	
New Brunswick	4	
Quebec	5	
Ontario	6	
Manitoba	7	
Saskatchewan	8	
Alberta	9	
British Columbia	10	
Yukon	11	[Recruit for BC]
Nunavut	12	[Recruit for BC]
Northwest Territories	13	[Recruit for BC]
Prefer not to say	99	[Thank and terminate]

[for consumers and IDI'S]

S5. And in what city, town or community do you reside? [do not read]

[for IDI'S]

See list here: Nutrition North Canada; or appended Excel sheet]

[Ensure a good mix]

[For consumers]

[If British Columbia]

Greater Vancouver Area	1	
Greater Victoria Area	2	
Other	77	[4 in each group]

[if Prairies]

Greater Calgary Area	3	
Greater Edmonton Area	4	
Greater Saskatoon Area	5	
Greater Regina Area	6	
Greater Winnipeg Area	7	
Other	77	[4 in each group]

[if Ontario]

Greater Toronto Area	7	
Greater Ottawa Area	7	
Other	77	[4 in each group]

[if Quebec]

Greater Montreal Area	9	
Greater Quebec City Area	10	
Other	77	[4 in each group]

[if Atlantic Canada]

Greater Moncton Area	11	
Greater Halifax Area	12	
Greater St. John's Area	13	
Greater Charlottetown Area	14	
Other	77	[4 in each group]
Prefer not to say	99	[thank and terminate]

[for all]

S6. What is your gender identity? [do not read; ensure a mix for consumers]

Man	1	
Woman	2	
Transgender	3	
Non-Binary	4	
Prefer to self-describe [specify]	77	
Prefer not to say	99	[thank and terminate]

[for all]

S7. Could you please tell me which of the following age categories you fall into? Are you...?

[Ensure a mix for consumers]

[Just track for producers and IDI'S]

18 to 24 years	1	[Youth consumer]
25 to 34 years	2	[Youth consumer]
35 to 54 years	3	[Adult consumer]
55 to 64 years	4	[Adult consumer]
65+ years	5	[Adult consumer]
Prefer not to say	99	[Thank and terminate]

[for producers]

S8. What type of production do you draw most of your gross farm revenue from? [read list; ensure a good mix]

Oilseed and grain farming (for example, soybean, canola, flaxseed, mustard seed) - safflower and sunflower, dried peas, dried beans, lentils - wheat, corn, rice, wild rice, buckwheat, etc.	1
Livestock farming (for example, cattle, poultry, pig, sheep, goat, etc.)	2
Dairy cattle and milk production	3
Fruit and vegetable farming (includes horticulture and viticulture)	4
Other types of farm production (e.g. aquaculture, beekeeping, forage, etc.)	5
Other (please specify)	77

[for producers]
S9. How many years have you been managing a farm business? [read list; ensure a good mix]

Less than 5 years	1
6 to 20 years	2
20 or more years	3

[for producers]
S10. Does your farm have a formal, written environmental farm plan?

Yes	1
No	2
Not applicable to my farm	3

[for producers]
S11. Is your farm organic certified or in the process of receiving organic certification?

Yes, organic certified	1
Yes, in the process of obtaining organic certification	2
No	3

[for consumers and IDI'S]
S12. What is the last level of education that you have completed? [for consumers ensure good mix]

Some high school	1	
Completed high school	2	
Some vocational studies	3	
Completed vocational studies (without high school diploma)	4	
Completed vocational studies (with high school diploma)	5	
Some college/university	6	
Completed college/university	7	
Prefer not to say	99	[thank and terminate]

[for consumers and IDI'S]
S13. What is your ethnic background? [do not read] [for consumers ensure good mix]

Caucasian	1
Chinese	2
South Asian (that is, East Indian, Pakistani, etc.)	3
Black	4
Filipino	5
Latin American	6
East or Southeast Asian (that is, Vietnamese, etc.)	7
Arab	8
West Asian (that is, Iranian, Afghan, etc.)	9
Korean	10
Japanese	11
Indigenous (First Nations, Métis, or Inuit)	12

Other	77	
Don't know/Prefer not to say	99	[thank and terminate]

[for consumers and IDI'S]

S14. Which of the following categories best describes your total household income; that is, the total income of all persons in your household combined, before taxes? [Read list] [for consumers ensure good mix]

Under $20,000	1	
$20,000 to under $40,000	2	
$40,000 to under $60,000	3	
$60,000 to under $80,000	4	
$80,000 to under $100,000	5	
$100,000 to under $150,000	6	
$150,000 or more	7	
Prefer not to say	9	[thank and terminate]

[S15 thru S23B for focus groups]
This research will require participating in a video call online.

S15. Do you have access to a computer, smartphone or tablet with high-speed internet which will allow you to participate in an online discussion group?

Yes	1	
No	2	[thank and terminate]

S16. Does your computer/smartphone/tablet have a camera that will allow you to be visible to the moderator and other participants as part of an online discussion group?

Yes	1	
No	2	[thank and terminate]

S17. Do you have a personal email address that is currently active and available to you?

Yes	1	[Please record email]
No	2	[Thank and terminate]

S18. Have you participated in a discussion or focus group before? A discussion group brings together a few people to understand their opinion about a given subject.

Yes	1	[MAX 1/3 PER GROUP]
No	2	[skip to S22]
Don't know/No response	99	[thank and terminate]

S19. When was the last time you attended a discussion or focus group?

If within the last 6 months	1	[thank and terminate]
If not within the last 6 months	2	
Don't know/No response	99	[THANK AND TERMINATE]

S20. How many of these sessions have you attended in the last five years?

If 4 or less	1	
If 5 or more	2	[THANK AND TERMINATE]
Don't know/No response	99	[THANK AND TERMINATE]

S21. And what was/were the main topic(s) of discussion in those groups?

If related to environment or sustainability, thank and terminate

S22. Participants in discussion groups are asked to voice their opinions and thoughts. How comfortable are you in voicing your opinions in front of others? Are you…? [read list]

Very comfortable	1	[Minimum 4 per group]
Fairly comfortable	2	
Comfortable	3	
Not very comfortable	4	[Thank and terminate]
Not at all comfortable	5	[Thank and terminate]
Don't know/No response	99	[Thank and terminate]

S23. Sometimes participants are asked to read text, review images, or type out answers during the discussion. Is there any reason why you could not participate?

Yes	1	[ask S23A]
No	2	[skip to S24A]
Don't know/No response	9	[thank and terminate]

S23A. Is there anything we could do to ensure that you can participate?

Yes	1	[ask S23B]
No	2	[Thank and terminate]
Don't know/No response	9	[Thank and terminate]

S23B. What specifically? [open end]

[interviewer to note for potential one-on-one interview]

Invitation

[focus groups]

S24A. Based on your responses, it looks like you have the profile we are looking for. I would like to invite you to participate in a small group discussion, called an online focus group, we are conducting at [time], on [date]

It will last up to up to 90 minutes and you will receive $[insert amount] as a thank you for your time. Would you be willing to attend?

Yes	1	[Recruit]
No	2	[Thank and terminate]
Don't know/Prefer not to say	9	[Thank and terminate]

[IDI'S]

S24B. The in-depth interviews will take place via telephone call. It will last approximately 30 to 40 minutes. The interview will be led by a research professional. Interviewees would receive an honorarium of $100 for their time. Would you be available to participate in the interview on date and time?

Yes	1	
No	2	[thank and terminate]

Privacy questions

Now I have a few questions that relate to privacy, your personal information, and the research process. We will need your consent on a few issues that enable us to conduct our research. As I run through these questions, please feel free to ask me any questions you would like clarified.

P1. First, we will be providing a list of respondents' first names and profiles (screener responses) to the moderator. Do we have your permission to do this? I assure you it will be kept strictly confidential.

Yes	1	[go to P2]
No	2	[go to P1A]

We need to provide the first names and background of the people participating because only the individuals invited are allowed in the session and this information is necessary for verification purposes. Please be assured that this information will be kept strictly confidential. go to P1A

P1A. Now that I've explained this, do I have your permission to provide your first name and profile?

Yes	1	[go to P2]
No	2	[thank and terminate]

P2. A recording of the group session will be produced for research purposes. The recordings will be used by the research professional to assist in preparing a report on the research findings and may be used by the Government of Canada and/or their creative agency for internal reporting purposes.

Do you agree to be recorded for research and reporting purposes only?

Yes	1	[thank and go to P3]
No	2	[read respondent info below and go to P2A]

It is necessary for the research process for us to record the session as the researchers need this material to complete the report.

P2A. Now that I've explained this, do I have your permission for recording?

Yes	1	[thank and go to P3]
No	2	[thank and terminate]

P3. [focus groups] It is standard qualitative procedure to invite clients, in this case, Government of Canada employees and their creative agency, to observe the groups online. They will be there simply to hear your opinions firsthand although they may take their own notes and confer with the moderator on occasion to discuss whether there are any additional questions to ask the group.

Do you agree to be observed by Government of Canada employees and/or employees of their creative agency?

Yes	1	[thank and go to invitation]
No	2	[thank and terminate]

Focus groups invitation

Wonderful, you qualify to participate in one of our discussion sessions. As I mentioned earlier, the group discussion will take place on [date] at [time] for up to 90 minutes.

Group	Audience	Region	Time	Number of participants
Tuesday, February 22, 2022				
1	Producers	Atlantic Canada (EN)	10:00 am EST/11:00 am AST/11:30 am NST	7
2	Producers	BC (EN)	1:00 pm EST/10:00 am PST	9
3	Producers	Ontario (EN)	1:00 pm EST	7
4	Youth (18 to 34 years)	Atlantic Canada (EN)	4:00 pm EST/5:00 pm AST/5:30 NST	8
5	Youth (18 to 34 years)	Quebec (FR)	6:00 pm EST	6
6	Youth (18 to 34 years)	Ontario (EN)	6:00 pm EST	7
7	Youth (18 to 34 years)	British Columbia (EN)	8:00 pm EST/5:00 pm PST	7
Wednesday, February 23, 2022				
8	Producers	Quebec (FR)	10:00 am EST	8
9	Producers	Atlantic Canada (EN)	10:00 am EST/11:00 am AST/11:30 am NST	7
10	Producers	Prairies (EN)	1:00 pm EST/12:00 pm CST/11:00 am MST	7
11	Producers	British Columbia (EN)	1:00 pm EST/10:00 am PST	9
12	Adult (35 years+)	Atlantic Canada (EN)	4:00 pm EST/5:00 pm AST/5:30 NST	7
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14	Adult (35 years+)	Ontario (EN)	6:00 pm EST	8
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Thursday, February 24, 2022				
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17	Producers	Ontario (EN)	10:00 am EST	5
18	Consumers	OLMC (FR)	5:00 pm EST/6:00 pm AST/6:30 pm NST/4:00 pm CST/ 3:00 pm MST/2:00 pm PST	7
19	Consumers	OLMC (EN)	6:00 pm EST	7
20	Adult (35 years+)	Prairies (EN)	7:00 pm EST/6:00 pm CST/ 5:00 pm MST	7
21	Adult (35 years+)	British Columbia (EN)	8:00 pm EST/5:00 pm PST	6
Friday, February 25, 2022				
22	Producers	OLMC (EN)	10:00 am EST	6
23	Producers	OLMC (FR)	1:00 pm EST/2:00 pm AST/ 2:30 pm NST/12:00 pm CST/ 11:00 am MST/10:00 am PST	9
24	Producers	Prairies (EN)	1:00 pm EST/12:00 pm CST/ 11:00 am MST	9

Respondent's name: Interviewer:

Respondent's phone number: (work) Date:

Respondent's phone number: (cell) Validated:

Respondent's email:

Can I confirm your email address so that we can send you the link to the online discussion group?

We ask that you login a few minutes early to be sure you are able to connect and to test your sound (speaker and microphone). If you require glasses for reading, please make sure you have them handy as well.

As we are only inviting a small number of people, your participation is very important to us. If for some reason you are unable to attend, please call us so that we may get someone to replace you. You can reach us at [insert phone number] at our office. Please ask for [name]. Someone will call you in the days leading up to the discussion to remind you.

So that we can call you to remind you about the discussion group or contact you should there be any changes, can you please confirm your name and contact information for me?

First name:
Last name:
Email:
Daytime phone number:
Evening phone number:

If the respondent refuses to give his/her first or last name, email or phone number please assure them that this information will be kept strictly confidential in accordance with the privacy law and that it is used strictly to contact them to confirm their attendance and to inform them of any changes to the discussion group. If they still refuse thank and terminate.

IDI invitation

Wonderful, you qualify to participate in one of our interviews. As I mentioned earlier, the interview will take place [Day, Month, Date] at [time] for up to 40 minutes.

Telephone in-depth interviews February 14 to 28, 2022

Schedule for one-hour intervals	Honorarium: $100

As we are only inviting a small number of people, your participation is very important to us. If for some reason you are unable to make this appointment, please call us so that we can reschedule. You can reach us at [insert phone number] at our office. Please ask for [name]. Someone will call you in the days leading up to the interview to remind you.

So that we can call you to remind you about the interview or contact you should there be any changes, can you please confirm your name and contact information for me?

First name:
Last name:
Email:
Daytime phone number:
Evening phone number:

If the respondent refuses to give his/her first or last name or phone number, please assure them that this information will be kept strictly anonymous in accordance with the privacy law and that it is used strictly to contact them to confirm their attendance and to inform them of any changes to the discussion group. If they still refuse thank and terminate.

Appendix C – Consumer discussion guide

Introduction 10 minutes 10 minutes total

Moderator introduces themselves and their role: role of moderator is to ask questions, [focus groups] make sure everyone has a chance to express themselves, keep track of the time, be objective/no special interest.

- The name of the firm the moderator works for, and the type of firm that employs them (such as, an independent marketing research firm).
- Role of participants: speak openly and frankly about opinions, remember that there are no right or wrong answers and no need to agree with each other.
- Results are confidential and reported all together/individuals are not identified/participation is voluntary.
- The length of the session/interview: [focus groups] 1.5 hours; [interviews] 30-40 minutes.
- [focus groups] The presence of any observers, their role and purpose, and the means of observation (observers viewing and listening in remotely).
- The presence and purpose of any recording being made of the session.
- [focus groups] Confirm participants are comfortable with the platform and some of the specific settings such as: how to mute and unmute themselves; where the hand raise button is; and the chat box.
- As mentioned, when we invited you to participate in this discussion group/interview, we are conducting research on behalf of the Government of Canada. These groups are being conducted for Agriculture and Agri-Food Canada (AAFC), more specifically, to explore issues related to the agriculture and food sector in Canada.

[for focus groups]
Moderator will go around the table and ask participants to introduce themselves.

Introduction of participants: To get started, please tell us your first name, who lives in your household [i.e., whether you live with someone including children (number and ages of children)], and your role in grocery shopping and/or meal preparation.

[for interviews]

Before we begin, can you tell me the type of community in which you live and what you do during the day?

Warm-up and context setting 15 minutes 25 minutes total

To begin, I would like to ask you a few questions and would ask that you use the chat box to record your answer. You can send your response to ‘everyone in the meeting’. If you’re having trouble using the chat box function, you can provide your response verbally.

- [chat box] First, when you think of Canada’s agricultural and food sector, what first comes to mind?
- [chat box] Next, what does the term ‘sustainable agriculture’ mean to you?
- What does sustainable agriculture look like or how would you recognize it?
    - In your opinion, does sustainable mean environmental?

- *[*poll] How important is environmentally sustainable agriculture to you personally? Would you say it is very important, somewhat important, not that important, or not at all important? Why or why not?
- What impact do you think agricultural activities have on the environment?

Perceptions of sustainable practices 30 minutes 55 minutes total

- Are you concerned about the impact of agricultural activities on the environment? Why or why not?
  - What specific activities are you most concerned about?
  - In your opinion, are there any agricultural practices that need to stop?

- [thumbs up/down] Now, I am going to show you a series of statements. For each of the following, please use the thumbs up/down to answer whether you agree or disagree with the statement*. [rotate showing 3 per group]*

  - Greenhouse gas emissions from the agriculture sector are rising
  - Farmers use too many pesticides
  - Organic foods are healthier than other foods
  - Genetically modified foods are less healthy
  - Sustainably produced food is too expensive
  - Canadian farming is environmentally responsible
  - The agriculture sector is one of the larger contributors of greenhouse gas
  - Organic farming is no better for the environment than non-organic farming
  - Canadian grown/produced foods are better for the environment than imported foods

  Probe*:*
  - Tell me why you agree or disagree?
  - Where did you get the information to answer this?

- Do you think Canadian farmers are environmentally responsible? Why or why not?
- What do you think farmers are already doing to fight climate change? Be more sustainable?
- Do you feel farmers are doing enough to protect the environment? Why or why not?
- How could farmers be more environmentally responsible? What could they do less of? What could they do more of?
- Would an increase in environmentally friendly practices in food production increase your trust in farmers and food production?
  - If not, why? If yes, why do you think it would increase your trust?

- Are you aware of any farming practices that are better for the environment or would be considered environmentally sustainable? What are they? Any others?
- I would like to show you a list of environmental farm or farming practices, and I would like to understand your thoughts about them.

  1. Rotating corn-based crops with legumes, such a beans, peas or lentils, to decrease nitrate in soil and run-off water.

2. Using special slow-release fertilizers that reduce the release of nitrate, a greenhouse gas.
3. Converting existing crop lands to grasslands. Grasslands have rich soils that allow them to store carbon, leading to reducing greenhouse gas emissions.
4. Growing easier-to-digest crops, such as alfalfa, in pastures to lower methane emissions from cattle.
5. Decreasing greenhouse gas emissions by adding acid treatments to cattle and pig manure storage tanks to decrease greenhouse gas emissions.

[moderator to probe on a selection of practices. Probes to include:]

- Have you heard of any of these?
- What do you think of these practices?
- Are they important? Why or why not?
- Which do you think would be most beneficial for the environment or have a positive impact?

Shopping behaviours 20 minutes 75 minutes total

I want to spend a few minutes understanding your shopping behaviours.

We are now going to do a little exercise. I want you to imagine you are grocery shopping and you need to buy [rotate products listed below, one product per group]. You are standing in the aisle looking at all the choices of [rotate products listed below, one product per group].

- Meat
- Apples
- Cereal
- Eggs
- Dairy

- How do you decide which package/one to buy?
- What things do you consider before you make your choice?
  - Why are those things important to your decision?
- Where did you get that information?

- [raise hand] How many of you look for sustainably produced food when grocery shopping? Why or why not?
  - What attributes do you look for?
  - How can you tell whether a food/product is sustainably produced?
    - Probe: What do you rely on to tell you it is sustainable? Sources of info? Third-party verification?
    - Probe: Is it the type of packaging (for example, recycled, compostable), information on the label, third-party certification, or your own research about the product/brand?
- If you were looking to purchase sustainable foods/products, what would you want/need to see to help you make your purchasing decisions?

    - If mention certification systems, probe deeper – what else? Is there something that needs to happen at the farm level?
- [Raise hand] Has anyone ever noticed any certifications or claims of sustainability on food or products?
    - [chat box?] Where? Which ones?
    - Probe*:* organic, free-range, fair trade, non-GMO, sustainable beef, naturally grown?
- To what extent do you believe or trust those claims? Why or why not?
    - Are some more trustworthy than others?

I want to spend a few minutes understanding potential trade-offs when you are shopping.

- What, if anything, would you be willing to give up to purchase foods produced using environmentally sustainable methods?
- If producing environmentally sustainable food means higher food costs, would you pay more? Why or why not?
- If producing environmentally sustainable food means less convenience, would you still support it by buying it? For example, less packaging, less processing, which may result in the need to plan meals more, shop more often, and cook more often.
    - Would you be willing to make this change in your day to day lives to support environmental sustainability in Canada?
    - Are you willing to have less variety of foods to support environmental sustainability in Canada?
- When all is said and done, and you need to make a choice, what factor is the most important in determining the foods you purchase?

Environmental Actions 10 minutes 85 minutes total

Now I would like to talk about environmental actions you can take.

- What actions do you take to reduce your environmental impact when it comes to food choices? Why?
    - 37% of Canadians who are on a specific diet are on a diet to reduce environmental impact.
        - Does this surprise you? Would you expect it to be higher or lower?
        - Have you changed your diet to be more environmentally friendly? If so, how?

- When it comes to the environment, what should everybody do more of? Why? What should everyone do less of?
- Where do you feel you can make the biggest impact/difference? Why?
- [raise hand] How many of you look for local and/or Canadian foods? Why or why not?
    - Do you think locally or Canadian made foods are better for the environment? Why or why not?

- [chat box] What does food waste mean to you? Please use the chat box to record your answer.
- [raise hand] Do you think food waste is a problem in Canada? Why or why not?

- 53% of Canadians plan to focus on reducing food waste in 2022.
  - Does this surprise you? Would you expect it to be higher or lower?

- What actions, if any, do you take to reduce food waste? How do you usually discard food waste (e.g., compost, garbage)? [chat box] What types of food are being thrown out most often in your household?
- Are there any actions you would like to take to reduce food waste but haven't? Which ones?
  - What has stopped you from taking those actions?
  - What would help you to take them?
- Who do you think is most responsible for food waste? Why?
  - Probe: Farmers? Processors? Manufacturers? Grocery stores? Consumers?

Specific to Northern communities

I want to take a little time to talk about food security in the north.

- Through the pandemic, how has the availability of the foods you typically buy changed, if at all? Better/worse/the same?
  - [if worse] What impact has that had on you personally? Is it something you worry about?
  - [If concerned] And prior to the pandemic, did you have the same concerns? Tell me about that.
- Have labour shortages (for example, grocery store clerks, transport truck drivers) been an issue?
  - [if yes] What impact have they had?
- Can you describe to me what you see in your grocery store(s)?
  - How do you get the food you eat?
  - Are foods in grocery stores more imported than locally sourced?
  - Is there anything missing? What would you like to see?
  - Are there enough nutritious options? Are they more expensive?
- Who do you think is responsible for making sure Canadians in remote communities have access to the food they need?
  - What should "they" be doing better or differently?
- Do you think northern communities are considered in the creation of food policies? **Or** Do you think northern communities are well supported by the food system? If not, what is missing? Are there things that are available in southern communities that should be available in northern communities?

Conclusion 5 minutes 90 minutes total

[Moderator to request additional questions are sent via the chat box directly to the moderator and probe on any additional areas of interest.]

This concludes what we needed to cover tonight.

- Does anybody have any final thoughts or comments to pass along?

We really appreciate you taking the time to come down here to share your views. Your input is very important.

Appendix D – Producer discussion guide

Introduction 10 minutes 10 minutes total

Moderator introduces themselves and their role: role of moderator is to ask questions, make sure everyone has a chance to express themselves, keep track of the time, be objective/no special interest.

- The name of the firm the moderator works for, and the type of firm that employs them (such as, an independent marketing research firm).
- Role of participants: speak openly and frankly about opinions, remember that there are no right or wrong answers and no need to agree with each other.
- Results are confidential and reported all together/individuals are not identified/participation is voluntary.
- The length of the session; 1.5 hours.
- The presence of any observers, their role and purpose, and the means of observation (observers viewing and listening in remotely).
- The presence and purpose of any recording being made of the session.
- Confirm participants are comfortable with the platform and some of the specific settings such as: how to mute and unmute themselves; where the hand raise button is; and the chat box.
- As mentioned, when we invited you to participate in this discussion group/interview, we are conducting research on behalf of the Government of Canada. These groups are being conducted for Agriculture and Agri-Food Canada (AAFC), more specifically, to explore issues related to the agriculture sector in Canada.

Moderator will go around the table and ask participants to introduce themselves.
Introduction of participants: To get started, please tell us your first name, where you are from and a little about your operation (such as, type of products, size of operation, etc.).

Warm-up and context setting 10 minutes 20 minutes total

To begin, I would like to ask you a few questions and would ask that you use the chat box to record your answer. You can send your response to 'everyone in the meeting'. If you're having trouble using the chat box function, you can provide your response verbally.

- [chat box] First, when you think of Canada's agricultural sector, what first comes to mind?
- [chat box] Next, what does the term 'sustainable agriculture' mean to your business?
- What does sustainable agriculture look like or how would you recognize it?
- How does sustainable agriculture relate to social responsibility? Economic profitability? Environmental stewardship?
    - Does sustainable mean environmental?
- [poll] How important is environmentally sustainable agriculture to your business? Would you say it is very important, somewhat important, not that important, or not at all important? Why or why not?
- What impact do agricultural activities have on the environment?

- Do you think that farmers are doing enough to fight climate change? Be more environmentally sustainable?
    - What could they do less of? What could they do to transition to be more environmentally sustainable?
    - [probe] What about on your own farm?
- Do you feel farmers are doing enough to protect the environment? Why or why not?
    - What could they do less of? What could they do more of to better protect the environment?
    - [probe] What about on your own farm?

Current practices in sustainable agriculture

30 minutes 50 minutes total

- How, if at all, has the concept of environmentally sustainable agriculture impacted your farm/farming practices? Why?
- *[*chat box*]* How do you define your farm and/or farming practices. In the chat box, can you please describe your farm/farming practices?
- Are there any labels you use to define your farm/farming practice? This need not be excessively long.
    - [if label raised] Why do you use that label?

    Labels to probe:
    - Certified Organic
    - Non-certified Organic
    - Regenerative
    - Modern
    - Multigenerational
    - Productivist
    - Unconventional
    - CSA (Community Supported Agriculture)
    - Traditional
    - Innovative
    - Carbon neutral/net zero
    - “Free from” (for example, antibiotics, hormones, pesticides, etc.)
    - Free-range, Free-run
    - Grass-fed

- What, if any, beneficial management practices (BMPs) or environmentally sustainable farming practices have you employed on your farm in the last five years? Why?
    - What benefit(s) have you seen from implementing this practice? How so?
    - [If not]
        - Why have you not implemented any? What prevents you from implementing them?
        - What would you need to overcome those barriers?
        - Who is responsible for that? Why?
        - What are the benefits or potential opportunities that you could reap if you were able to implement one or more of these practices?

[list of sample BMPs for moderator information]

- Continual Cover (for example, cover crops, perennial crops)
- Reduced Tillage (for example, no-till, strip till)
- 3 year+ Crop rotation
- 4R Nutrient Management (for example, right place, time, source, rate)
- Organic Amendments (for example, manure, compost, biosolids)
- Innovative Drainage (for example, controlled drainage, retention ponds, wetlands)
- Erosion Control Structures (for example, berms, wind rows)
- Compaction Prevention (for example, controlled tire inflation systems)
- Compaction Reduction (for example, controlled traffic)
- Pesticide Risk Reduction (v IPM, Drift avoidance, resistance avoidance)
- Reduced or no use of chemical fertilizers and pesticides
- Rotational grazing and livestock incorporation
- Silvopasture and agroforestry

- What, if any, are the barriers to implementing more environmentally sustainable practices? Why?
  Probe*:*
  - Cost
  - Lack of time to learn about innovations
  - Lack of time to implement innovations
  - Lack of information to be able to assess how innovations will add value to your farm operation
  - Lack of in-house technical expertise to implement innovations
  - Lack of external advice and technical expertise to implement innovations
  - Lack of timely access to repair/troubleshooting services locally
  - Level of risk for the return on investment
  - Lack of access to reliable high-speed internet/cellular service

- How long do you think it would take you to implement some of the BMPs you have mentioned? 5 years? Or 10 years? Or 15 years?

Impact of consumer preferences 30 minutes 80 minutes total

Now I would like to better understand how consumer perceptions and preferences impact your business.

- [Chat box] What consumer preferences do you feel impact the agriculture sector the most? Why?
- What about consumer perceptions about farming? Which, if any, consumer perceptions impact the agriculture sector the most? Why?
  - Do you see these preferences as a temporary trend or a permanent shift?
  - How, if at all, have impacted these preferences and perceptions your business? Why?
  - [poll] Has the pandemic changed consumer preferences? Yes/No
- Are there any consumer perceptions that you feel are not true?
- Do you get the sense that consumers understand farming? Why or why not? What would you like consumers to better understand about farming?

- Does anyone sell directly to consumers? [Raise hand]
- Do you think consumers understand the challenges of environmentally sustainable food production? Why or why not?
  - Do you think they should understand the challenges?
  - [if don't understand] Whose responsibility is it to educate consumers about the challenges of environmentally sustainable food production?
  - [if don't understand] How do you think these consumer impressions were formed? Where do you think consumers get their information on environmentally sustainable food production?

- Do you think consumers trust producers to produce food in an environmentally sustainable way? Why or why not?
- [If time permits] We are also speaking to consumers about these same issues. From them we heard… [moderator to cite key findings from the focus groups with consumers]
  - What do you think of this perception?
  - What would you say to consumers in response?

- [Raise hand] I am going to cite some recent statistics on consumer perceptions and preferences and I want you to raise your hand if they reflect what you are experiencing in your business.
  [Moderator to rotate selection of three data points per group]
  - 38% of Canadian consumers say they always/often look for food produced using environmentally sustainable practices
  - 56% say that they have changed what products and services they buy/use out of concern for climate change
  - 48% say they limit meat consumption to help fight climate change
  - 44% say they have boycotted a food product out of concern that environmentally sustainable practices were not followed
  - 44% of those who rarely or never purchase items produced using environmentally sustainable practices say they do not buy these items because they are not confident they were produced sustainably

  [Moderator to probe for each statistic]
  - What is your reaction to that statistic?
  - Does it surprise you? How so?
  - How, if at all, has this finding impacted your business? Why?

Conclusion 10 minutes 90 minutes total

[Moderator to request additional questions are sent via the chat box directly to the moderator and probe on any additional areas of interest.]

This concludes what we needed to cover tonight.
- Does anybody have any final thoughts or comments to pass along?

We really appreciate you taking the time to come down here to share your views. Your input is very important.