



MADE IN *Canada*

Growing Canada's value-added food sector



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CANADA

Report of the The Standing Senate Committee
on Agriculture and Forestry

The Honourable Diane F. Griffin, Chair
The Honourable Donald Neil Plett, Deputy Chair

JULY 2019



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MEMBERS



The Honourable
Diane F. Griffin
Chair



The Honourable
Donald Neil Plett
Deputy Chair

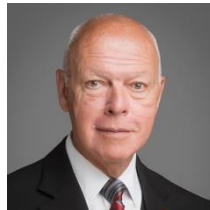
The Honourable Senators



Wanda Elaine
Thomas Bernard



Robert Black



Jean-Guy
Dagenais



Colin Deacon



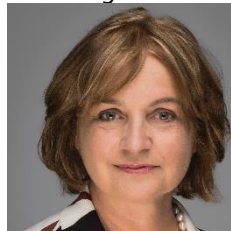
Norman E. Doyle



Stan Kutcher



Terry M. Mercer



Julie Miville-
Dechêne



Rosemary Moodie



Victor Oh

EX OFFICIO MEMBERS OF THE COMMITTEE:

The Honourable Senators

Peter Harder, PC (or Diane Bellemare or Grant Mitchell)

Larry W. Smith (or Yonah Martin)

Joseph A. Day (or Terry M. Mercer)

Yuen Pau Woo (or Raymonde Saint-Germain)

Other Senators who have participated from time to time in the study:

The Honourable Senators

Salma Ataullahjan

Douglas Black

Marty Deacon

Raymonde Gagné

Ghislain Maltais (retired)

Sabi Marwah

Mary Jane McCallum

Chantal Petitclerc

André Pratte

Mohamed-Iqbal Ravalia

Yuen Pau Woo

Parliamentary Information and Research Services, Library of Parliament:

Corentin Bialais, Analyst

Offah Obale, Analyst

Senate Committees Directorate:

Kevin Pittman, Clerk of the Committee

Annie Trudel, Administrative Assistant

Senate Communications Directorate:

Síofra McAllister, Communications Officer

ORDER OF REFERENCE

Extract from the *Journals of the Senate* of Thursday, 15 February 2018:

The Honourable Senator Dagenais moved, for the Honourable Senator Griffin, seconded by the Honourable Senator Plett:

That the Standing Senate Committee on Agriculture and Forestry be authorized to conduct a study on how the value-added food sector can be more competitive in global markets. More specifically, the Committee shall be authorized to examine:

- (a) the comparative advantage of the Canadian value-added food sector;
- (b) the food sector's capacity to generate value-added products in order to meet global consumer demand while remaining competitive in the Canadian market;
- (c) the support that should be provided to industry stakeholders in such areas as technology, marketing, environmental certification and intellectual property; and

That the committee submit its final report to the Senate no later than December 21, 2018, and that the committee retain all powers necessary to publicize its findings until 180 days after the tabling of the final report.

The question being put on the motion, it was adopted.

Richard Denis
Clerk of the Senate

Extract from the *Journals of the Senate* of Thursday, 29 November 2018:

The Honourable Senator Griffin moved, seconded by the Honourable Senator Cormier:

That, notwithstanding the order of the Senate adopted on Thursday, February 15, 2018, the date for the final report of the Standing Senate Committee on Agriculture and Forestry in relation to its study on how the value-added food sector can be more competitive in global markets be extended from December 21, 2018 to June 28, 2019.

The question being put on the motion, it was adopted.

Richard Denis
Clerk of the Senate

Extract from the *Journals of the Senate* of Thursday, 20 June 2019:

With leave of the Senate,

The Honourable Senator Griffin moved, seconded by the Honourable Senator Pate:

That, notwithstanding the order of the Senate adopted on Thursday, November 29, 2018, the date for the final report of the Standing Senate Committee on Agriculture and Forestry in relation to its study on how the value-added food sector can be more competitive in global markets be extended from June 28, 2019, to July 31, 2019.

After debate,

The question being put on the motion, it was adopted.

Richard Denis
Clerk of the Senate

Extract from the *Journals of the Senate*, Thursday, March 1, 2018:

Resuming debate on the motion of the Honourable Senator Griffin, seconded by the Honourable Senator Forest:

That the Standing Senate Committee on Agriculture and Forestry, in accordance with rule 12-7(10), be authorized to examine and report on such issues as may arise from time to time relating to agriculture and forestry; and

That the committee report to the Senate no later than June 30, 2019.

After debate,

The question being put on the motion, it was adopted.

Richard Denis
Clerk of the Senate

Executive Summary

The untapped potential of Canada's value-added food sector presents an opportunity to increase international and interprovincial trade, inspire innovation, and break down barriers to economic growth across the country. While the food processing sector is already one of the country's largest employers, there is plenty of room to grow.

The value-added food sector takes raw agricultural products like:



It also finds innovative ways to cultivate primary products in order to meet emerging consumer trends, such as demands for more transparency and sustainability in food products.

That Canada currently processes only half of its agricultural output demonstrates the extent to which the food processing sector is underdeveloped.

Canada's abundance of primary products provides a comparative advantage to the value-added sector: it has a ready supply of product to which it can add value. However, the sector must ensure that it adds value through a consumer-centric approach, including innovating to develop products that meet emerging consumer trends. **The government should work to develop a global marketing program** that focuses explicitly on increasing the profile of the Canada Brand. By improving food processing capacity within our borders, supporting innovation, and strengthening our global image, Canada can increase its international exports.

However, **regulatory barriers prevent farmers and processors from exporting some of these made-in-Canada products**. While regulatory safeguards are necessary to preserve confidence in Canada's reputation for safe and high-quality agri-food products, the current system restricts innovative practices and products.

The committee recommends updating the regulatory framework so that it encourages innovation; this will increase the ability of Canada's value-added agri-food products to reach international markets. By expanding the reach of Canadian products to international markets, Canada can increase profits and create jobs.

To further **close the export gap** between primary and value-added foods and to take advantage of international appetite for Canadian products, financial investment must be made to encourage and foster innovation, which could include developing new products, new packaging and marketing approaches, and more efficient means of production.

The Committee heard that there is much to be **learned from the Netherlands**, a country that has little agricultural land but has become the second greatest exporter of agri-food products in the world. Several factors contribute to the success of the country, including a **customer-centric approach and a deep-rooted culture of innovation**. In addition, the government of the Netherlands has implemented programs that encourage collaboration among the agri-food sector industry, the government, and research institutions; and between industrial sectors such as agri-food, health, and high-tech.



CANADIAN BUSINESSES IN THE FOOD AND BEVERAGE PROCESSING SECTOR ARE GENERALLY SMALL IN TERMS OF NUMBER OF EMPLOYEES

Size of Canadian agriculture and agri-food sector businesses



Regardless of their size, companies sometimes need government support to complete research or to take on new research and development projects. This R&D can increase businesses' competitiveness or help them expand their production capacity, thereby creating more jobs and producing a positive impact on the entire Canadian economy.

Innovation can drive growth in the sector but cannot take place without significant financial investment. Witnesses told the committee that launching or adapting a business to produce value-added food products requires heavy capital investment up front. It is imperative that the government expand and improve upon the existing mechanisms it uses to **support research, development, and innovation**. In particular, focus should be directed at expanding the supercluster initiative and strategies that encourage collaboration between industry, government, and research partners.

The government must also work to break down barriers to growth within our borders. This includes **facilitating interprovincial trade** and establishing safer, more efficient modes of transportation across our geographically vast country.

A significant barrier to growth in the value-added food sector is the absence of an adequate workforce.

In 2017, the average job vacancy rate in the agriculture sector varied between 4.5% and 6.3%, while the average for all Canadian industries was only 2.8%.

The government must work to resolve the current labour shortage by making changes to the Temporary Foreign Worker Program and by raising awareness of career opportunities in the sector, particularly among students.



There is significant untapped potential in the value-added food sector. The federal government should create an environment that allows products greater access to international markets, that supports innovation, research, and development, and that breaks down barriers to growth within our borders.

RECOMMENDATIONS

RECOMMENDATION 1:

The Committee recommends that, regarding the **Temporary Foreign Worker Program**, the Government of Canada:

(a) **review the program's requirements** in order to provide an expedited process for participants that have complied consistently with the program requirements over consecutive years;

(b) **review the processing fees for program applications** so that they do not impose too heavy a burden on businesses; and

(c) establish mechanisms that **prioritize access to permanent residence for temporary foreign workers** in agriculture and agri-food sectors that are particularly affected by labour shortages.

RECOMMENDATION 2:

The Committee recommends that, regarding the **problems of transportation of agricultural and agri-food products**, the Government of Canada:

(a) work with the provincial and territorial governments to **maintain and expand an efficient road network** through the country, and more specifically expedite the timelines for twinning of the following highways to reduce transportation costs through the use of Long Combination Vehicles:

(i) Alberta Highway 40; and

(ii) Quebec Highway 185 from Saint-Antonin to Saint-Louis-du-Ha! Ha! to decrease transportation costs to and from the Atlantic Provinces;

(b) work with provinces/territories to **harmonize regulations for the trucking industry** in order to minimize delays for trucks moving from one province to another;

(c) **modernize the Canadian Food Inspection Agency and Canada Border Services Agency inspection and registration systems** in order to reduce processing times for trucks crossing the border with the United States; and

(d) **modernize the Canada Maritime Act** in order to allow Port authorities to provide expanded services such as providing logistics services, operating grain elevators or processing facilities.

RECOMMENDATION 3:

The Committee recommends that the Government of Canada examine ways to **support the development of the food processing sector in Western Canada** in order to increase the value of shipments of agricultural and agri-food products.

RECOMMENDATION 4:

The Committee recommends that the Government of Canada **reform regulatory agencies' mandates** to include innovation, growth and overall agri-food sector competitiveness as a core consideration as well as **establish a permanent and independent panel of industry experts and other stakeholders to advise regulators**.

RECOMMENDATION 5:

The Committee recommends that the Government of Canada **support innovation, growth, and competitiveness** in the value-added food sector by:

- (a) **developing initiatives similar to the innovation superclusters** in order to support the development of key agriculture and agri-food industries. These should be capable of securing the financial and entrepreneurial resources necessary to support successful innovation and scalability nationwide;
- (b) **exploring options to fund innovation and adapt to changing market conditions**. Among them, considering changes to capital cost allowance, such as reducing amortization periods or expanding the Accelerated Investment Incentive to apply to agricultural and farming equipment;
- (c) **strengthening and providing increasing support and funding for basic, applied and market focused research**, especially the development and mentoring of Canada's next generation of highly qualified personnel. Agriculture and Agri-Food Canada's research stations should be integrated into this effort; and
- (d) **prioritizing the modernization of traceability systems for agri-food products**, in order to enhance this important priority that is highly valued by Canadian and global customers.

RECOMMENDATION 6:

The Committee recommends that the Government of Canada engage actively with its main trading partners to **bolster an open and rules-based approach to international trade** and address emerging non-tariff barriers to trade in export markets.

RECOMMENDATION 8:

The Committee recommends that the Government of Canada **develop and fund an effective global marketing program** that explicitly focus on increasing the value of the Canada Brand in the mind of global consumers.

RECOMMENDATION 7:

The Committee recommends that the Government of Canada **commit to supporting supply management** by examining initiatives to improve competitiveness and promote growth.

RECOMMENDATION 9:

The Committee recommends that the federal government work actively with provincial/territorial governments to **ensure that laws, regulations, and policies enhance trade** in agriculture and agri-food products between provinces and territories.

INTRODUCTION

Canada is one of the largest exporters of agricultural products, and its food and beverage processing sector is the largest manufacturing sector in terms of gross domestic product as well as the country's biggest manufacturing employer, with more than 250,000 employees. Yet Canada has traditionally exported mainly agricultural products that have undergone little or no processing, and this remains largely true today.¹ As far back as 1879, Canada's Finance Minister Sir Samuel Leonard Tilley was already advocating that Canada should not just be "hewers of wood and drawers of water" but should develop its industrial capabilities.²

In 2016, Canada exported \$33.5 billion worth of processed food and beverages. By comparison, the Netherlands, which has about 34 times less farmland than Canada, exported \$73.1 billion worth of these products in the same year. Several factors have contributed to the Dutch success in the agri-food sector, including a customer-centric approach and a deep-rooted culture of innovation. In addition, the Government of the Netherlands has implemented programs that encourage collaboration in the agri-food sector not only among industry, government and research institutions and between industrial sectors, such as agri-food, health and high-tech. Canada can draw lessons from the Netherlands' experience. Moreover, Canada's value-added agriculture and agri-food sector has been described as a promising sector with significant potential for growth by the Advisory Council on Economic Growth.³

Between March 29, 2018 and 11 April 2019, the Committee conducted a study to identify the challenges the value-added agriculture and agri-food sector still needs to overcome in order to grow and expand into global markets. The Committee heard from nearly 100 witnesses and received almost 50 briefs from organisations representing Canadian producers, processors, representatives from government as well as representatives from the Netherlands. It also travelled across the country, visiting Quebec, British Columbia, Manitoba and Ontario to meet directly with stakeholders in the sector.

¹ Senate, Standing Senate Committee on Agriculture and Forestry [AGFO], *Evidence*, 1st Session, 42nd Parliament, 4 April 2019 (David Hughes, Emeritus Professor of Food Marketing, Imperial College London, As an individual).

² Dictionary Canadian Biography, *TILLEY, Sir SAMUEL LEONARD*.

³ Advisory Council on Economic Growth, *Unleashing the Growth Potential of Key Sectors*, 6 February 2017.

Chapter 1

VALUE-ADDED AGRICULTURE IN CANADA

What is Value-added Agriculture?

Value-added agriculture is defined as the production techniques and processes that add economic value to a raw agricultural product. This concept traditionally referred primarily to food processing sector activities, such as milling, meat preparation, vegetable canning and dairy product manufacturing. Innovations in storage, packaging and transportation techniques were also often included as ways of adding value to agricultural products. Today, this definition has expanded to include enhancing raw agricultural products through special production methods and the protection of identity characteristics through systems such as geographic indications, identity preserved products and organic agriculture.⁴ There is no formal definition of value-added agriculture used by the federal government in Canada, however the United States Department of Agriculture, Rural Business Development uses a definition that illustrates these traditional as well as emergent aspects of value-added (Box 1).



⁴ Ruoxi Lu and Rebekka Dudensing, "What Do We Mean by Value-added Agriculture?" *Choices*, 2015.

**Box 1: U.S. Department of Agriculture, Rural Business Development
Definition of value-added**

Value-Added—The incremental value that is realized by the producer from an agricultural commodity or product as the result of a change in its physical state, differentiated production or marketing, as demonstrated in a business plan, or Product segregation. Also, the economic benefit realized from the production of farm or ranch-based renewable energy. Incremental value may be realized by the producer as a result of either an increase in value to buyers or the expansion of the overall market for the product. Examples include milling wheat into flour, slaughtering livestock or poultry, making strawberries into jam, the marketing of organic products, an identity-preserved marketing system, wind or hydro power produced on land that is farmed and collecting and converting methane from animal waste to generate energy. Identity-preserved marketing systems include labeling that identifies how the product was produced and by whom.

Source: Code of Federal Regulations, *Regulations of the Department of Agriculture*.

The witnesses the Committee heard added to this definition. Sylvie Cloutier, President and Chief Executive Officer of the Conseil de la transformation alimentaire du Québec, said that processes that change a product “to increase its consumer appeal or to move it up the value chain” also add value.⁵ Gordon Bacon, Chief Executive Officer of Pulse Canada, argued that the value of food also depends on how it meets emerging consumer needs through health, nutrition and safety improvements.⁶ Finally, Rebecca Lee, Executive Director of the Canadian Horticultural Council, pointed out that agritourism is another way of creating value from a farm’s primary agricultural production. Tourism activities such as pick-your-own fruit and farmers’ markets can occur in parallel with traditional farming, adding value.⁷

During this study, the Committee travelled across Canada and found that farmers are employing all of these methods of adding value to agricultural and agri-food products. The Committee toured food processing facilities such as the Viterra canola crushing plant in Manitoba and the Gay Lea dairy processing facility in Ontario. In Winnipeg, the Committee witnessed the efficiency of the Maple Leaf Foods pork processing and packaging plant and the Peak of the Market vegetable storage and shipping facilities.

⁵ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 19 April 2018 (Sylvie Cloutier, President and Chief Executive Officer, Conseil de la transformation alimentaire du Québec).

⁶ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 20 September 2018 (Gordon Bacon, Chief Executive Officer, Pulse Canada).

⁷ Ibid. (Rebecca Lee, Executive Director, Canadian Horticultural Council).



Cranberry production illustrates the many ways value can be added to agricultural products. The Committee was able to tour Fruit d'Or, a company based in Plessisville, Quebec, that cultivates cranberries and they are either processed or sold directly. Some of these products are grown organically for higher prices.

Research and new technologies are some of the main drivers of value-added, as they result in new products and new production or processing methods for foodstuffs.⁸ The Committee also saw firsthand the ability of Canadian businesses to innovate, such as the Chudleigh's plant in Ontario using the latest bakery technologies. The Committee visited the TruLeaf company in Guelph, which uses vertical agriculture techniques to grow plants year-round and control their taste and nutritional properties.

Moreover, innovation produces new applications for agricultural products that are already grown for other reasons. For example, the Committee visited Hemp Oil Canada, a Manitoba company that produces hemp oil, seeds and proteins that are used in a wide range of human and animal foods and in cosmetics. Ted Haney, Executive Director of the Canadian Hemp Trade Alliance, gave the Committee an overview of the hemp industry's potential.

⁸ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 29 November 2018 (Heather Hill, Research Manager, Culinary Research and Innovation, Paterson GlobalFoods Institute, Red River College).

There are more than 25,000 products that can be made from hemp fibre. These include bio-pellets used to replace pure plastic products with bio-composites, kitty litter and commercial absorbency products, textile fabrics, rope, insulation, automotive parts, snowboards and hempcrete.

All of these products outperform the products they were designed to replace. They are all sustainable and most of them cost up to 35 per cent less to produce.⁹

In addition, the Committee toured businesses that make products whose added value is based on the way they are produced and their identity. For example, the company Fruit d'Or in Plessisville produces certified organic cranberries and cranberry products that command premium prices in the domestic and international markets. Also in Quebec, the Citadelle Cooperative company exports 90% of its maple products, which are especially prized internationally because they have a good reputation as Canadian food products.

Changing Consumer Preferences

Consumer preferences change rapidly, creating opportunities to develop new products that meet their needs. Much of the value-added to agricultural and agri-food products is in response to emerging consumer demands. Businesses must be increasingly customer-oriented if they want to stay competitive and grow. These changing preferences can be a real challenge for businesses, especially for those that have capital intensive activities, which must be able to adapt quickly or lose customers.

⁹ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 18 October 2018 (Ted Haney, Executive Director, Canadian Hemp Trade Alliance).

Consumer preferences and retail food markets are changing extremely fast. Food companies are simply not able to respond to them as quickly as they would like. As a result, over the past three years, average sales at North America's top 10 food processing companies have actually declined by 4.4 per cent. Four of the top 10 have endured sales drops in the double digits. Big food has lost more than \$20 billion in sales in the past three years as customer loyalty to national brands has faded.¹⁰

David Hughes, Emeritus Professor of Food Marketing at Imperial College London, stated that most of the growth in the value-added sector over the past five years has been captured by innovative small and medium-sized businesses that have satisfied the emerging needs of younger generations, including millennials. Over the same period, the large agri-food companies have seen flat or even decreasing sales, as they have done little to adjust to these new trends.¹¹



¹⁰ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 14 June 2018 (Donald Buckingham, President and Chief Executive Officer, Canadian Agri-Food Policy Institute).

¹¹ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 4 April 2019 (David Hughes, Emeritus Professor of Food Marketing, Imperial College London, As an individual).

Donald Buckingham, President and Chief Executive Officer of the Canadian Agri-Food Policy Institute, reported that the industry has started to react. He explained that the large agri-food companies have commissioned studies to understand these trends. This research reveals that consumers are demanding not only safe food, but also more transparency, improved sustainability and additional ethnic food options.¹² Teresa Schoonings, Member of the Board of Directors at Food and Beverage Canada, added that today's consumers tend to have more of a social conscience and more public health, food safety and affordability concerns.¹³

*We have to produce food products that consumers want to eat, which are really tasty. Remember, we pop them in our mouths and we want them to be tasty and nutritious. But at the same time, they have to be good for the environment, good for the local community, good for the farmers, good for the animals. Companies that are addressing this and managing to communicate this to their consumers are seeing success.*¹⁴

On the transparency front, consumers increasingly want to know what is in the products they buy and are more loyal to brands that are transparent.¹⁵ Improving product traceability can provide more information to consumers. The Canadian Grain Commission has established a traceability system for soy in order to clearly show which soybeans are not genetically modified, which is an important criterion for soy milk producers in East Asia, who are prepared to pay more for that product.¹⁶

The demand for transparency dovetails with growing consumer attention to the nutritional value of products, including their healthiness. Paul Hetherington, President and Chief Executive Officer of the Baking Association of Canada, remarked that bread producers adapted to these demands by reducing the amount of trans fats – which increase the risk of heart disease¹⁷ – in their products.¹⁸

¹² Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 14 June 2018 (Donald Buckingham, President and Chief Executive Officer, Canadian Agri-Food Policy Institute).

¹³ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 3 May 2018 (Teresa Schoonings, Member of the Board of Directors, Food and Beverage Canada).

¹⁴ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 4 April 2019 (David Hughes, Emeritus Professor of Food Marketing, Imperial College London, As an individual).

¹⁵ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 20 September 2018 (Rebecca Lee, Executive Director, Canadian Horticultural Council).

¹⁶ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 14 June 2018 (Donald Buckingham, President and Chief Executive Officer, Canadian Agri-Food Policy Institute).

¹⁷ Government of Canada, "Fats."

¹⁸ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 20 September 2018 (Paul Hetherington, President and Chief Executive Officer, Baking Association of Canada).



Sustainability is another increasingly important factor in consumers' food choices. Carla Ventin, Vice President of Government Relations at Food and Consumer Products Canada, said this trend includes an aversion to overpackaging, a desire for packaging to be recyclable and an interest in a company's environmental history.¹⁹ Myrna Gillis, Chief Executive Officer of Aqualitas, introduced her business to the Committee as a cannabis producer that uses aquaponics, a combination of aquaculture and horticulture. This synergy enabled the company to reduce its water and energy consumption. As a result, it has obtained a number of environmental certifications that enable it to command higher prices from its customers.²⁰

The demand for protein has also changed, both in Canada and abroad. Population increases and a growing middle class in developing countries are expected to boost demand for plant and animal proteins, reported the Honourable JoAnne Buth, Chief Executive Officer of the Canadian International Grains Institute.²¹ However, some witnesses asserted that Canadians are expected to eat less meat

in the years ahead. Evan Fraser, Canada Research Chair in Global Food Security at the University of Guelph, said the meat industry is preparing for consumption habits to shift to smaller amounts of higher-quality meat.²² Finally, consumption of plant protein that can be extracted from pulses, hemp, oats, wheat, canola or flax is also forecast to grow dramatically, both in Canada and around the world.²³

¹⁹ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 19 April 2018 (Carla Ventin, Vice President, Government Relations, Food and Consumer Products Canada).

²⁰ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 28 February 2019 (Myrna Gillis, Chief Executive Officer, Aqualitas).

²¹ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 27 September 2018 (The Honourable JoAnne Buth, Chief Executive Officer, Canadian International Grains Institute).

²² Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 8 November 2018 (Evan Fraser, Canada Research Chair in Global Food Security, Social Sciences and Humanities, University of Guelph, As an individual).

²³ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 27 September 2018 (The Honourable JoAnne Buth, Chief Executive Officer, Canadian International Grains Institute).

Profile of Canada's Value-added Agriculture and Agri-food Sector

The value-added agriculture and agri-food sector is one of the largest economic sectors in Canada. Agriculture and Agri-Food Canada reports that the food and beverage processing sector is the largest manufacturing industry in the country. This sector accounted for \$28.5 billion, or 16.4%, of GDP in 2016, putting it ahead of transportation equipment manufacturing. That year, the sector employed 256,456 people, or 17.3% of manufacturing employment, again ranking it first among Canada's manufacturing industries.²⁴

Donald Buckingham described the food and beverage processing sector as fragmented.²⁵ In 2016, 94.1% of the sector's businesses employed fewer than 100 people, while those with more than 500 employees accounted for only 0.5% of the total.²⁶ However, this proportion varies from one industry to another; the percentage of businesses with over 500 employees is 2.5% among meat processors, for example.²⁷ Lastly, large businesses accounted for 46.9% of the sector's total exports in 2016.²⁸

These facts are important in understanding the dynamic and the challenges that businesses in this sector can face. For example, the large number of small and medium-sized businesses can limit their growth potential. They sometimes have very limited resources, which can hamper their ability to carry out research and development or to find international customers.²⁹ Larger businesses often have the internal capacity to conduct these activities.³⁰



²⁴ Agriculture and Agri-Food Canada, *An Overview of the Canadian Agriculture and Agri-Food System 2017*.

²⁵ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 14 June 2018 (Donald Buckingham, President and Chief Executive Officer, Canadian Agri-Food Policy Institute).

²⁶ Agriculture and Agri-Food Canada, *An Overview of the Canadian Agriculture and Agri-Food System 2017*.

²⁷ Ibid.

²⁸ Ibid.

²⁹ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 19 April 2018 (Mathew Wilson, Vice President, Policy and Government Relations, Canadian Manufacturers and Exporters).

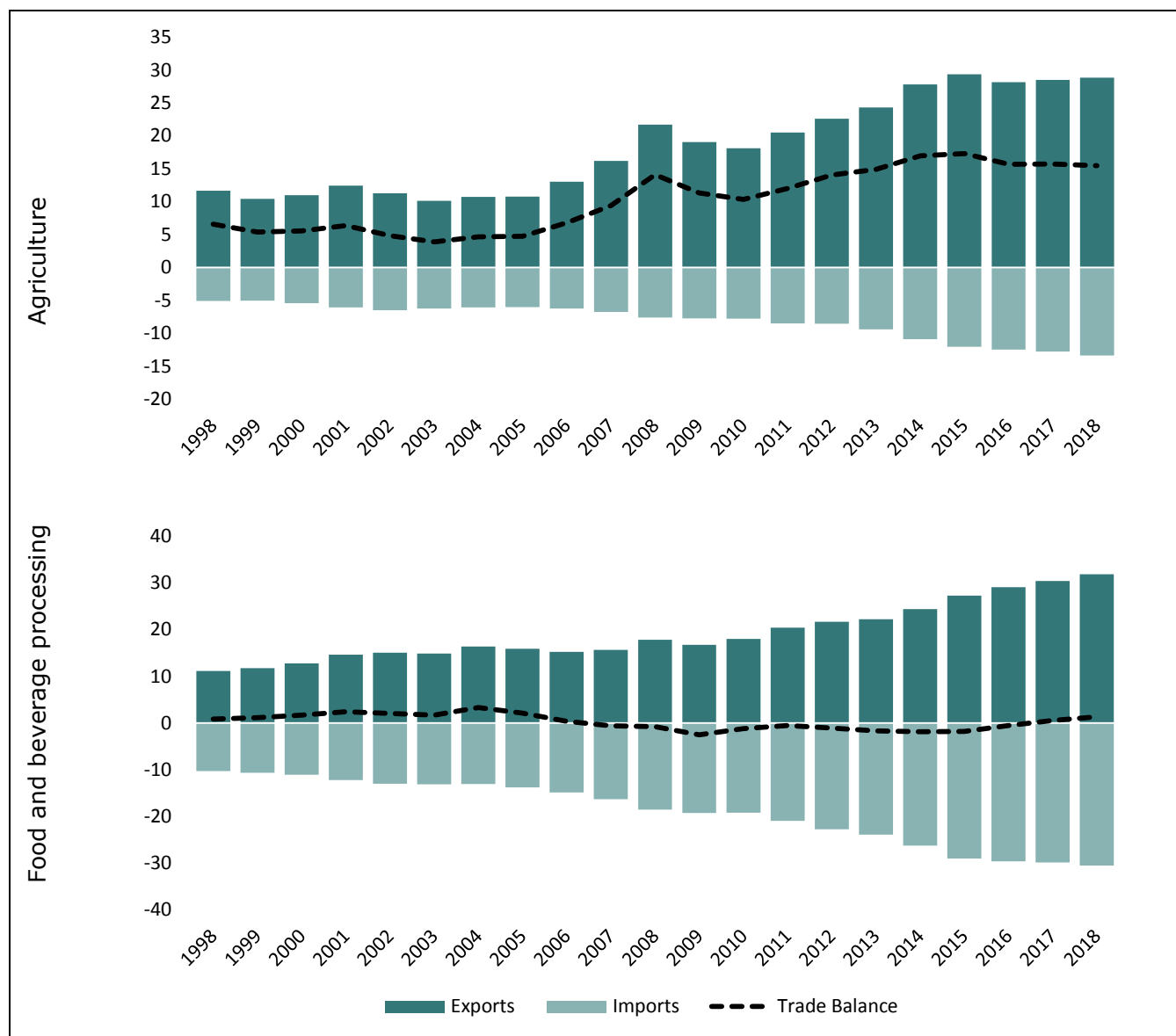
³⁰ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 25 October 2018 (Bruno Larue, Full Professor, Faculty of Agricultural and Food Sciences, Université Laval, As an individual).

Canada's agriculture and agri-food sector is highly trade-oriented. In 2016, Canada exported nearly \$56 billion of agricultural and agri-food products, while imports totalled \$44.4 billion, resulting in a trade surplus of over \$11 billion.³¹ Figure 1 compares the trade balance of the primary agriculture sector with that of the food and beverage processing sector. The trade balance for crops and livestock was strongly positive, while that of food and beverage processing was only slightly positive in 2018, and even negative in previous years. Marco Valicenti, Director General of the Sector Development and Analysis Directorate in the Market and Industry Services Branch of Agriculture and Agri-Food Canada, reported that exports reached \$59.3 billion in 2018.³²

³¹ Agriculture and Agri-Food Canada, *An Overview of the Canadian Agriculture and Agri-Food System 2017*.

³² Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 9 April 2019 (Marco Valicenti, Director General, Sector Development and Analysis Directorate, Market and Industry Services Branch, Agriculture and Agri-Food Canada).

Figure 1 – Comparison of Trade Balances of Agriculture Sector and Food and Beverage Processing Sector (C\$ millions)



Source: Prepared by the Committee using data from Government of Canada, *Trade Data Online*, codes 111 (Crop Production), 112 (Animal Production), 311 (Food Production, except for code 3117 – Seafood Product Preparation and Packaging) and 3121 (Beverage Manufacturing) of the North American Industry Classification System (NAICS).

A number of witnesses believe that Canada's success in international markets is largely due to its ability to produce large quantities of agricultural commodities. Derek Brewin, Professor in the Faculty of Agricultural and Food Sciences at the University of Manitoba,

argued that this abundance is the main comparative advantage of the value-added agriculture sector, as it provides the food processing sector with a ready supply of inputs.³³ However, given that Canada processes only 40% of its agriculture output, other witnesses believe that there is a need to move up the food value chain which will turn primary commodities into high-value food products as well as increase the value of Canadian exports. Taking canola as an example, Chris Vervaet, Executive Director of the Canadian Oilseed Processors Association, explained that half of the canola produced in Canada is processed domestically and then sold as a value-added product, but the goal is to raise that figure and reach 14 million tonnes of processing.³⁴ Other factors provide additional comparative advantages for the sector. Rex Newkirk, Associate Professor and Scientific Lead at the Canadian Feed Research Centre of the University of Saskatchewan, said that an abundant supply of high-quality ingredients produced in a clean and safe environment also underlies the sector's success.³⁵

However, Bruno Larue, Full Professor in the Faculty of Agricultural and Food Sciences at Université Laval, noted that some industries can prosper even when their inputs are not produced in Canada, so long as they have a robust logistics chain that supplies them effectively. For example, the chocolate industry in Quebec is particularly successful even though the province does not produce a single cacao bean.³⁶ Similarly, he pointed out that the provinces that export the most agri-food products also import the most.³⁷ Ontario is the leading exporter of processed food and beverages, at more than \$10 billion in 2018, but it imports nearly twice that value in those same products (Figure 2).

³³ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 25 October 2018 (Derek Brewin, Professor, Faculty of Agricultural and Food Sciences, University of Manitoba, As an individual).

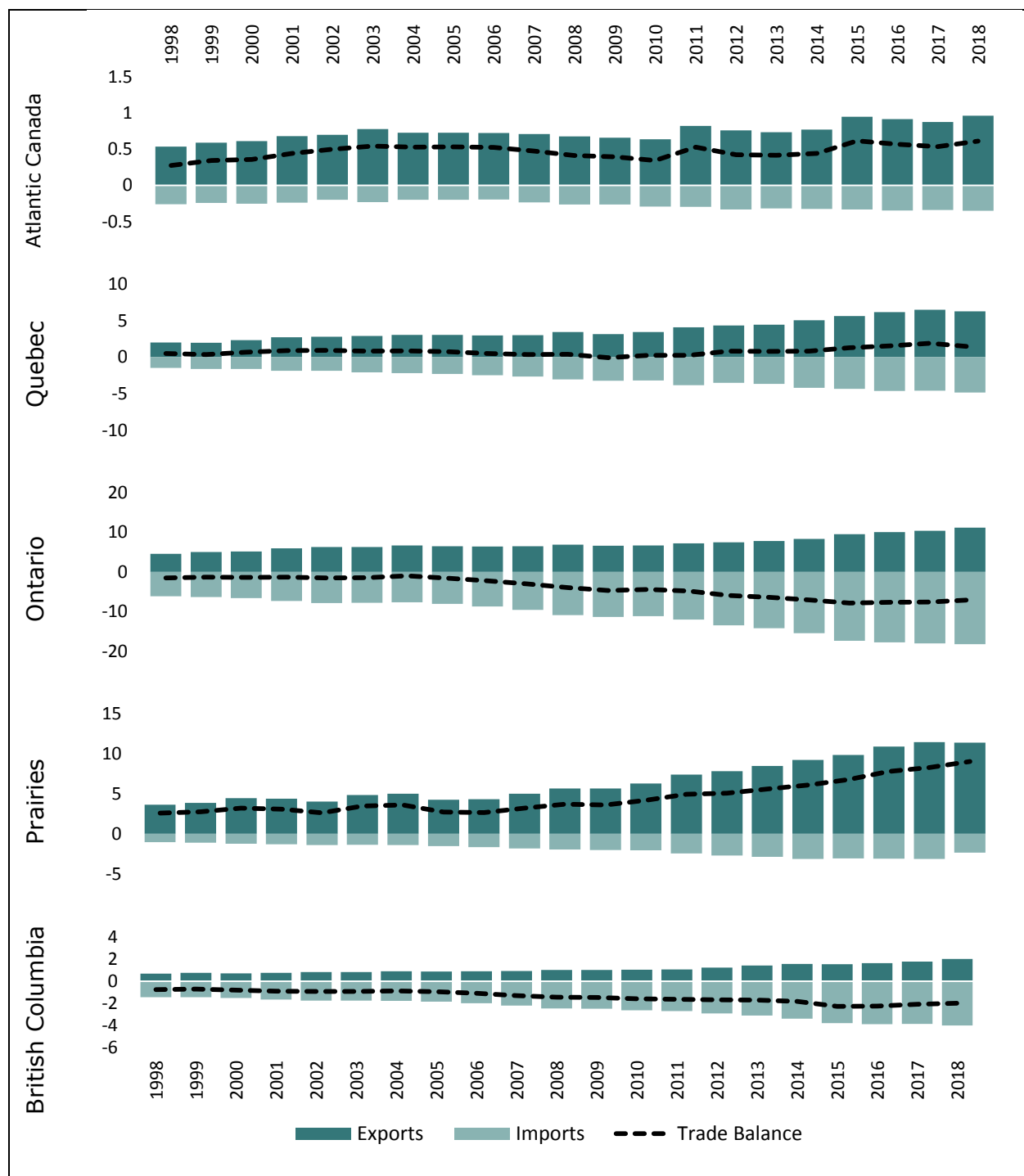
³⁴ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 26 April 2018 (Chris Vervaet, Executive Director, Canadian Oilseed Processors Association).

³⁵ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 29 November 2018 (Rex Newkirk, Associate Professor and Scientific Lead, Canadian Feed Research Centre, University of Saskatchewan).

³⁶ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 25 October 2018 (Bruno Larue, Full Professor, Faculty of Agricultural and Food Sciences, Université Laval, As an individual).

³⁷ Ibid. (Bruno Larue, Full Professor, Faculty of Agricultural and Food Sciences, Université Laval, As an individual).



Figure 2 – Change in Trade Balance of the Food and Beverage Processing Sector by Region (C\$ billions)



Source: Prepared by the Committee using data from Government of Canada, *Trade Data Online*, codes 111 (Crop Production), 112 (Animal Production), 311 (Food Production, except for code 3117 – Seafood Product Preparation and Packaging) and 3121 (Beverage Manufacturing) of the North American Industry Classification System (NAICS)

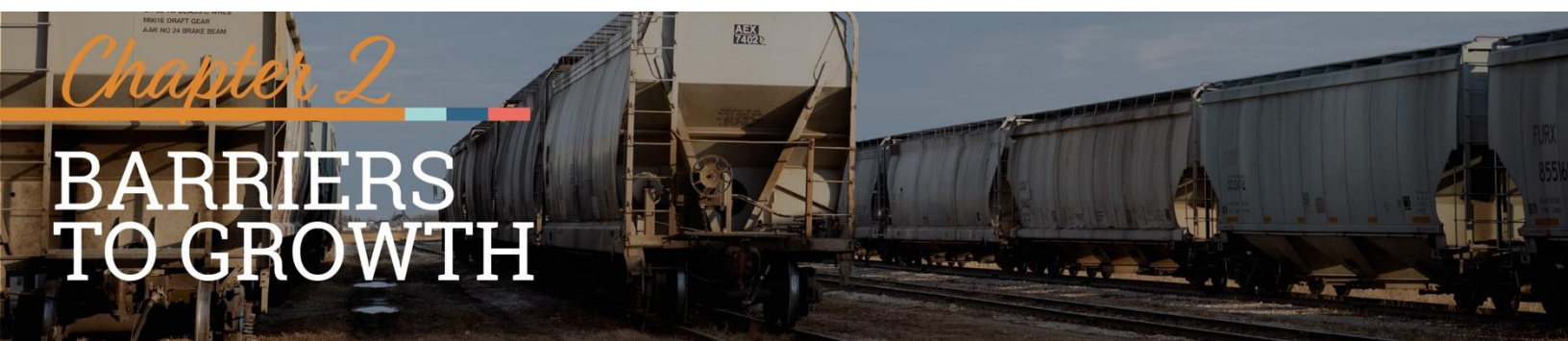
Yet some witnesses maintained that Canada has a great deal of untapped potential. That was one of the key messages of the second report of the Advisory Council on Economic Growth, chaired by Dominic Barton. In that report, the council emphasized that Canada processes only 50% of its agricultural output, a statistic that it attributes to an underdeveloped food processing sector. In comparison, the report highlights the success of the Netherlands, a country with 34 times less agricultural land but which exported more than twice as much as Canada in terms of processed food and beverages in 2016. Table 1 presents some statistics comparing the two countries' agriculture and agri-food sectors and highlight the gap between the two countries. Finally, the report also identified regulatory barriers and a lack of investment in processing and transportation infrastructure as the historical reasons for this underdevelopment.³⁸

Table 1 – Comparison between the Netherlands and Canada's Agri-food Sectors

	 Netherlands	 Canada
Agricultural Land	18,370 km²	626,562 km² (34,1x the Netherlands)
Total Agri-Food and Seafood Exports	\$136.6 billion (#2 globally)	\$64.6 billion (#8 globally)
Size of Food and Beverage Industry (Annual Revenues)	\$99.8 billion (2016)	\$109.3 billion (2016) (1.1x the Netherlands)
Total Processed Food and Beverage Exports	\$73.1 billion (2016) (approx. 2.18x Canada)	\$33.5 billion (2016)
Machinery and Equipment Investment – Percent of Sales	2.1%	1.7%
Research and Development – percent of Sales	0.58%	0.14%

Source: Statistics Canada, Organization for Economic Cooperation and Development and Global Trade Tracker. Multiples may not add up due to rounding. Adapted from a brief submitted to the Committee by Agriculture and Agri-Food Canada.

³⁸ Advisory Council on Economic Growth, *Unleashing the Growth Potential of Key Sectors*, 6 February 2017.



During its meetings, the Committee tried to identify the main problems facing value-added agriculture and agri-food sector stakeholders and the best ways of addressing them. These problems hurt the sector's businesses and limit their ability to achieve its ambitious growth targets.

Labour Shortages, an Ongoing Barrier

Current Situation

A number of witnesses asserted that the value-added agriculture sector will not be able to grow without an adequate supply of labour.³⁹ The entire agriculture and agri-food sector is currently affected by chronic labour shortages. Statistics Canada reports that the average job vacancy rate in the agriculture sector varied from 4.5% to 6.3% in 2017;⁴⁰ while the average for all Canadian industries that year was only 2.8%.⁴¹ A report from the Canadian Agricultural Human Resource Council (CAHRC) stated that the agriculture sector is short 59,000 workers and that this figure could reach 114,000 by 2025.⁴² Martin Lavoie, President and Chief Executive Officer of Canada Pork International, said that this shortage directly affects the growth of the value-added agriculture and agri-food sector.

³⁹ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 31 May 2018 (Keith Kuhl, President and Chief Executive Officer, Southern Potato Company).

⁴⁰ This statistic includes jobs in the "crop production," "animal production and aquaculture" and "support activities for agriculture and forestry" subsectors.

⁴¹ Statistics Canada, *Job vacancies, payroll employees, job vacancy rate, and average offered hourly wage by industry sector, quarterly, unadjusted for seasonality*.

⁴² Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 2 October 2018 (Portia MacDonald-Dewhirst, Executive Director, Canadian Agricultural Human Resource Council).

There's truly a shortage of manpower for our plants. Whether it's in processed products or simply adding value, if you don't have the labour, you will send the cuts bone-in, so you're not adding value in Canada because of a shortage in manpower. This is extremely important. We need to have our plants to keep the value here in Canada, sell the product as processed as possible, not necessarily just in value-added, but the more you debone and skin the product, the more value you add in Canada and the more jobs you have in Canada instead of other countries.⁴³

The witnesses explained that many Canadians associate work in the agriculture and agri-food sector with low wages.⁴⁴ This biased view is false in many respects. For example, Ryan Koeslag, Executive Vice-President and Chief Executive Officer of the Canadian Mushroom Growers' Association, reported that wages for workers in his industry range from the minimum wage to \$30 per hour, and supervisors and managers can earn up to \$80,000 per year.⁴⁵ Ray Price, President of Sunterra Farms Ltd., also cited wages of \$20 to \$30 per hour in the pork processing industry in Alberta.⁴⁶ Moreover, new technologies have substantially changed the sector, which now increasingly requires technical skills and professionals such as engineers.⁴⁷

⁴³ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 7 June 2018 (Martin Lavoie, President and Chief Executive Officer, Canada Pork International).

⁴⁴ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 19 April 2018 (Carla Ventin, Vice President, Government Relations, Food and Consumer Products Canada).

⁴⁵ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 4 October 2018 (Ryan Koeslag, Executive Vice-President and Chief Executive Officer, Canadian Mushroom Growers' Association).

⁴⁶ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 31 May 2018 (Ray Price, President, Sunterra Farms Ltd.).

⁴⁷ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 4 October 2018 (Justine Taylor, Science and Government Relations Manager, Ontario Greenhouse Vegetable Growers).



Raising awareness about the reality of agricultural careers should therefore be a priority. Students should learn more about the nature of agricultural work and the ways that new technologies are changing the sector.⁴⁸ Teresa Schoonings, Member of the Board of Directors of Food and Beverage Canada, argued that the Taste Your Future initiative launched by Food and Beverage Ontario to promote careers in that province's food processing industry should be extended to the rest of Canada.⁴⁹

Several witnesses emphasized the need for more investment in recruitment and education to attract Canadian youths to the agriculture and agri-food sector. According to David Hughes, "the wheel has turned a little" and a younger generation, more preoccupied by the food they eat, has become increasingly interested in working in the sector and this trend should be supported by an adequate education system.⁵⁰ In addition, expertise built by education institutions is key to attract international companies to the country. According to Heather Hill, this is what should be the focus of applied research institutions such as Red River College, for which she works.

⁴⁸ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 20 September 2018 (Rebecca Lee, Executive Director, Canadian Horticultural Council).

⁴⁹ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 3 May 2018 (Teresa Schoonings, Member of the Board of Directors, Food and Beverage Canada).

⁵⁰ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 4 April 2019 (David Hughes, Emeritus Professor of Food Marketing, Imperial College London, As an individual).

The role of an applied research college or education institute is to prepare for the jobs of the future and anticipate what large multinational companies locating in Manitoba require of their available workforce.⁵¹

However, some aspects of agriculture and agri-food jobs do indeed frustrate hiring. For instance, both Rebecca Lee and Mark McNeil, Chief Executive Officer of Bonduelle Americas, underscored that the seasonality of work in the horticulture and vegetable processing and packaging industries makes it unappealing to many Canadians, who prefer permanent employment.⁵² Furthermore, while labour shortages are less severe near large cities, they are more serious in rural areas that are less attractive to some Canadians.⁵³ A further factor is Canada's low birth rate, which will prevent these sectors from renewing their workforces in the long run.⁵⁴

Ways that Immigration and the Temporary Foreign Worker Program can Help

The federal government has established immigration programs to address the labour shortages. For short-term needs, Canadian businesses can use the Temporary Foreign Worker Program administered by Employment and Social Development Canada (ESDC). This program "allows Canadian employers to hire foreign nationals to fill temporary labour and skill shortages when qualified Canadian citizens or permanent residents are not available."⁵⁵ To take advantage of this program, employers must carry out a Labour Market Impact Assessment (LMIA).⁵⁶ Once these formalities are completed, temporary workers can apply for a work permit from Immigration, Refugees and Citizenship Canada (IRCC).

Four of the Temporary Foreign Worker Program's recruitment streams are open to the agriculture sector. The Seasonal Agricultural Worker Program enables operators to recruit foreign workers from countries that have signed agreements with Canada for work periods of up to eight months. These workers are selected by the governments of their countries of origin, which verify that they meet the program criteria.⁵⁷

⁵¹ Ibid.

⁵² Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 20 September 2018 (Rebecca Lee, Executive Director, Canadian Horticultural Council); Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 27 September 2018 (Mark McNeil, Chief Executive Officer, Bonduelle Americas).

⁵³ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 2 October 2018 (Kenneth Elgin Forth, President, Foreign Agricultural Resource Management Services).

⁵⁴ Ibid.

⁵⁵ Employment and Social Development Canada, *2018–19 Departmental Plan*, p. 33.

⁵⁶ Government of Canada, "Who needs a Labour Market Impact Assessment?"

⁵⁷ The following foreign governments participate in the Seasonal Agricultural Worker Program: Mexico, Anguilla, Antigua and Barbuda, Barbados, Dominica, Grenada, Jamaica, Montserrat, St. Kitts-Nevis, St. Vincent and the Grenadines, St. Lucia, and Trinidad and Tobago.

The agricultural stream of the Temporary Foreign Worker Program enables employers to recruit foreign workers when Canadians and permanent residents are not available. To qualify, employers must operate in specific sectors designated by ESDC, and the work must relate to primary agriculture. Finally, employers whose production is not on the National Commodities List can hire workers through the stream for high-wage positions or the stream for low-wage positions, which cover all occupations.

Overall, the witnesses expressed support for the Temporary Foreign Worker Program, which is essential to meeting the labour force needs of Canada's agriculture and agri-food sector. However, they did raise concerns about the program and recommended improvements.

Some witnesses believe the Temporary Foreign Worker Program's is cost-prohibitive, particularly in the food processing sector. In that sector, employers have to use the program's stream for low-wage positions. This stream imposes a \$1,000 fee for each worker to cover the cost of processing the LMIA application. This fee does not apply to the Seasonal Agricultural Worker Program.⁵⁸ Mark McNeil acknowledged that processing applications has a cost, he suggested reducing the fee to between \$50 and \$1,000.⁵⁹ Steven West, Director of Sector Policy for the Temporary Foreign Worker Program, told the Committee that ESDC is reviewing the program's service fees and may realign them.⁶⁰

In addition to paying fees and experiencing sometimes lengthy waiting times, employers have to repeat the process every year if they want to employ temporary foreign workers again. Corinne Pohlman, Senior Vice President of National Affairs and Partnerships at the Canadian Federation of Independent Business, proposed that employers be allowed to bring the same temporary foreign workers back year after year.⁶¹ Similarly, a number of witnesses suggested establishing a trusted employer program that would simplify the temporary foreign worker allocation process for employers that have used the program for several years and have always followed the rules.⁶² Derek Johnstone, Special Assistant to the National President of the United Food and Commercial Workers of Canada, said that, to

⁵⁸ Employment and Social Development Canada, "Program requirements for low-wage positions"; Employment and Social Development Canada, "Hire a temporary worker through the Seasonal Agricultural Worker Program: Program requirements."

⁵⁹ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 27 September 2018 (Mark McNeil, Chief Executive Officer, Bonduelle Americas).

⁶⁰ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 4 October 2018 (Steven West, Director, Sector Policy, Temporary Foreign Worker Program, Skills and Employment Branch, Employment and Social Development Canada).

⁶¹ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 14 June 2018 (Corinne Pohlman, Senior Vice President, National Affairs and Partnerships, Canadian Federation of Independent Business).

⁶² Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 4 October 2018 (Baerbel Langner, Legal Counsel – Immigration, Past Chair, Canadian Bar Association, National Immigration Section, HyLife); Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 2 October 2018 (Kenneth Elgin Forth, President, Foreign Agricultural Resource Management Services); Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 31 May 2018 (Keith Kuhl, President and Chief Executive Officer, Southern Potato Company).

prevent abuse, an effective way of protecting these workers is to give them “open” work permits that allow them to change employers, if necessary.⁶³

Recommendation 1(a): The Committee recommends that the Government of Canada review the Temporary Foreign Worker Program’s requirements in order to provide an expedited process for participants that have complied consistently with the program requirements over consecutive years.

Recommendation 1(b): The Committee recommends that the Government of Canada review the processing fees for Temporary Foreign Worker Program applications so that they do not impose too heavy a burden on producers and processors.

These recommendations from businesses in the agriculture and agri-food sector would help stabilize the labour force so that it can meet their long-term needs. Some witnesses went further and suggested that the program should include paths to permanent residence that would enable some temporary foreign workers to stay in Canada indefinitely.

Currently, there are 900 temporary foreign worker butchers like Ronald from Breslau, Ontario, and 700 farm workers, like Eric from Ashburn, Ontario who would like to stay in their positions and are looking for immigration options. Unfortunately, they don’t qualify for federal or most provincial programs, other than Manitoba, given that Canada prioritizes high-skill workers.⁶⁴

Mary Robinson, Chair of the Canadian Agricultural Human Resource Council, cited a joint study conducted by her organization, the Canadian Meat Council and Mushrooms Canada that found butchers at meat processing plants and mushroom farm workers stay in their jobs an average of 10 years and 11 years respectively.⁶⁵ Finding ways for these workers to stay in the country permanently could offer a lasting solution to the sector’s labour shortages.

⁶³ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 2 October 2018 (Derek Johnstone, Special Assistant to the National President, United Food and Commercial Workers of Canada).

⁶⁴ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 2 October 2018 (Mary Robinson, Chair, Canadian Agricultural Human Resource Council).

⁶⁵ Ibid.

Recommendation 1(c): The Committee recommends that the Government of Canada establish mechanisms that prioritize access to permanent residence for temporary foreign workers in agriculture and agri-food sectors that are particularly affected by labour shortages.

Transportation Infrastructure

Transport Canada reports that agricultural products are one of the most commonly shipped goods by sea, road and rail. In addition to having access to labour, the success of the value-added agriculture and agri-food sector depends on reliable transportation infrastructure that enables goods to reach domestic and international markets.

Our infrastructure definitely has to be maintained forever. We are in one of the biggest countries in the world. Without developing intermodal transportation, it is impossible to develop new markets for the agri-food sector.⁶⁶



A number of barriers currently impede Canada's ability to export its agricultural and agri-food products. These barriers not only limit the amount of goods that can be sold abroad, but also affect Canada's reputation among its international partners. Jack Froese, President of the Canadian Canola Growers Association, told the Committee that his Japanese customers express concerns every year about the Canadian rail system and Canada's ability to deliver its products in a timely manner.⁶⁷

⁶⁶ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 8 November 2018 (Sylvain Charlebois, Professor in Food Distribution and Policy, Faculty of Agriculture, Dalhousie University, As an individual).

⁶⁷ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 26 April 2018 (Jack Froese, President, Canadian Canola Growers Association).

Challenges for Canada's Transportation System

As regards rail transportation, a number of events have revealed the limits of the current system. In March 2018, Western Canada experienced significant delays in grain shipments that hit producers hard. The Committee heard from representatives of the country's rail companies, Canadian National and Canadian Pacific, who outlined the measures they want to take to address this problem over the long term. The *Transportation Modernization Act* requires rail companies to submit a report each year detailing their plans to ship grain and other goods in winter weather conditions. The two companies' plans include purchasing new locomotives and hopper cars and hiring more train conductors.⁶⁸ Canadian Pacific's plan includes modernizing its hopper-car fleet by introducing new cars that can handle up to 15% more volume.⁶⁹ Canadian National announced a number of measures, including the development of programs that enable its customers to secure a priority car supply.⁷⁰

The representative of the Canadian Trucking Alliance indicated that investment in road infrastructure was also required. In particular, he mentioned that there are currently two hot points in the Canadian road network that undermines the efficiency of the agri-food supply chain: Highway 40 in Alberta and Quebec Highway 185 from Saint-Antonin to Saint-Louis-du-Ha! Ha!. Highway 185 serves as the primary surface transportation route between Central Canada and the Atlantic Provinces. The fact that these two highways are not twinned prevent the use of certain vehicles such as Long Combination Vehicles.⁷¹

⁶⁸ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 25 October 2018 (David Przednowek, Director of Grain Marketing, CN);

Ibid. (Robert Taylor, Assistant Vice President, North American Advocacy, Canadian Pacific).

⁶⁹ Canadian Pacific, *Grain Service Outlook for 2018/19 Grain Crop Year*, 31 July 2018.

⁷⁰ Canadian National, *CN Grain Plan*.

⁷¹ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 22 November 2018 (Stephen Laskowski, President, Canadian Trucking Alliance).

Recommendation 2(a): The Committee recommends the Government of Canada work with the provincial and territorial governments to maintain and expand an efficient road network throughout the country, and more specifically expedite the timelines for twinning of the following highways to reduce transportation costs through the use of Long Combination Vehicles:

- (i) Alberta Highway 40; and**
- (ii) Quebec Highway 185 from Saint-Antonin to Saint-Louis-du-Ha! Ha! to decrease transportation costs to and from the Atlantic Provinces.**

There is a patchwork of provincial/territorial regulations that has resulted in several barriers for the trucking industry, including on wide base single tires, spring weight limits and other restrictions. For example, certain truck configurations can only be driven in British Columbia at night and in Alberta during the day. The result of this interprovincial barrier is that drivers may have to wait several hours before moving between these provinces. Moreover, due to differing regulations on tire sizes, some trucks must change their tires at certain provincial borders. Addressing these inconsistencies across Canada would improve transportation systems to the benefit of the agri-food sector.⁷²

Recommendation 2(b): The Committee recommends that the Government of Canada work with provinces/territories to harmonize regulations for the trucking industry in order to minimize delays for trucks moving from one province to another.

The land border is also a source of concern for Stephen Laskowski of the Canadian Trucking Alliance. Among his concerns, he said that the Canadian Food Inspection Agency and Canada Border Services Agency processing times for trucks crossing the border with the United States are sometimes lengthy. He advocated modernizing the two agencies' inspection and registration systems from both a hardware and software standpoint to speed up processing.⁷³ Fred Gaspar, Director General of the Commercial Program Directorate at the Canada Border Services Agency, said that importers must provide

⁷² Ibid.

⁷³ Ibid.

commercial information before their goods arrive at the border. The system is automated, and most shipments do not require inspection. However, delays can occur when the system determines that a second inspection is required.⁷⁴

Recommendation 2(c): The Committee recommends the Government of Canada modernize the Canadian Food Inspection Agency and Canada Border Services Agency inspection and registration systems in order to reduce processing times for trucks crossing the border with the United States.

Besides the American market, which is served by land, Canada's agri-food exports are also transported to other international markets by sea. A reliable port system is therefore crucial to shipping Canadian products to international markets. Diederik Beutener, Trade Commissioner at the Embassy of Canada to the Kingdom of the Netherlands, provided the example of the strategic importance of the port of Rotterdam as the "first pillar" of the success of the Dutch food industry.⁷⁵

A good seaway transport system can contribute to the competitiveness of Canada's agri-food sector by facilitating the movement of agri-food products to parts of Canada that are not connected to the country's road or rail networks, such as Newfoundland or Vancouver Island. Wendy Zatylny, President of the Association of Canadian Port Authorities, underscored the importance of the investments in the Port of Vancouver to build the first grain terminal in 50 years. She also applauded the federal government's investments under the Trade and Transportation Corridors Initiative. However, the regulations made under the Canada Marine Act constrain the expansion of port operations by limiting Port authorities' role to shipping and navigation services and excluding other activities, such as providing logistics services, operating grain elevators or processing facilities, that could become part of the value-added agriculture and agri-food supply chain.⁷⁶

Recommendation 2(d): The Committee recommends that the Government of Canada modernize the *Canada Maritime Act* in order to allow Port authorities to provide expanded services such as providing logistics services, operating grain elevators or processing facilities.

⁷⁴ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 9 April 2019 (Fred Gaspar, Director General, Commercial Program Directorate, Canada Border Services Agency).

⁷⁵ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 11 April 2019 (Diederik Beutener, Trade Commissioner, Embassy of Canada to the Kingdom of the Netherlands).

⁷⁶ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 2 April 2019 (Wendy Zatylny, President, Association of Canadian Port Authorities).

Expanding the Processing Sector to Address Transportation problems

In addition to increasing the capacity of Canada's transportation infrastructure, boosting the value of shipments could help resolve current problems:

In our case, we produce canola as one of our crops. We probably produce 100 per cent more per acre than we did 10 years ago. We will just get better and better at producing more volume. I don't believe we will be able to twin the rail to Vancouver in any reasonable length of time. We will be constrained long-term, so more value-added, high-value products leaving the country on rail would be better than the commodities.⁷⁷



Ron Davidson, Executive Director of Soy Canada, told the Committee that there is no soybean crushing facility in Manitoba or Saskatchewan even though these two provinces produced 2.7 million tonnes of soybeans in 2017, 35% of total Canadian production. Opening such a plant in the region could increase the value of shipments for export and increase supplies of soybean meal for Prairie meat producers.⁷⁸

Establishing processing facilities close to production regions is a model that some sectors in Canada already use. Carla Ventin of Food and Consumer Products of Canada mentioned that potato processing plants are next to potato farms in Eastern Canada.⁷⁹ This is true of the Cavendish Farms plants located primarily on Prince Edward Island, one of Canada's main potato-producing provinces.

⁷⁷ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 31 May 2018 (Ray Price, President, Sunterra Farms Ltd.).

⁷⁸ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 24 May 2018 (Ron Davidson, Executive Director, Soy Canada).

⁷⁹ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 19 April 2018 (Carla Ventin, Vice President, Government Relations, Food and Consumer Products Canada).

However, Derek Brewin of University of Manitoba warned that setting up processing plants close to production areas should not be viewed as a panacea. His research has shown that canola crushing plants within production areas can, in certain circumstances, be less profitable than plants closer to consumers. He cited changing market conditions, the low domestic demand for canola and the integrated nature of the North American supply chain as evidence to support his conclusion.⁸⁰

Recommendation 3: The Committee recommends that the Government of Canada examine ways to support the development of the food processing sector in Western Canada in order to increase the value of shipments of agricultural and agri-food products.

The Regulatory Framework

It is difficult to imagine the agri-food sector without regulations. Regulatory safeguards are a necessary part of producing, processing and selling food, and essential for protecting consumers, producers and other value-chain stakeholders. The Committee heard that Canada's regulatory system provides internationally renowned quality and safety assurance.

Chris White, Chief Executive Officer of the Canadian Meat Council noted that:

One of the reasons Canada has such a substantive advantage over many jurisdictions and countries we work in is the terrific reputation of the Canadian Food Inspection Agency (CFIA). The standards and the expectations they have of the sector are critical to the ability for us to export. As I said, with the work we do at CFIA and the regulation they impose on industry, our members would quibble, but they wouldn't push back too much because they know that the CFIA brand of approval opens all sorts of markets internationally. And without those, they wouldn't have nearly the profits or the potential for profits that they do.⁸¹

⁸⁰ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 25 October 2018 (Derek Brewin, Professor, Faculty of Agricultural and Food Sciences, University of Manitoba, As an individual).

⁸¹ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 29 March 2018 (Chris White, Chief Executive Officer, Canadian Meat Council).

Likewise, Andrew Casey, President and Chief Executive Officer, BIOTECCanada, said a strong, efficient regulatory system for the agri-food sector actually acts as a competitive advantage for Canada.⁸²

While witnesses are broadly supportive of the work done by the CFIA, they nonetheless emphasized that there is need to improve the regulatory framework of Canada's agri-food sector. The country's regulatory system is increasingly inhibiting the sector's nimbleness by restricting innovative practices and products, and by being slow to approve new traits. Paul Hetherington, President, Baking Association of Canada, and Gordon Harrison, President of the Canadian National Millers Association, expressed concerns that there is a lack of coordination and understanding of the cumulative impacts of regulatory initiatives on the food processing sector across departments and across federal, provincial/territorial levels of government.⁸³ Table 1 summarizes the various regulatory initiatives at the federal level regarding the agri-food sector.

Table 1: Selection of recent changing regulation that affect the agri-food sector

- **Health Canada**
 - Healthy Eating Strategy - Canadian Food Guide
 - Updated Nutrition Facts Table
 - Front of Package for Nutrients of Concern
- **Canadian Food Inspection Agency**
 - Food Labelling Modernization Initiative
 - 'Truthfulness in Labelling'
 - Safe Food for Canadians Regulations
 - Consolidation of several acts and regulations
- **Food and Drugs Act**
 - Nutrition Facts Table Changes

⁸² Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 16 October 2018 (Andrew Casey, President and Chief Executive Officer, BIOTECCanada).

⁸³ Baking Association of Canada/Canadian National Millers Association, Brief submitted to the Standing Senate Committee on Agriculture and Forestry.

The Economic Strategy Table on Agri-Food has highlighted that the competitiveness of Canada's agri-food sector is stymied by the 'tonne of feathers' dilemma, whereby hundreds of well-intentioned and seemingly unobtrusive regulations add up to weigh down on performance, productivity and growth.⁸⁴ Likewise, Rebecca Lee, Executive Director of the Canadian Horticultural Council, stated that the regulatory burden on farmers is a significant hindrance to the competitiveness of the agri-food sector.⁸⁵

Case study: Traceability of Cattle

We have been undertaking nearly a 20-year project to improve the traceability of cattle in Canada. It started first with cattle identification, tagging the cattle and having a database. Then we moved from bar tags to radio frequency. Then we moved to some reporting requirements, movement reporting. Now we are trying to work with the Canadian Food Inspection Agency on getting full traceability. We came up with a cattle implementation plan, which is our traceability plan. We agreed on that in 2012 with the beef industry, the cattle industry, the provincial governments as well as CFIA, and we have been working and negotiating with CFIA ever since to implement that. We all want to get there. It's about the nuances. Traceability is absolutely a vital tool that can help us and help our customers feel more confident in our product, but you have to hit the sweet spot between having it as a beneficial tool versus the cost of compliance.

John Masswohl, Director of Government and International Relations, Canadian Cattlemen's Association, Senate, AGFO, Evidence, 29 March 2018

Moreover, Canada is facing competition from other jurisdictions, many of which have more agile regulatory environments. For instance, the United States Department of Agriculture recently decided to allow the development, cultivation and sale of plant varieties obtained using CRISPR gene editing technology without the need for prior approval. As a result, a firm that introduces a new product of gene editing does not face regulatory barriers to commercialization in the United States. The Committee heard that in Canada, it takes on average two years to get a new trait approved. Dennis Prouse, Vice President of CropLife Canada, said "we don't see any reason why it should take any longer than a year, especially when we have a competitor in Brazil that is now doing approvals in much less than a year."⁸⁶

⁸⁴ Innovation, Science and Economic Development Canada, *Canada's Economic Strategy Tables: Agri-food*, September 2018, p. 5.

⁸⁵ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 20 September 2018 (Rebecca Lee, Executive Director of the Canadian Horticultural Council).

⁸⁶ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 16 October 2018 (Dennis Prouse, Vice-President, Government Affairs, CropLife Canada).

Case study: Limagrain

Limagrain, which just built a research centre in Saskatoon, has a high-fibre wheat that allows for more efficient milling and a healthier final product processing. Unfortunately, our complex regulatory framework means it is commercialized in the United States, unregulated this year, and will be for over three years before it comes to Canada. U.S. farmers will grow it first, U.S. millers will mill it first, and the finished product processing plants will be built south of the border first.

Dennis Prouse, Vice-President, Government Affairs, CropLife Canada Senate, AGFO, Evidence, 16 October 2018.

In addition, Mr. Prouse indicated that Canada needs to modernize its regulatory approach for these new plant breeding techniques to ensure an efficient and predictable pathway to the commercialization of novel products of biotechnology, which in turn will add value to the agri-food sector.

Carla Ventin, Vice President of Food & Consumer Products of Canada, mentioned that processors are concerned with the compliance costs associated with proposed government regulations on front-of-package labelling which, if implemented, are estimated by Agriculture and Agri-Food Canada at \$1.8 billion.⁸⁷ As a foundation to its Healthy Eating Strategy, Health Canada is using a daily value (DV) criteria to define what is “a lot” of the following nutrients: saturated fat, sugar and salt. The threshold of 15% of the DV is utilized as a regulatory compliance trigger for warning labels as part of Health Canada’s front-of-package labelling initiative.⁸⁸

While some of the Committee’s witnesses agreed with the objective of the Healthy Eating Strategy to make it easier for Canadians to make healthier food choices, they also stated that the regulations for front-of-package labelling, as currently proposed by the government, will not help achieve that objective.

Front-of-package labels are an oversimplification of what makes a product healthy. Nutrient dense products like dairy will be required to carry a warning label, while empty calorie snack foods will be given the green light.⁸⁹

⁸⁷ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 19 April 2018 (Carla Ventin, Vice President, Government Relations, Food & Consumer Products of Canada).

⁸⁸ Government of Canada, *Health Canada's Healthy Eating Strategy*, 15 March 2019.

⁸⁹ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 16 October 2018 (Mathieu Frigon, President, Dairy Processors Association of Canada).

Many witnesses argued that the regulatory approach of the Government of Canada needs to evolve to better fit an agri-food sector where innovation is the norm. Regulation has to be agile and adaptive enough to support the sector's competitiveness, ensuring sufficient oversight to protect health and safety without posing obstacles to innovation. Ideally, Canada's regulatory environment should act as a catalyst for new value-added products. Regulation must also be predictable, efficient, and consistent, so that it is not a barrier to business investment, innovation, and, ultimately, economic growth.⁹⁰ The Committee recognizes that this is a complex issue and notes the CFIA's efforts in regulatory modernization. The *Safe Food for Canadians Regulations* entered into force on 15 January 2019. Daniel Miller, Executive Director of the International Affairs Branch at CFIA, indicated that these new regulations replace fourteen existing commodity-based food regulations with a single set of rules that apply to all food that is traded across provincial or national borders.⁹¹ But the government must do more. Canadian agri-food firms still must comply with inconsistent and overlapping rules among regulatory agencies and jurisdictions.

Recommendation 4: The Committee recommends that the Government of Canada reform regulatory agencies' mandates to include innovation, growth and overall agri-food sector competitiveness as a core consideration as well as establish a permanent and independent panel of industry experts and other stakeholders to advise regulators.

⁹⁰ Advisory Council on Economic Growth, *Investing in a Resilient Canadian Economy*, 1 December 2017, p. 1.

⁹¹ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 9 April 2019 (Daniel Miller, Executive Director, International Affairs Branch, Canadian Food Inspection Agency).

Selected Tax Policies

Witnesses repeatedly emphasized to the Committee that the competitiveness of the agri-food sector in global markets “starts at home,” and that it is therefore important to ensure that domestic economic policies provide a business environment that enables Canadian firms to thrive. Jane Proctor, Vice President of the Canadian Produce Marketing Association stressed that changes to the small business deduction for affiliated corporations and the carbon tax are two of the most recent tax changes that negatively impact firms and will potentially stifle growth: “we cannot overstate the impact our tax system has on our members, especially when compared to the recent tax changes in the United States and the tax incentives offered to companies by different states to open up new facilities, which some of our Canadian firms have taken advantage of.”⁹²

For his part, Chris Vervaet, Executive Director of the Canadian Oilseed Processors Association, acknowledged the role of the federal government to address climate change and reduce greenhouse gas emissions through legislation and regulations. However, he added that a price on carbon will place a cost burden to the oil seed processing sector. For instance, Mr Vervaet highlighted that “a carbon price of \$50 a tonne on CO₂ will cost oilseed processors an additional \$30 million every year.”⁹³ Similarly, Jack Froese, President of the Canadian Canola Growers Association, stated that “the environment and sustainability are key priorities and farmers are doing their part. With changes to production practices, farmers are now sequestering more carbon in soils than in the past and new tools and equipment means we are also mitigating our emissions. As farmers, we want to be recognized for the work and we cannot afford to have domestic policies such as carbon taxes erode our competitiveness.”⁹⁴

Andrew Casey of BIOTECCanada expressed a different opinion when he suggested that advances in biotechnology make it possible for agri-food firms to reduce their greenhouse gas emissions, and therefore avoid the carbon tax. He provided the example of a firm called Agrisoma that has developed jet engine fuel extracted from a modified mustard seed, the use of which reduces gas emissions of aircrafts. He explained that “when you have a carbon tax, that makes fossil fuel less competitive, so if airlines are looking for ways to reduce their carbon footprint from an economic standpoint because they’re going to get taxed on it, one of the ways to do that is through something like the Agrisoma technology.”⁹⁵

⁹² Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 31 May 2018 (Jane Proctor, Vice President, Policy and Issues Management, Canadian Produce Marketing Association).

⁹³ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 26 April 2018 (Chris Vervaet, Executive Director, Canadian Oilseed Processors Association).

⁹⁴ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 26 April 2018 (Jack Froese, President, Canadian Canola Growers association).

⁹⁵ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 16 October 2018 (Andrew Casey, President and Chief Executive Officer, BIOTECCanada).

The Committee underscores that it is critical that the Government of Canada maintains and improves a business environment to attract investment in agri-food processing while it concurrently addresses the challenges posed by climate change. Taxes have a direct impact on investment decisions by firms. Moreover, proposed tax changes in the United States may reduce rates to levels in line with or below Canada's, produce more favourable rules for deducting capital expenditures, and lead to the adoption of a "territorial" system that encourages repatriation of corporate profits.⁹⁶ In the face of rapidly changing technology and an ever-more-competitive global marketplace, Canada cannot be complacent.

⁹⁶ Advisory Council on Economic Growth, *Investing in a Resilient Canadian Economy*, 1 December 2017, p. 17.

Chapter 3

INNOVATION AS A DRIVER OF GROWTH IN THE VALUE-ADDED AGRICULTURE AND AGRI-FOOD SECTOR

Developing new products or new production, packaging or marketing technologies are examples of adding value to commodities. During its study, the Committee met with various stakeholders who discussed the innovations they implemented in their businesses or organizations, the mechanisms the federal government uses to support research and innovation in the sector and how these mechanisms could be improved.

Investments in Innovation in the Agriculture and Agri-food Sector

Investments in research and development result in new products and support the growth of the agriculture and agri-food sector. Witnesses provided numerous examples of research that helped them boost their businesses' profitability. Some witnesses said that their business model largely stems from technical innovations. For example, Aqualitas develops cannabis products using innovative aquaponic growing technology that uses up to 90% less water and 50% less energy than traditional indoor growing methods.⁹⁷ In addition, innovation can improve a specific process in the production chain: Mark McNeil, Chief Executive Officer of Bonduelle Americas, said that his company developed a special dehydration technique for vegetables that preserves them during freezing and extends the range of potential uses for them.⁹⁸

A number of different stakeholders in Canada are engaged in research and development. The private sector itself makes a significant portion of total research investments. Brian Innes, Vice-President of Public Affairs at the Canola Council of Canada, reported that canola seed developers invest more than \$100 million every year to make canola cultivars more resistant to disease, insects and weather.⁹⁹ Small and medium-sized businesses are also innovating. For example, the Committee toured Barrie's Asparagus Farm & Country Market, which has developed new applications for its asparagus-based products such as pastas and teas made out of the asparagus it grows. Likewise, Todd Hyra, President of the

⁹⁷ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 28 February 2019 (Myrna Gillis, Chief Executive Officer, Aqualitas).

⁹⁸ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 27 September 2018 (Mark McNeil, Chief Executive Officer, Bonduelle Americas).

⁹⁹ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 26 April 2018 (Brian Innes, Vice-President, Public Affairs, Canola Council of Canada).

Canadian Seed Trade Association, said that his business buys plant breeding products from a small business in Saskatoon that was founded by a single individual and his family.¹⁰⁰

An organization like Genome Canada is using a different model to fund research. It places itself at the nexus between research institutions' capabilities and the research needs of businesses across Canada. Marc Lepage, President and Chief Executive Officer of Genome Canada, provided to the Committee an example of his organization's project with the dairy cooperative Agropur and Laval University aimed at understanding the ideal microbial balance for cheese production as part of the cooperative's efforts to increase its output.¹⁰¹ Whether companies are large or small, they sometimes need government support to complete their research or to take on more research and development projects. Various departments deliver innovation support programs. Agriculture and Agri-Food Canada offers the AgriInnovate Program to provide Canadian for-profit organizations with up to 50% of the funding they need to commercialize or adopt innovative agricultural or agri-food technologies and processes. Similarly, the AgriScience Program offers businesses and academic institutions funding and opportunities to partner with the department's scientists on pre-commercial activities. Since 2017, Innovation, Science and Economic Development Canada has offered the Strategic Innovation Fund, which provides over \$10 million in funding to businesses of all sizes to support research and development projects that "facilitate the growth and expansion of firms in Canada, attract and retain large scale investments in Canada and advance large-scale industrial research, development and technology demonstration through high-impact collaborations."¹⁰² Agriculture and Agri-Food Canada officials noted that one of the streams of that fund is specifically for the agriculture sector and that it provides up to \$50 million in funding for projects involving new technologies, automation and digitization.¹⁰³

The superclusters initiative is one of the federal government programs that elicited the most enthusiasm among witnesses. This program is administered by Innovation, Science and Economic Development Canada and provides targeted investments in technologies and regions that are key to GDP growth and employment over the next 10 years.¹⁰⁴ On 15 February 2018, five superclusters were announced, including one in the agriculture and agri-food sector: the Protein Industries Supercluster, located on the Prairies, will provide up to \$153 million in funding to "increase the value of key Canadian crops, such as canola, wheat and pulses."¹⁰⁵

¹⁰⁰ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 27 November 2018 (Todd Hyra, President, Canadian Seed Trade Association).

¹⁰¹ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 2 April 2019 (Marc Lepage, President and Chief Executive Officer, Genome Canada).

¹⁰² Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 9 April 2019 (Andrea Johnston, Assistant Deputy Minister, Innovation Canada, Innovation, Science and Economic Development Canada).

¹⁰³ Ibid. (Marco Valicenti, Director General, Sector Development and Analysis Directorate, Market and Industry Services Branch, Agriculture and Agri-Food Canada).

¹⁰⁴ Ibid.

¹⁰⁵ Ibid.

Witnesses generally expressed support for this initiative, as they believe it provides important opportunities to grow the sector. The Honourable JoAnne Buth stated that this initiative will help make Canada “the place to go for novel protein and co-products, fractions, ingredients, food, feed products and technologies.”¹⁰⁶ Rex Newkirk, Associate Professor and Scientific Lead at the Canadian Feed Research Centre of the University of Saskatchewan, further noted that the initiative will benefit scientific organizations by enabling them to secure long-term funding to bring their projects to fruition.¹⁰⁷ Similarly, Sylvain Charlebois of Dalhousie University, applauded the initiative and recommended implementing this model in other key agriculture and agri-food industries such as livestock and horticulture.¹⁰⁸



During a fact-finding mission, senators learned that researchers at the Summerland Research and Development Centre are working on geographic information system (GIS) to map the climate and soils of British Columbia's vineyards to determine sensory attributes of wines.

Research in the sector is also conducted by Agriculture and Agri-Food Canada's twenty research and development centres across the country. In British Columbia, the Committee toured the Summerland Research and Development Centre. During its visit, the organization's researchers presented some of the innovative technologies the centre has developed, including apple varieties that are tailored to the region's climate and consumer preferences. The centre also supports the development of appellations based on data collected using geographic information system (GIS) tools that characterize the region's terroir.¹⁰⁹ A number of witnesses highlighted the major contributions these centres make to the sector's innovation efforts. The most well-known achievement of Agriculture and Agri-Food Canada's research and development centres is probably the development of

¹⁰⁶ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 27 September 2018 (The Honourable JoAnne Buth, Chief Executive Officer, Canadian International Grains Institute).

¹⁰⁷ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 29 November 2018 (Rex Newkirk, Associate Professor and Scientific Lead, Canadian Feed Research Centre, University of Saskatchewan).

¹⁰⁸ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 8 November 2018 (Sylvain Charlebois, Professor in Food Distribution and Policy, Faculty of Agriculture, Dalhousie University, As an individual).

¹⁰⁹ Agriculture and Agri-Food Canada, "[Summerland Research and Development Centre](#)."

canola seeds in the 1960s (box 2). Jane Proctor, Vice President of Policy and Issues Management at the Canadian Produce Marketing Association, recommended that the government continue supporting these research centres, as well as educational institutions that contribute to agricultural research.¹¹⁰

Box 2: Canola development in Canada

The success of the canola industry in Canada is an example of successful collaboration between research institutions and government, particularly Agriculture and Agri-Food Canada's research and development centres. Canola belongs to the rapeseed family, which was grown only marginally in Canada before the Second World War. During the war, production intensified to meet the needs of the naval industry, which uses rapeseed oil as an engine lubricant. In the 1950s and 1960s, plant breeding programs conducted by the University of Manitoba and Agriculture and Agri-Food Canada's research and development centres on the Prairies, among others, led to the development of several new species adapted for human consumption. A purely Canadian product, canola is now one of Canada's flagship products in international markets.

Sources: Agriculture and Agri-Food Canada, *Canadian Canola*.
Canola Council of Canada, *History of varietal development*.

Weaknesses of the Canadian System and International Models to Follow



The Food Starter business incubator helps new businesses to commercialize their products. PalettAmerica is one of the companies developing its products and operating in Food Starter's facilities.

Lack of Investment and Difficulty of Commercializing Research and Development Results

While there are many examples of innovative Canadian businesses in the agriculture and agri-food sector, a number of witnesses underscored the sector's relatively low levels of investment in research and development. Mathew Wilson, Vice President of Policy and Government Relations at Canadian Manufacturers and Exporters, argued that the sector has been chronically underinvesting in technology and productivity. He pointed out

¹¹⁰ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 31 May 2018 (Jane Proctor, Vice President, Policy and Issues Management, Canadian Produce Marketing Association).

that, even as the food processing sector has been growing, its spending on machinery and equipment has been declining since 2014. He believes this trend must be reversed if the sector's growth is to continue.¹¹¹ Dennis Prouse, Vice-President of Government Affairs at CropLife Canada, said that Canada cannot rely on foreign innovations and needs domestic ones so that producers and processors have access to new technologies as early as possible. That way, they can build or retain their competitive advantage.¹¹² Finally, Derek Brewin of University of Manitoba noted that government support in areas where private investment is less common is particularly important. This is true of plant breeding for open pollinated crops such as wheat and barley, which receive less attention from private investors than hybrid crops such as corn and canola.¹¹³

In addition to the underinvestment mentioned by a number of witnesses, Michael Wolfson, Sector Development Officer for Economic Development and Culture at the City of Toronto, pointed out that only a small portion of research and development spending leads to a saleable product:

In my research leading up to the opening of the food incubator, I discovered that, in Canada, less than 3 per cent of all money spent on research and development is ever commercialized. We must do a better job. Value-added food production is an expensive industry because of regulations and cost of capital. Building and supporting a network of commercialization centres across Canada that can assist innovative, emerging and growing food businesses and enhance the reputation of Canadian food and beverage products worldwide will go a long way to making the value-added food sector in Canada more competitive in global markets.¹¹⁴

The Committee was able to tour the Food Starter business incubator that Michael Wolfson oversees. This organization rents industrial premises to young entrepreneurs in the food processing sector to help them commercialize their new ideas. During its visit, the Committee heard from Arlene Dickinson, founder of District Venture, an agri-food accelerator in Alberta. The accelerator offers access to funding, mentorship and other support to new businesses in the food sector in order to help them grow rapidly. The Committee also heard that new businesses particularly lack public funding at the last phase

¹¹¹ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 19 April 2018 (Mathew Wilson, Vice President, Policy and Government Relations, Canadian Manufacturers and Exporters).

¹¹² Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 16 October 2018 (Dennis Prouse, Vice-President, Government Affairs, CropLife Canada).

¹¹³ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 25 October 2018 (Derek Brewin, Professor, Faculty of Agricultural and Food Sciences, University of Manitoba, As an individual).

¹¹⁴ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 4 April 2019 (Michael Wolfson, Sector Development Officer, Economic Development and Culture, City of Toronto).

of product development and that regulations are not well designed for small and medium businesses. David Hughes said that incubators are a positive development but emphasized that ongoing support for these businesses is needed after their initial success and when they start to expand their operations.¹¹⁵

*[Y]ou do need some opportunity for start-ups to be able to go and to get an opportunity, to start small and then grow. Clearly there is room for federal and provincial finance in that regard.*¹¹⁶

According to Food and Beverage Canada, implementing policies such as the Accelerated Investment Incentive, a measure proposed in the 2018 Fall Economic Statement, will enhance “industry competitiveness at home and abroad.”¹¹⁷ The Accelerated Investment Incentive provides enhanced first year allowance for certain eligible assets subject to Capital Cost Allowance (CCA) rules.¹¹⁸

Recommendation 5(a): The Committee recommends that the Government of Canada develop initiatives similar to the innovation superclusters in order to support the development of key agriculture and agri-food industries. These should be capable of securing the financial and entrepreneurial resources necessary to support successful innovation and scalability nationwide.

Recommendation 5(b): The Committee recommends that the Government of Canada explore options to fund innovation and adapt to changing market conditions, including changes to capital cost allowance, such as reducing amortization periods or expanding the Accelerated Investment Incentive to apply to agricultural and farming equipment.

¹¹⁵ Ibid. (David Hughes, Emeritus Professor of Food Marketing, Imperial College London, As an individual).

¹¹⁶ Ibid.

¹¹⁷ Food and Beverage Canada, *Brief*, 11 March 2019.

¹¹⁸ Capital cost allowance measures are measures designed to deduce the cost of depreciable property in order for producers and processors to acquire new equipment and machinery.

Strengthening Co-operation among Sectoral Players



During a fact-finding mission, the Committee visited the Richardson Center for Functional Foods and Nutraceuticals at the University of Manitoba where an artificial stomach has been developed jointly with Agriculture and Agri-Food Canada. This device will help researchers to better understand digestion and nutrition.

The lack of co-operation among innovation stakeholders – industry, research institutions and government – was called one of the major weaknesses of Canada's agriculture and agri-food sector. Numerous witnesses cited examples of countries that have established mechanisms to strengthen co-operation among various sectoral players. The Netherlands is one such country, and it has managed to become the second-largest agri-food exporter owing to a number of innovative policies.

Since 2011, the Netherlands has implemented the "top sectors" initiative. This industrial policy promotes coordination between industry, government and research institutions in nine strategic sectors that currently account for 80% of business research and development spending. One of the nine sectors is agri-food and another is horticulture, while most of the others, such as life sciences and high-tech systems, can intersect with the agriculture and agri-food sector. The top sectors are organized into "top teams" made up of high-level representatives of industry, government and research institutions that propose innovation programs to the government, which it evaluates and validates.¹¹⁹ Maarten Schans, Senior Advisor for Agri-Food at the Netherlands Foreign Investment Agency, told the Committee about the role the government plays in this system. The Dutch Ministry of Economic Affairs is the lead ministry for the top sectors policy overall, but some ministries play more specific roles in certain top sectors. Consequently, the agriculture ministry is involved in the agri-food top sector.¹²⁰

¹¹⁹ Organisation for Economic Co-operation and Development, *OECD Reviews of Innovation Policy NETHERLANDS*, OECD Reviews of Innovation Policy, Paris, 16 September 2014.

¹²⁰ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 11 April 2019 (Maarten Schans, Senior Advisor, Agri-Food, Netherlands Foreign Investment Agency).

In addition, the Dutch experience highlights the importance of research partnerships in the agriculture and agri-food sector rather than a siloed approach. Maarten Schans explained to the Committee the interaction between the tech and agriculture sectors in the Netherlands. He provided the example of Dutch technology firm Philipps' successful shift in focus from commodity lighting to high-tech LED lighting that primarily serves the horticultural sector. He added that this shift in focus was made possible because of the "cross-technological collaboration" existing between industrial sectors in the Netherlands.¹²¹

Recommendation 5(c): The Committee recommends that the Government of Canada prioritize strengthening and providing increasing support and funding for basic, applied, and market focused research, especially the development and mentoring of Canada's next generation of highly qualified personnel. Agriculture and Agri-Food Canada's research stations should be integrated into this effort.

Many witnesses from Canadian industry praised the Netherlands' policies. Dave Carey, Executive Director of the Canadian Seed Trade Association, argued that bringing together all the seed organizations into a single body significantly raised the industry's profile within the Dutch government.¹²² Focusing efforts on certain key sectors was also viewed positively. Gregg Curwin, former chief executive officer and Founder of TruLeaf, noted that its emphasis on the greenhouse industry enabled the Netherlands to become a world leader in horticulture and greenhouse technology, which is now imported on a large scale by Canadian businesses.¹²³

A number of witnesses highlighted the need to improve federal data collection in the agriculture and agri-food sector. Evan Fraser of the University of Guelph cited the Netherlands and Israel as models. Both of these countries have implemented data collection systems for the sector that have improved business decision-making. He argued that the sector needs to build information technology (IT) infrastructure that incorporates cloud computing, cybersecurity and blockchain "to ensure that Canadian food systems are transparent and cyber secure." This kind of system would considerably improve food traceability "from farm to store" and meet growing consumer demands for more transparency.¹²⁴ Daniel Miller of the Canadian Food Inspection Agency explained that the agency is focused on implementing the labelling system "of the future" and confirmed that

¹²¹ Ibid.

¹²² Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 27 November 2018 (Dave Carey, Executive Director, Canadian Seed Trade Association).

¹²³ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 21 March 2018 (Gregg Curwin, Former chief executive officer and Founder, TruLeaf).

¹²⁴ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 8 November 2018 (Evan Fraser, Canada Research Chair in Global Food Security, Social Sciences and Humanities, University of Guelph, As an individual).

these initiatives are in response to increasing consumer demands for greater transparency.¹²⁵

Recommendation 5(d): The Committee recommends that the Government of Canada prioritize the modernization of traceability systems for agri-food products, which is of high importance to Canadian and global customers.

Lastly, a number of witnesses said the government needs to update its regulations and policies to fully account for new and emerging technologies that could bring lasting change to the sector. This is especially true of new gene editing techniques, including CRISPR Cas9 technology, which improves plant breeding. Representatives of CropLife Canada explained that the government currently regulates this technology on a case-by-case basis, which creates uncertainty for businesses. They recommended that the government take a more predictable approach to regulating the technology.¹²⁶

¹²⁵ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 9 April 2019 (Daniel Miller, Director General, International Programs Directorate, International Affairs Branch, Canadian Food Inspection Agency).

¹²⁶ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 16 October 2018 (Ian Affleck, Vice-President, Plant Biotechnology, CropLife Canada).

Chapter 4

VALUE-ADDED AGRI-FOOD SECTOR AND INTERNATIONAL TRADE

International trade has a major impact on Canada's value-added agriculture and agri-food sector. Canadian agri-food firms rely on trade to increase their customer base, realize economies of scale, and access the inputs and technologies that they need to succeed.

This chapter outlines the free trade agreements (FTAs) that Canada is a signatory to. It discusses the manner in which these FTAs help Canadian agri-food producers and processors access global markets and contribute to the competitiveness of the value-added agri-food sector. This chapter also provides a brief overview of issues that the federal government should consider in order to foster the performance of Canada's agri-food sector including supply management, increasing the profile of Canadian agri-food products, and interprovincial trade barriers.

Canada's Free Trade Agreements

Canada currently has twelve FTAs with countries representing two-thirds of the world's total gross domestic product (GDP).¹²⁷ Among these agreements, the *North American Free Trade Agreement* (NAFTA) provides access to the American and Mexican markets. On 30 November 2018, Canada, the United States and Mexico concluded negotiations to modernize NAFTA and signed the new Canada–United States–Mexico Agreement (CUSMA).¹²⁸ Canada is also a signatory to the *Comprehensive and Progressive Agreement for Trans-Pacific Partnership* (CPTPP), which entered into force on 30 December 2018.¹²⁹ On 21 September 2017, the *Comprehensive Economic and Trade Agreement* (CETA) between Canada and the European Union provisionally entered into force.

¹²⁷ Government of Canada, *Budget 2019*, 19 March 2019.

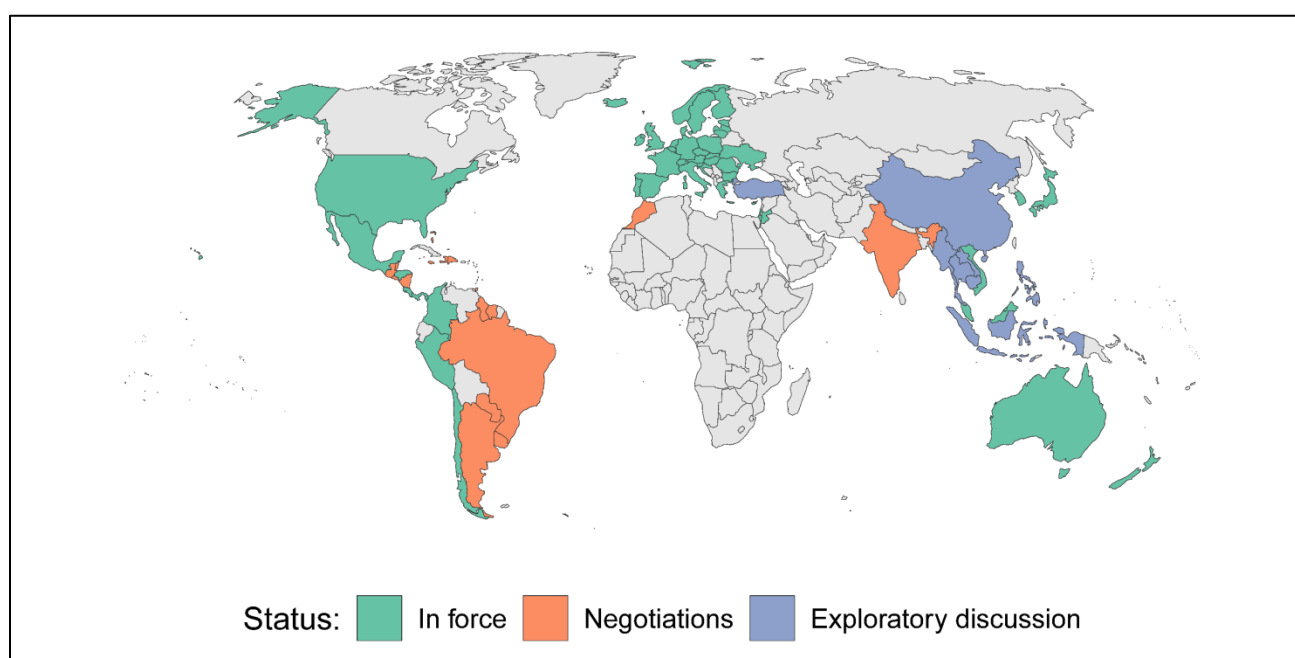
¹²⁸ Pending the ratification and implementation of Canada–United States–Mexico Agreement (CUSMA) by the signatories, the *North American Free Trade Agreement* (NAFTA) continues to regulate trade between Canada, the United States and Mexico.

¹²⁹ The signatories to the *Comprehensive and Progressive Agreement for Trans-Pacific Partnership* (CPTPP) are Australia, Brunei Darussalam, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore and Vietnam.

Exploratory discussions for a possible Canada–Association of Southeast Asian Nations (ASEAN) free trade agreement are ongoing.¹³⁰ In March 2018, Canada and MERCOSUR member states launched negotiations toward a comprehensive free trade agreement.¹³¹

These FTAs allow signatories to grant each other preferential access to their domestic markets. Their provisions generally commit countries to eliminate tariffs on a variety of products, the effect of which is to reduce the cost of trade for exporters and importers, and therefore help to establish a predictable environment that is more conducive to international trade. Figure 3 summarizes Canada's situation regarding its trade agreements and negotiations.

Figure 3 – Distribution of Canadian Free Trade Agreements and Their Status



Source: Figure prepared by the Committee using data obtained from Global Affairs Canada, *Trade and investment agreements*.

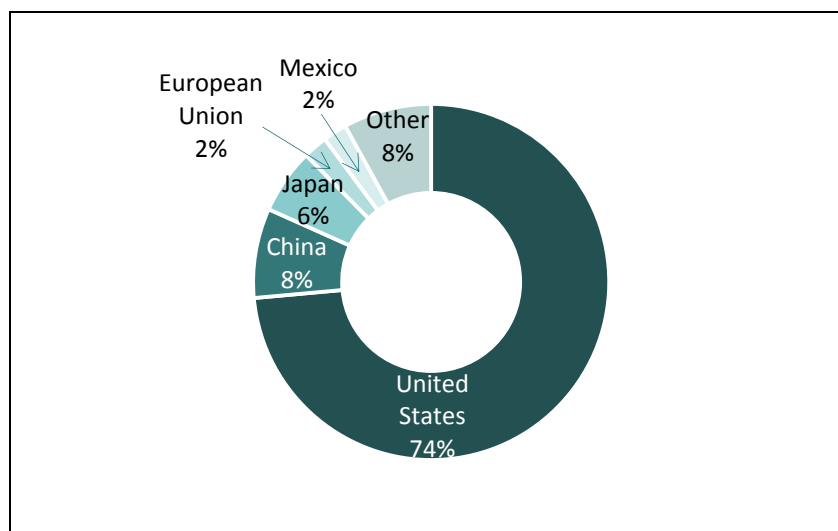
¹³⁰ Association of Southeast Asian Nations (ASEAN) countries are Brunei Darussalam, Cambodia, Indonesia, Laos PDR, Malaysia, Myanmar, Philippines, Singapore, Thailand and Vietnam.

¹³¹ MERCOSUR countries are Argentina, Brazil, Paraguay and Uruguay.

The Need for Market Access and Trade Diversification

Canada is one of the world's largest exporters of agriculture and agri-food products after the European Union, the United States, Brazil and China with export sales of \$59.3 billion in 2018.¹³² Of the \$59.3 billion in Canadian agriculture and agri-food exports in 2018, processed foods and beverages accounted for 61.5% with exports value of \$36.5 billion.¹³³ As Figure 4 reveals, 74% of Canada's processed food and beverages exports are sold to the United States, 8% to China, and 6% to Japan.

Figure 4 – Export Markets of the Canadian Processed Food and Beverages Sector, 2018



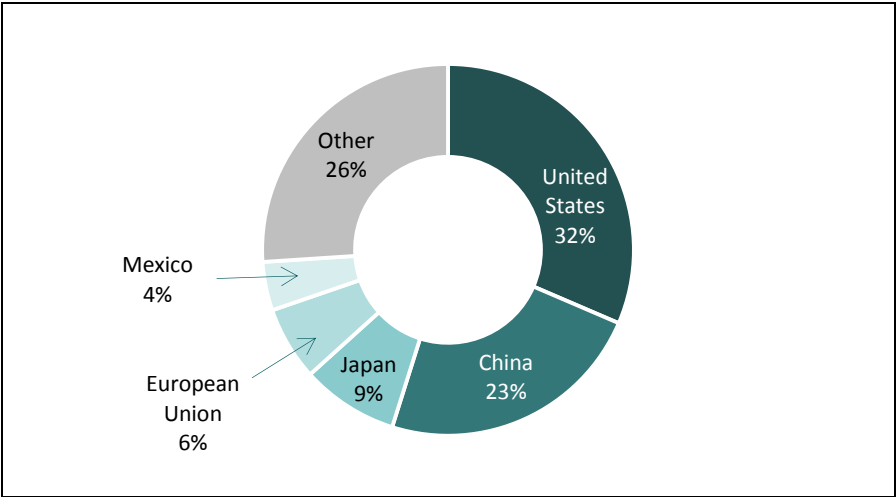
Source: Figure prepared by the Committee using data obtained from Government of Canada, [*Trade Data Online*](#).

¹³² Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 9 April 2019 (Marco Valicenti, Director General, Sector Development and Analysis Directorate, Agriculture and Agri-Food Canada).

¹³³ Ibid.

In 2018, Canada exported primary agriculture products worth \$22.8 billion, accounting for 38.5% of the country's total value of agriculture and agri-food exports for that year. Figure 5 indicates the top five export markets for Canada's primary agriculture products.

Figure 5- Export Markets of the Canadian Primary Agriculture Sector, 2018



Source: Figure prepared by the Committee using data obtained from Government of Canada, *Trade Data Online*.

The Committee heard testimony related to the need for access to foreign markets as a contributing factor to the competitiveness of Canada's value-added agri-food sector. According to Kathleen Donohue, Director General, Market Access Secretariat at Agriculture and Agri-Food Canada because over half the value of the country's agriculture and agri-food production is exported, the sector's competitiveness relies on its ability to increase and diversify access to international markets under FTAs.¹³⁴ Likewise, Claire Citeau, Executive Director of the Canadian Agri-Food Trade Alliance, told the Committee that FTAs influence, in large part, the competitiveness of the agri-food sector in global markets. She stressed that "many components of market access are directly under the influence of FTAs, tariffs, quotas, rules of origin, compliance to sanitary and phytosanitary provisions, trade remedies and subsidies. Competitive access to global markets through FTAs is our top priority as 90% of farmers depend on world markets to sustain their livelihoods."¹³⁵

While access to the U.S. market remains crucial for Canada's agriculture and agri-food sector, witnesses stressed that Canadian firms would benefit from opportunities beyond the United States. John Masswohl, Director of Government and International Relations at the Canadian Cattlemen's Association, said: "the CPTPP agreement is going to be a huge opportunity for us to get a tariff advantage, especially while the United States is not in that deal."¹³⁶ Brian Innes, Vice-President of the Canola Council of Canada, estimated an increase of \$780 million per year of value-added canola products when the CPTPP enters into force.¹³⁷

According to Jack Froese, President of the Canadian Canola Growers Association, Japan is the third-largest export market for Canadian canola products. He pointed out that canola seeds enter duty-free, while canola oil faces a 16% duty. As a result, Canada exported \$1.4 billion in seed and only \$6.4 million in oil to Japan in 2017. He said that the CPTPP will eliminate this tariff discrepancy and that the removal of Japan's oil tariff is expected to spur demand for Canadian canola oil. The increased demand will directly support the growth of value-added processing and productivity in Canada.¹³⁸ Similarly, Roy Davidson, Executive Director of Soy Canada, said that in 2017, Canada exported five million tonnes of soybean seeds and soybean products valued at \$2.5 billion. The primary destinations were China, the European Union, the United States and Japan. He affirmed that Soy Canada would welcome progress in Canada-China trade discussions.¹³⁹

With a domestic population of 35.8 million people and a market representing about 2.1% of global GDP, Canada is a relatively small market. The value-added agri-food sector therefore relies on access to international markets to be competitive and increase or sustain its growth. While the Government of Canada has recently secured market access in

¹³⁴ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 22 November 2018 (Kathleen Donohue, Director General, Market Access Secretariat, Agriculture and Agri-Food Canada).

¹³⁵ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 19 April 2018 (Claire Citeau, Executive Director, Canadian Agri-Food Trade Alliance).

¹³⁶ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 29 March 2018 (John Masswohl - Director of Government and International Relations, Canadian Cattlemen's Association).

¹³⁷ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 26 April 2018 (Brian Innes, Vice-President, Canola Council of Canada).

¹³⁸ Ibid. (Jack Froese, President, Canadian Canola Growers Association).

¹³⁹ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 24 May 2018 (Roy Davidson, Executive Director, Soy Canada).

Europe, Asia-Pacific and North America following the conclusion of CETA, CPTPP and CUSMA, it does not, however, have FTAs with some of Canada's biggest agri-food export markets, including China and India.

Non-Tariff Barriers to Trade as Obstacles to the Competitiveness of the Value-added Agri-Food Sector

International trade in agri-food products can be affected by non-tariff barriers (NTBs) that originate from domestic regulations. While FTAs help reduce tariffs on Canadian agri-food products, some export markets remain inaccessible for certain agri-food products due to NTBs. Agriculture and agri-food products are uniquely vulnerable to a wide range and complex set of regulations, standards, testing and certification procedures that are geared to consumer health and safety protection.

The Committee heard testimony pointing to an increasing use by Canada's trading partners of NTBs over the past few years. For instance, Italy, the third-largest foreign buyer of Canada's durum wheat, cut back on its imports in 2018 because of concerns about the use of the herbicide glyphosate.¹⁴⁰ Cam Dahl, President of Cereals Canada, stated that since Canada signed CETA, the country's durum exports "which are worth about \$500 million have fallen to nothing."¹⁴¹ He explained that this shortfall is due to the Government of Italy "taking protectionist measures that are completely outside of our trade agreements."

Likewise, the Honourable JoAnne Buth said that over the years, Italian farmers have looked for a variety of issues to try and block Canada out of the Italian market. Most recently, they have targeted the use of glyphosate and the potential residues that can be found in durum wheat. She added that "the pressure put on the Italian government has essentially resulted in them placing a non-tariff trade barrier on Canadian durum by requiring zero residues. We all know the difficulty in reaching zero these days. Essentially, we won't be able to reach zero. As a result, the pasta makers have been reluctant and have not been purchasing Canadian durum. That's the situation we face right now."¹⁴²

In the European market, outstanding NTB issues remain on meat processing protocols, crop protection products, country-of-origin labelling and the timely approval of biotechnology traits. Claire Citeau of the Canadian Agri-Food Trade Alliance stressed that farmers are "very concerned with recent protectionist measures from (E.U.) member states under the guise of country-of-origin labelling provisions that are not in the spirit of the CETA. Typically, once free trade agreements are implemented, multiple non-tariff barriers

¹⁴⁰ The reason is that some Italian consumers are afraid Canadian wheat has been "poisoned" because it tested positive for traces of glyphosate, even though glyphosate poses no risk to human health if residues are within accepted limits. A recent study by the Canadian Food Inspection Agency found more than 98% of foods that tested positive for glyphosate were within the acceptable limit. See Canadian Food Inspection Agency, *Safeguarding with Science: Glyphosate Testing in 2015-2016*.

¹⁴¹ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 24 May 2018 (Cam Dahl, President, Cereals Canada).

¹⁴² Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 27 September 2018 (JoAnne Buth, Chief Executive Office, Canadian International Grains Institute).

arise.”¹⁴³ According to Roy Davidson of Soy Canada: “the concern with CETA is the NTBs that Canadian firms face across the agriculture sector which include the long delays in obtaining approval of traits, the non-scientific response to genetically modified crops, and pesticide limits.”¹⁴⁴

Recent regulatory decisions made by the Government of India are affecting Canadian pulse trade. Canada is one of the biggest suppliers of pulse crops to India. In 2016, Canada’s exports of pulses, including dry peas, to India were worth over \$1.1 billion and accounted for 27.5% of Canada’s global pulse exports. India requires that all pulse shipments it imports be fumigated with methyl bromide in the exporting country to make certain that they are free from plant pests that are of concern to India. But Canada had been exempted from the fumigation order since 2004, partly because methyl bromide fumigation is not effective at low temperatures, like those in Canada during the late fall, winter, and early spring. The exemption allowed pulses to be fumigated with methyl bromide after arrival in India. However, the Government of India repealed that exemption in 2017. Since then, India announced a 50% tariff on dry pea imports from Canada.¹⁴⁵

The risk that these regulatory measures could be used solely as trade barriers to protect domestic agri-food sectors have led the World Trade Organization (WTO) to encourage governments to harmonize their requirements on the basis of international standards. In the area of food safety and quality, the WTO’s Agreement on the Application of Sanitary and Phytosanitary (SPS) Measures and WTO’s Agreement on Technical Barriers to Trade (TBT) rely on the Codex Alimentarius standards by setting these out as the benchmark for harmonization.¹⁴⁶ However, countries are not bound to respect these international standards.

In order to trade internationally and have access to foreign markets for high-value agri-food products, Canadian producers must be able to meet national agri-food regulations. The Committee recognizes that complying with these requirements in export markets can be challenging. Coordination between all relevant agencies within government as well as with stakeholders from the entire food supply chain is essential. Actors with responsibility for agri-food control systems require knowledge and skills. Investments in this area will allow Canada to contribute to shaping international standards and take advantage of trade opportunities.

¹⁴³ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 19 April 2018 (Claire Citeau, Executive Director, Canadian Agri-Food Trade Alliance).

¹⁴⁴ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 24 May 2018 (Roy Davidson, Executive Director, Soy Canada).

¹⁴⁵ Agriculture and Agri-Food Canada, Statement by the Government of Canada on Pulse Exports to India, 29 November 2017.

¹⁴⁶ Codex Alimentarius is a compilation of harmonized international food standards, guidelines and codes of practice. Collectively, the Codex texts aim to protect consumer health and promote fair practices in the food trade and are developed with the joint input of the Food and Agricultural Organization, and the World Health Organization.

Recommendation 6: The Committee recommends that the Government of Canada engage actively with its main trading partners to bolster an open and rules-based approach to international trade and address emerging non-tariff barriers to trade in export markets.

Supply Management

In place since the 1970s, Canada's supply management system protects the dairy, poultry and egg sectors against market volatility while providing producers with a stable income. Principally, it regulates supply by restricting production and marketing through quotas, and this in turn increases prices. The supply management system also directly sets the price of the commodity.

There are, however, some drawbacks. For example, because farmers operating under a supply management system receive protected returns for their products, they may have less incentive to seek value-added ventures. Also, there is a concern that supply management greatly increases the costs for new entrants, since production quotas may be difficult to obtain and priced out of reach for most new smaller farm operations.

Some witnesses discussed the possible negative consequences of FTAs regarding the competitiveness of products that are supply-managed in Canada: dairy; chicken; eggs and egg products; turkey; and broiler hatching eggs. Dominique Benoit of the Dairy Processors Association of Canada estimates that "the combined losses from CETA, CPTPP and CUSMA market access commitments will be more than \$2 billion over the course of implementation (of the agreements)". He added that "CETA, CPTPP and CUSMA provide no opportunities for Canada's domestic dairy sector."¹⁴⁷

Likewise, Egg Farmers of Canada claimed that the Canadian market access granted to foreign products under the CUSMA and CPTPP agreements and Canada's commitments to the World Trade Organization will amount to nearly 7% of Canada's current egg production, or 51.4 million dozen eggs.¹⁴⁸

¹⁴⁷ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 16 October 2018 (Dominique Benoit, Member of the Board of Directors, Dairy Processors Association of Canada).

¹⁴⁸ Egg Farmers of Canada, *Brief submitted to the Standing Senate Committee on Agriculture and Forestry*, 18 February 2019.

That is the equivalent of the annual production of nearly 85 average sized egg farms in Canada or more than the entire annual egg production from the Atlantic Provinces (NB, PEI, NS and NL).¹⁴⁹

Chicken Farmers of Canada estimated that the total increased access resulting from CUSMA and CPTPP to the Canadian chicken market will be equal to 10.8% of Canada's production in 2017.¹⁵⁰ Canada will be offering an additional 39.5 million kilograms (Mkg) of access, boosting total access from 90.1 Mkg to 129.6 Mkg.

On an annual basis, this increase in access will translate into \$240 million in fewer contributions to the Canadian economy, as well as the loss of 3,100 jobs nationwide.¹⁵¹

Jean-Charles Le Vallée, Associate Director at the Conference Board of Canada, expressed a different opinion. He asserted that "the supply management system limits Canada's exports of value-added dairy and poultry."¹⁵² He added that firms like Saputo and Agropur buy dairy inputs in the United States, Argentina and Australia because it is not competitive for them to buy such inputs in Canada.

Martha Hall Findlay, President and Chief Executive Officer of the Canada West Foundation stated that partly because of the supply management system, Canada's dairy products are not competitive in export markets.¹⁵³ She explained that "our pricing (of supply-managed products), even if we had no other restriction, are just really expensive and so we won't go flooding the European market because our stuff is too expensive."¹⁵⁴ For her part, Carole Gendron, Director of Regulatory and Sectoral Affairs at Farm Products Council of Canada, said that regarding the poultry, egg and dairy sectors, the focus is to supply the domestic market. She added that "there is no real appetite for export or increasing the export market."¹⁵⁵

¹⁴⁹ Ibid.

¹⁵⁰ Chicken Farmers of Canada, *Brief submitted to the Standing Senate Committee on Agriculture and Forestry*, 18 February 2019.

¹⁵¹ Ibid.

¹⁵² Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 14 June 2018 (Jean-Charles Le Vallée, Associate Director, the Conference Board of Canada).

¹⁵³ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 19 February 2019 (Martha Hall Findlay, President and Chief Executive Officer, Canada West Foundation).

¹⁵⁴ Ibid.

¹⁵⁵ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 19 February 2019 (Carole Gendron, Director of Regulatory and Sectoral Affairs, Farm Products Council of Canada).

Sylvain Charlebois, Professor in Food Distribution and Policy at Dalhousie University, remarked that “in 1972, Canada had 42,000 dairy farms and, today, it has 11,000 of them. That is a closed club that has never really considered its role internationally. Supply management was [...] useful for a period of time. However, I think it has reached the end of its useful life. The industry must think of other solutions. International agreements force us to think differently.”¹⁵⁶ However, Mr. Charlebois added it would be a mistake to abolish the quota system of supply management. He said that “those assets are used by Farm Credit Canada, which is a Crown corporation. Canadians are just as involved in supply management as agricultural producers are. We all participate in that system, in one way or another, be it as consumers, taxpayers or owners within Farm Credit Canada.”

The Committee heard that there is a dairy boom occurring in middle class markets in China, particularly with products such as infant formula, yogurt and fresh milk. Simon Somogyi, Arrell Chair in the Business of Food and Associate Professor, University of Guelph, pointed out that due to Canada’s supply managed sector, it is difficult or impossible to competitively export these products.¹⁵⁷

For the supply managed sector to be competitive, witnesses indicated that long-term strategies such as market development through innovation and investment must be put in place.¹⁵⁸ According to Tim Klompmaker, Board Director at Chicken Farmers of Canada, an investment tax credit program as well as a market development fund will support improvement in farming operations.¹⁵⁹ For his part, Emmanuel Destrijker, Executive Member, Egg Farmers of Canada, said that it is essential for farmers and processors in the supply managed sector to hold extensive consultations with the federal government regarding long-term strategies.¹⁶⁰

The Committee notes that some of this work has already begun. In October 2018, the Government of Canada announced the creation of working groups comprised of representatives from the supply management sector. These working groups — two with dairy farmers and processors and one with poultry and egg farmers and processors — will develop strategies to ensure the long-term viability of the dairy, poultry and egg sectors. But more has to be done. The Committee is of the opinion that significant efforts are still required to foster competitiveness in the supply management sector and ensure that Canadian farmers and processors are able to take advantage of increased global demand for dairy, poultry and egg products.

¹⁵⁶ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 8 November 2018 (Sylvain Charlebois, Professor in Food Distribution and Policy, Dalhousie University).

¹⁵⁷ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 21 March 2019 (Simon Somogyi, Arrell Chair in the Business of Food and Associate Professor, University of Guelph).

¹⁵⁸ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 18 February 2019 (Phil Boyd, Executive Director, Turkey Farmers of Canada).

¹⁵⁹ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 18 February 2019 (Tim Klompmaker, Board Director, Chicken Farmers of Canada).

¹⁶⁰ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 18 February 2019 (Emmanuel Destrijker, Executive Member, Egg Farmers of Canada).

Recommendation 7: The Committee recommends that the Government of Canada commit to supporting supply management by examining initiatives to improve competitiveness and promote growth.

Canada Brand as Catalyst for a Globally Competitive Agri-Food Sector

Canada's value-added agri-food sector is globally recognized as having high quality, innovative and safe products.¹⁶¹ For instance, the country's agri-food firms have over the past few decades pioneered and introduced valuable innovation such as canola, pulses and chilled pork. Canada's per-hectare use of pesticides is among the world's lowest.¹⁶² Farm biosecurity protocols give the Canadian agri-food sector a competitive edge by offering consumers and importing countries products which are resilient to market disruptions resulting from disease or food-safety problems. Canadian agri-food firms are subject to traceability requirements which enable the sector to better manage potential disease outbreaks.

According to Gary Stordy, Director of Government and Corporate Affairs at Canadian Pork Council, "Canada is one of only a few countries to initiate a national swine traceability system. PigTRACE enables the traceability of live animals as an added value to customers."¹⁶³ Likewise, Roy Davidson of Soy Canada said that "the Canadian Identity Preserved Recognition System, which is managed by the Canadian Grain Commission, allows Canada to stand out in foreign markets. Canada is the only country to have a national government-based traceability system for food-grade soybeans that is recognized around the world."¹⁶⁴ These characteristics of the Canadian agri-food sector appeal to consumers who want proof that their food has been produced in a safe and environmentally sustainable way. This reputation is critical for Canada's value-added products to succeed in an increasingly competitive global marketplace. An effective branding initiative can therefore position the country's agri-food products in international markets, build consumer recognition and help command premium prices for these products.

Witnesses highlighted the role of the Canada Brand initiative in enhancing the share of Canada's agri-food sector in global trade. Kathleen Donohue from Agriculture and Agri-Food Canada stated that AAFC administers the Canada Brand program, which is designed to give Canadian agri-food products a competitive advantage by helping to differentiate them through a common strategy and set of tools including graphics and imagery, key

¹⁶¹ Government of Canada, *Unleashing the Growth Potential of Key Sectors*, 6 February 2017, p. 7.

¹⁶² Ibid., p. 8.

¹⁶³ Senate, AGFO, Evidence, 1st Session, 42nd Parliament, 7 June 2018 (Gary Stordy, Director, Government and Corporate Affairs, Canadian Pork Council).

¹⁶⁴ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 24 May 2018 (Roy Davidson, Executive Director, Soy Canada).

advantage messaging and promotional items.¹⁶⁵ Canadian firms involved in producing, promoting or supporting products grown, raised, harvested or processed in Canada are eligible for the program.

Martin Lavoie, President of Canada Pork International, added that as a result of the commercial success of Canadian chilled pork exports, Japanese consumers are able to identify and recognize the quality of Canadian pork. He underlined that Canadian farmers “have tripled chilled pork exports to Japan in the last five years” and that the support from the Canada Brand program contributed to the high export numbers.¹⁶⁶

Even though over 700 Canadian agri-food firms and associations are using the program to enhance their international promotions, Ms. Donohue pointed out that “the Canada Brand (program) has since been scaled back to a basic framework where agri-food firms can continue to take advantage of the existing tag line, photo bank and other tools” for promotional endeavours. For instance, at agri-food shows around the world, the Canada Brand graphics and imagery are used to clearly define Canada’s pavilion, which helps to attract consumers looking for high-quality safe food.

The Committee believes that in order to establish a strong Canadian brand, our agri-food exports need to be effectively marketed, focusing in particular on emerging economies. As the Report of *Canada’s Economy Strategy Tables: Agri-food* states, Canada needs a one brand - one voice approach to increase the visibility and competitiveness of the country’s agri-food sector.¹⁶⁷

Recommendation 8: The Committee recommends that the Government of Canada develop and fund an effective global marketing program that explicitly focuses on increasing the value of the Canada Brand in the minds of global consumers.

Interprovincial Trade Barriers

Canada’s provinces also have a role to play in the competitiveness of the value-added food sector in global markets. Barriers to interprovincial trade increase the cost of doing business, discourage investment and national economies of scale, and erode the competitiveness of the value-added agri-food sector. Witnesses emphasized that the country benefits if internal barriers to trade are minimized, and if producers and processors have fair access throughout the domestic market. Increased access to the Country’s internal market helps agri-food producers to scale up in order to compete abroad.

¹⁶⁵ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 22 November 2018 (Kathleen Donohue, Director General, Market Access Secretariat, Agriculture and Agri-Food Canada).

¹⁶⁶ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 7 June 2018 (Martin Lavoie, President, Canada Pork International).

¹⁶⁷ Innovation, Science and Economic Development Canada, *Canada’s Economic Strategy Tables: Agri-food*, September 2018, p. 14.



Dan Paszkowski of the Canadian Vintners Association, for example, underlined that the first step to global trade success is to ensure that there is free trade within Canada. He explained that “to have wine delivered from a domestic winery is a fact of life in major wine-producing countries, but, in Canada, this would be illegal in seven of 10 provinces, although nine out of 10 Canadians state that they would like provincial laws changed to be able to order wine from an out-of-province winery and have it delivered to their home.”¹⁶⁸ For his part, Cam Dahl of Cereals Canada mentioned that in cases where Canadian provinces have deviated from science-based regulatory decisions, such as Ontario’s ban on neonicotinoids, the outcomes have been counterproductive to Canada’s value-added processing and the country’s export interests.¹⁶⁹

Trade in Canada that crosses provincial/territorial borders is regulated by the Canadian Free Trade Agreement (CFTA), an intergovernmental trade agreement that entered into force on 1 July 2017. Its objectives are to reduce and eliminate, to the extent possible, barriers to the free movement of persons, goods, services and investments within Canada, and to establish an open, efficient and stable domestic market. Because section 121 of the *Constitution Act, 1867* prohibits the application of tariffs on goods that are traded among Canada’s provinces, the CFTA addresses the removal of barriers to internal trade, and includes chapters on government procurement, environmental protection, labour mobility,

¹⁶⁸ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 7 June 2018 (Dan Paszkowski, President and Chief Executive Officer, Canadian Vintners Association).

¹⁶⁹ Senate, AGFO, *Evidence*, 1st Session, 42nd Parliament, 24 May 2018 (Cam Dahl, President, Cereals Canada).

and notification regarding regulatory measures that have the potential to impede the domestic market, among other topics.¹⁷⁰

The Committee notes that the witnesses' remarks are consistent with a number of recent reports that have characterized the country's interprovincial trade barriers as balkanizing the country into separate jurisdictions that impede the free flow of goods. For instance, the 2018 *Report of Canada's Economic Strategy Tables: Agri-food* highlighted packaging requirements as an impediment to internal trade.¹⁷¹ According to the report, "food distributors and processors are prohibited from shipping both fresh and processed fruits and vegetables across provincial boundaries if they do not meet the prescribed rules on packaging, labelling and grading under the *Canadian Agricultural Products Act*." The report also mentions that "allowing goods to be shipped hundreds of kilometres within a province without having to meet these requirements while barring a food processing plant from sourcing the same products from a farm one kilometre away if it happens to be on the other side of a provincial border is a regulatory inconsistency that stifles productivity and efficiency."¹⁷²

Recommendation 9: The Committee recommends that the federal government work actively with provincial/territorial governments to ensure that laws, regulations, and policies enhance trade in agriculture and agri-food products between provinces and territories.

Although the federal and provincial governments have started to address some of the recommendations made in this report on interprovincial trade barriers, the Committee believes that significant efforts are still required to create free trade in agri-food products between provinces/territories. Addressing internal trade barriers should be a priority in order to ensure that Canadian agri-food firms have a level playing field domestically, and can grow and innovate at home so they are better equipped to compete internationally.

¹⁷⁰ Internal Trade Secretariat, *Canadian Free Trade Agreement*.

¹⁷¹ Innovation, Science and Economic Development Canada, *Report of Canada's Economic Strategy Tables: Agri-food*, 28 September 2018.

¹⁷² Ibid.



CONCLUSION

The future of Canada's value-added agriculture and agri-food sector is promising. Value can be added at the production, processing and marketing stages, which offers a wide range of possibilities for Canadian businesses looking to develop new products. Consumers are increasingly asserting their preferences for products that meet specific requirements, such as transparency, sustainability and safety; this trend poses a challenge for the sector, and it will have to adapt quickly. In order to achieve this, Canada could draw inspiration from countries such as the Netherlands, which have put in place robust innovation support mechanisms such as effective synergies between the agriculture and agri-food industry, government and academia. As a result, the Netherlands is currently second in global agri-food exports, even though it has limited agricultural resources in comparison to Canada's.

Nevertheless, Canada has many strengths that will help it seize these opportunities and meet these challenges. The country is home to an abundance of primary agricultural products and many innovative businesses. Many challenges still need to be overcome, including the sizeable challenges posed by labour shortages in the agriculture sector, transportation infrastructure, regulatory issues as well as international and interprovincial trade barriers. These challenges compromise the success of producers and processors by limiting their ability to recruit labour or access international markets among others. Finally, Canada's success in international markets still depends heavily on the government's ability to negotiate trade agreements with its partners and address the trade barriers that affect its products.

APPENDIX A: WITNESSES

DATE OF APPEARANCE	NAME, TITLE	ORGANIZATION
Thursday, April 11, 2019	Diederik Beutener, Trade Commissioner	Embassy of Canada to the Kingdom of the Netherlands
	Maarten Schans, Senior Advisor Agri-Food	Netherlands Foreign Investment Agency
Tuesday, April 9, 2019	Marco Valicenti, Director General, Sector Development and Analysis Directorate, Market and Industry Services Branch	Agriculture and Agri-Food Canada
	Doug Band, Director General, Trade and Anti-dumping Programs Directorate	Canada Border Services Agency
	Fred Gaspar, Director General, Commercial Program Directorate	
	Daniel Miller, Executive Director, International Programs Directorate, International Affairs Branch	Canadian Food Inspection Agency
	Christopher Wilkie, Director General, Trade Sectors	Global Affairs Canada
	Iyana Goyette, Deputy Director, Trademarks Branch, Canadian Intellectual Property Office	Innovation, Science and Economic Development Canada
	Andrea Johnston, Assistant Deputy Minister, Innovation Canada	
	Mesmin Pierre, Director General, Trade-marks Branch, Canadian Intellectual Property Office	
Thursday, April 4, 2019	David Hughes, Emeritus Professor of Food Marketing, Imperial College London	As an Individual

	Michael Wolfson, Sector Development Officer, Economic Development & Culture	City of Toronto
	Emily Haynes, Executive Director	Taste of Nova Scotia
Tuesday, April 2, 2019	Tim Heney, Chief Executive Officer, Thunder Bay Port Authority	Association of Canadian Port Authorities
	Debbie Murray, Director, Policy and Regulatory Affairs	
	Wendy Zatylny, President	
	Cindy Bell, Executive Vice-President, Corporate Development	Genome Canada
	Marc Lepage, President and Chief Executive Officer	
Thursday, March 21, 2019	Simon Somogyi, Arrell Chair in the Business of Food and Associate Professor, University of Guelph	As an Individual
	Gregg Curwin, Former Chief Executive Officer and Founder	TruLeaf
	Derek Vella, Manager, Guelph Food Innovation Centre	University of Guelph
Thursday, February 28, 2019	Myrna Gillis, Chief Executive Officer	Aqualitas
Thursday, November 29, 2018	Luis Garcia, Chair, Craig Richardson Institute of Food Processing Technology	Conestoga College
	Lyndon Ashton, Manager, Canadian Food and Wine Institute Innovation Centre	Niagara College Canada
	Heather Hill, Research Manager, Culinary Research and Innovation, Paterson GlobalFoods Institute	Red River College
	Rex Newkirk, Associate Professor and Scientific Lead, Canadian Feed Research Centre	University of Saskatchewan

Tuesday, November 27, 2018	Dave Carey, Executive Director	Canadian Seed Trade Association
	Todd Hyra, President	
	Patrick Smith, President	Intellectual Property Institute of Canada
Thursday, November 22, 2018	Kathleen Donohue, Director General, Market Access Secretariat, International Affairs Branch	Agriculture and Agri-Food Canada
	Lynn Renaud, Director General, Business Development and Competitiveness Directorate, Programs Branch	
	Stephen Laskowski, President	Canadian Trucking Alliance
Thursday, November 8, 2018	Sylvain Charlebois, Professor in Food Distribution and Policy, Faculty of Agriculture, Dalhousie University	As an Individual
	Evan Fraser, Canada Research Chair in Global Food Security, Social Sciences and Humanities, University of Guelph	
Thursday, October 25, 2018	Derek Brewin, Professor, Faculty of Agricultural and Food Sciences, University of Manitoba	As an Individual
	Bruno Larue, Full Professor, Faculty of Agricultural and Food Sciences, Université de Laval	
	Naomi Iwashita, Manager, Temperature Control Solutions Intermodal	Canadian Pacific
	Robert Taylor, Assistant Vice President, North American Advocacy	
	David Przednowek, Director of Grain Marketing	CN

Thursday, October 18, 2018	Ted Haney, Executive Director	Canadian Hemp Trade Alliance
	Rob Ziner, Founder and Chief Executive Officer	Canadian Industrial Hemp Corporation
Tuesday, October 16, 2018	Andrew Casey, President and Chief Executive Officer	BIOTECCanada
	Ian Affleck, Vice-President, Plant Biotechnology	CropLife Canada
	Dennis Prouse, Vice-President, Government Affairs	
	Dominique Benoit, Member of the Board of Directors	Dairy Processors Association of Canada
	Mathieu Frigon, President and Chief Executive Officer	
Thursday, October 4, 2018	Tom Rosser, Assistant Deputy Minister, Strategic Policy Branch	Agriculture and Agri-Food Canada
	Marco Valicenti, Director General, Sector Development and Analysis Directorate, Market and Industry Services Branch	
	Ryan Koeslag, Executive Vice-President and Chief Executive Officer	Canadian Mushroom Growers' Association
	Steven West, Director, Sector policy, Temporary Foreign Worker Program, Skills and Employment Branch	Employment and Social Development Canada
	Baerbel Langner, Legal Counsel-Immigration, Past Chair, Canadian Bar Association, National Immigration Section	HyLife

	Natasha Kim, Director General, Immigration Branch	Immigration, Refugees and Citizenship Canada
	Helene Panagakos, Director, Temporary Resident Program Division, Immigration Program Guidance	
	Justine Taylor, Science and Government Relations Manager	Ontario Greenhouse Vegetable Growers
Tuesday, October 2, 2018	Keron Headley	As an Individual
	Portia MacDonald-Dewhirst, Executive Director	Canadian Agricultural Human Resource Council
	Mary Robinson, Chair	
	Kenneth Elgin Forth, President	Foreign Agricultural Resource Management Services
	Derek Johnstone, Special Assistant to the National President	United Food and Commercial Workers of Canada
Thursday, September 27, 2018	Phil de Kemp, Executive Director	Barley Council of Canada
	Jean-Pierre Haché, Vice President Quality Assurance and Health and Safety	Bonduelle Americas
	Mark McNeil, Chief Executive Officer	
	The Honourable JoAnne Buth, Chief Executive Officer	Canadian International Grains Institute
	Irv Teper, Chief Executive Officer	Concord Premium Meats Ltd
	Denise Allen, President and Chief Executive Officer	Food Processors of Canada
Tuesday, September 25, 2018	Daniel A. Richard, Senior Corporate Counsel and Director of Government Relations, J. D. Irving Ltd.	Cavendish Farms Corporation

Thursday, September 20, 2018	Paul Hetherington, President and Chief Executive Officer	Baking Association of Canada
	Rebecca Lee, Executive Director	Canadian Horticultural Council
	Gordon Harrison, President	Canadian National Millers Association
	Bruce MacIntyre, Member of Executive Committee	
	Buck (Harold) VanNiejenhuis, Member of Executive Committee	
	Gordon Bacon, Chief Executive Officer	Pulse Canada
Thursday, June 14, 2018	Donald Buckingham, President and Chief Executive Officer	Canadian Agri-Food Policy Institute
	Tulay Yildirim, Director of Research	
	Corinne Pohlmann, Senior Vice President, National Affairs and Partnerships	Canadian Federation of Independent Business
	Jean-Charles Le Vallée, Associate Director, Food Horizons Canada	The Conference Board of Canada
Thursday, June 7, 2018	Gary Stordy, Director, Government and Corporate Affairs	Canadian Pork Council
	Martin Lavoie, President and Chief Executive Officer	Canada Pork International
	Dan Paszkowski, President and Chief Executive Officer	Canadian Vintners Association
	CJ Hélie, Executive Vice President	Spirits Canada
	Jan Westcott, President and Chief Executive Officer	
Thursday, May 31, 2018	Tia Loftsgard, Executive Director	Canada Organic Trade Association
	Jane Proctor, Vice President, Policy and Issues Management	Canadian Produce Marketing Association
	Keith Kuhl, President Chief Executive Officer	Southern Potato Company
	Ray Price, President	Sunterra Farms Ltd.

Thursday, May 24, 2018	Cam Dahl, President	Cereals Canada
	Ron Davidson, Executive Director	Soy Canada
Thursday, May 3, 2018	Peter Mulherin, Chairperson	Canadian Food Exporters Association
	Susan Powell, President and Chief Executive Officer	
	Teresa Schoonings, Member of Board of Directors	Food and Beverage Canada
Thursday, April 26, 2018	Keith Mussar, Vice President Regulatory Affairs	Canadian Association of Importers and Exporters
	Joy Nott, President and Chief Executive Officer	
	Jack Froese, President	Canadian Canola Growers Association
	Catherine Scovil, Director of Government Relations	
	Chris Vervaet, Executive Director	Canadian Oilseed Processors Association
	Brian Innes, Vice-President, Public Affairs	Canola Council of Canada
Thursday, April 19, 2018	Claire Citeau, Executive Director	Canadian Agri-Food Trade Alliance
	Mathew Wilson, Vice President, Policy and Government Relations	Manufacturers and Exporters
	Sylvie Cloutier, President and Chief Executive Officer	Conseil de la transformation alimentaire du Québec
	Dimitri Fraeys, Vice-President, Innovation and Economic Affairs	
	Carla Ventin, Vice President, Government Relations	Food & Consumer Products of Canada

Thursday, March 29, 2018	John Masswohl, Director of Government and International Relations	Canadian Cattlemen's Association
	Chris White, President and Chief Executive Officer	Canadian Meat Council

APPENDIX B: WRITTEN SUBMISSIONS RECEIVED BY THE COMMITTEE

ORGANIZATION	SUBMITTER
Agriculture and Agri-Food Canada	Kathleen Donohue
	Lynn Renaud
As Individuals	Dominic Barton
	Bruno Larue
	Simon Somogyi
	Franco J. Vaccarino
Association of Canadian Port Authorities	Tim Heney
	Wendy Zatylny
Atlantic Chamber of Commerce	Organization Only
Baking Association of Canada	Paul Hetherington
Canada Organic Trade Association	Tia Loftsgard
Canadian Agricultural Human Resource Council	Portia MacDonald-Dewhirst
Canadian Agri-Food Policy Institute	Donald Buckingham
Canadian Federation of Independent Business	Corinne Pohlmann
Canadian Health Food Association	Organization Only
Canadian Hemp Trade Alliance	Ted Haney
Canadian Industrial Hemp Corporation	Rob Ziner
Canadian Horticultural Council	Organization Only
Canadian International Grains Institute	The Honourable JoAnne Buth
Canadian Meat Council	Organization Only
Canadian Mushroom Growers' Association	Ryan Koeslag
Canadian National Millers Association	Gordon Harrison

Canadian Produce Marketing Association	Organization Only
Canadian Seed Trade Association	Dave Carey Todd Hyra
Canadian Trucking Alliance	Stephen Laskowski
Canadian Vintners Association	Dan Paszkowski
Cereals Canada	Cam Dahl
Chamber of Commerce for Greater Moncton	Organization Only
Conestoga College	Luis Garcia
Food and Beverage Canada	Teresa Schoonings
Food and Beverage Ontario	Organization Only
Food & Consumer Products of Canada	Carla Ventin
Food Processing Skills Canada	Organization Only
Food Starter	Organization Only
Foreign Agricultural Resource Management Services	Kenneth Elgin Forth
Fredericton Chamber of Commerce	Organization Only
Immigration, Refugees and Citizenship Canada	Natasha Kim
Innovation, Science and Economic Development Canada	Andrea Johnston Mesmin Pierre
Intellectual Property Institute of Canada	Patrick Smith
Netherlands Foreign Investment Agency	Maarten Schans
Niagara College Canada	Lyndon Ashton
Ocean Spray Cooperative	Organization Only
Ontario Greenhouse Vegetable Growers	Justine Taylor

Pulse Canada	Gordon Bacon
Red River College	Heather Hill
Spirits Canada	Jan Westcott
The Canadian Chamber of Commerce	Ryan Greer
United Food and Commercial Workers of Canada	Derek Johnstone

APPENDIX C: FACT-FINDING MISSIONS

Plessisville, QC - October 19, 2018

ORGANIZATION	NAME, TITLE
Visit to Fruit d'Or	Martin Le Moine, President
	François Ferland, Process Technician
	Mathieu Chandonnet, Process Technician
	Simon Bonin, Berry Procurement, Agronomist
	Sylvie Cloutier, President and Chief Executive Officer, Conseil de la transformation alimentaire du Québec
	Dimitri Fraeys, Vice-President, Innovation and Economic Affairs, Conseil de la transformation alimentaire du Québec
Visit to Citadelle	Michel Labbé, President
	Martin Plante, Chief Executive Officer
	Jean-Marie Chouinard, Director of Corporate Affairs and Corporate Secretary

Kelowna, BC and Winnipeg, MB - October 28 to November 3, 2018

ORGANIZATION	NAME, TITLE
Visit to Sun-Rype Products Limited	Amanda Burns, Vice President & Chief Financial Officer
	Jason Leithead, Vice President of Operations & Logistics
	Jeff Clark, Assistant Operations Manager-Beverage
	Mark Fraser, Assistant Operations Manager-Food
Visit to Summerland Sweets Ltd.	Len Filek, General Manager
Visit to Pacific Agri-Food Research Centre	Joyce Boye, Director RDT
	Manuel Juarez, Acting Associate Director

	<p>Jesse MacDonald, Biologist</p> <p>Peter Toivonen, Research Scientist (Postharvest Physiology)</p> <p>Pat Bowen, Research Scientist (Viticulture and Plant Physiology)</p> <p>Masoumeh Bejaei, Research Scientist (Food Sensory and Consumer Research)</p> <p>Pascal Delaquis, Research Scientist (Food Microbiology)</p> <p>Kelly Ross, Research Scientist (Food Biochemistry and Food Processing)</p> <p>Kevin Usher, Research Scientist (Viticulture and Sustainable Production Systems)</p>
Visit to Nk'Mip Cellars	<p>Josie Tyabji, Senior Director of Estates and Industry</p> <p>Cassandra Capone, Visitor Experience Manager</p> <p>Troy Ravndahl, Manager, Retail</p>
BC Fruit Growers Association	<p>Pinder Dhaliwal, President</p> <p>Glen Lucas, General Manager</p>
Visit to BC Tree Fruits Cooperative	<p>Stan Swales, Chief Executive Officer</p> <p>Warren Everton, Chief Financial Officer</p> <p>Peter Hoffman, Director of Operations</p> <p>Michael Daley, Cider General Manager</p> <p>Chris Pollock, Marketing Manager</p>

Visit to Mission Hill Wines	<p>Michael Hill, Chief Operating and Financial Officer</p> <p>Graham Nordin, Director of Wine Experience</p> <p>Barinder Singh Sall, Vice President of Government and Regulatory Affairs, Canada</p> <p>The Mark Anthony Group of Companies</p> <p>Anita Stewart, Culinary author and food activist</p>
Visit to Inovata Foods Corp. - Culinary Innovation Center	<p>Jason Yohemas, Chief Financial Officer</p> <p>Jonathan Smid, Director of Culinary Innovation</p>
The Young Agrarians Network, Kelowna, British Columbia	<p>John Hofer, Organic Farmers, Wise Earth Farm</p> <p>Brenda Paterson, Organic Farmers, Wise Earth Farm</p> <p>Tyler Chartrand, Ogopogo Salsa</p> <p>Jeremy Shelton</p> <p>Jennifer Hiebert</p> <p>Sajiva Kombucha</p>
Visit to Canadian International Grain Institute	<p>The Honourable JoAnne Buth, Chief Executive Officer</p> <p>Dean Dias, Director, Value Chain Relations</p> <p>Adam Deck, Director of Operations, Warburtons</p>
Visit to Bruce D. Campbell Farm and Food Discovery Centre, University of Manitoba	<p>Karin Wittenberg, Dean, Faculty of Agricultural and Food Sciences</p> <p>Jitendra Paliwal, Associate Dean (Graduate Programs)</p> <p>Michele Rogalsky, Director, School of Agriculture</p> <p>Derek Brewin, Head, Department of Agribusiness and Agricultural Economics</p>

	<p>Peter Jones, Director, Richardson Centre for Functional Foods and Nutraceuticals</p> <p>James House, Head, Department of Food and Human Nutritional Sciences</p> <p>Kim Ominski, Professor and Associate Head, Department of Animal Science</p> <p>Yvonne Lawley, Assistant Professor, Department of Plant Science</p> <p>Myrna Grahn, Manager, Bruce D. Campbell Farm and Food Discovery Centre</p> <p>Kristen Matwychuk, Coordinator, Bruce D. Campbell Farm and Food Discovery Centre</p> <p>Crystal Jorgenson, Communications Specialist, Faculty of Agricultural and Food Sciences</p>
Visit to Hemp Oil Canada	<p>Clarence Shwaluk, Director, Farm Operations Fresh Hemp Foods Ltd</p> <p>Rachel Catellier, Logistics and Regulatory Supervisor, Manitoba Harvest</p>
Visit to Viterra Oil Seed Processing Plant, Ste. Agathe, Manitoba	<p>Nevin Fahmy, Procurement Coordinator</p> <p>Farid Borji, Production Supervisor</p> <p>Alvin Klippenstein, Load out supervisor</p> <p>Rene Labossiere, Chief Power Engineer</p> <p>Mina Shenoda, Maintenance Planner</p> <p>Eric Garand, Quality Assurance Manager</p> <p>Russell Erb, Grain Manager</p> <p>Isaac Cohen, Maintenance Manager</p> <p>Ilana Trahtenberg, Production Manager</p> <p>Michael Moussa, Director, Technical Operations Oil Processing</p>

	<p>Richard Wansbutter, Government Relations/Consultant</p> <p>Rick White, Chief Executive Officer Canadian Canola Growers Association</p> <p>Chris Vervaet, Executive Director Canadian Oil Processors Association</p>
Visit to Richardson Centre for Functional Foods and Nutraceutical, University of Manitoba	<p>Peter Jones, Director</p> <p>Michael Janzen, Development Manager</p> <p>Tom Grafenhan, Research Scientist/Program Manager Microbiology</p> <p>Sijo Joseph (Thandapilly), Adjunct Professor, Department of Human Nutritional Sciences</p> <p>Nooshin Nikmaram, PhD Student</p> <p>Ruchira Nandasiri, PhD Student</p> <p>Mark Pinder, MSc Candidate</p> <p>Adam J. Franczyk, PhD Student</p> <p>Jiaur Rahman, PhD Student</p> <p>Yongbo She, PhD Student</p> <p>Maryam Samsamikor, PhD Student</p>
Visit to Maple Leaf Foods	<p>Paul Hughes, Production Manager</p> <p>Graeme Acheson, Production Manager</p> <p>Carmelle Voth, Manager, Human Resources</p>
Visit to Peak of the Market	<p>Beth Connery, Chair of the Board</p> <p>Larry McIntosh, President and Chief Executive Officer</p> <p>Mark Zachanowich, Vice President Operations</p> <p>Pam Kolochuk, Chief Financial Officer</p> <p>Tracy Shinnars – Carnelley, Vice President Research & Quality</p>

Visit to Canadian Malting Barley Technical Centre	Peter Watts, Managing Director
	Yueshu Li, Director of Malting & Brewing Operations
	Andrew Nguyen, Malting & Brewing Technical Specialist
	Michael McMullen, President, MCM Consulting Limited, Governor, Canadian Chamber of Commerce , Vice-Chair, Aboriginal Chamber of Commerce

Guelph, ON - March 10 to March 13, 2019

ORGANIZATION	NAME, TITLE
Visit to Ontario Food Terminal	Gianfranco Leo, Administration Manager, Ontario Food Terminal
	Gary Da Silva, Operations Manager, Ontario Food Terminal
	David Pingitore, Super Select Produce Buyer
	Rob Roorda, Wholesaler
	Steve Bamford, Wholesaler
	Marcus Koorneef, Wholesaler
Visit to Food Starter Facility	Jackie Kwitco, Owner, Fressie Bessie
	Nader Halal, Owner, Nader Halal Foods
	Kevin Lee, Owner, Yumba Foods
	Will Bowcott, Owner, Yumba Foods
	Varun Sharma, Owner, Yumba Foods
	Mauro Ritacca, Owner, Cucina Mauro Catering
	Adam Lewis, Owner, Muira Cold Brew Coffee
	Bobby Khorasani, Owner, Abokichi
	Fumi Tsukamoto, Owner, Abokichi

	<p>Kimoko Oiuchikura, Abokichi</p> <p>Gassan El Aisami, Owner, Palett America</p> <p>Jada El Yasin, Owner, Palett America</p> <p>Arlene Dickinson, District Ventures</p> <p>Michael Wolfson, Sector Development Officer, Economic Development & Culture Division, City of Toronto</p>
<p>Visit to Maple Leaf ThinkFOOD Culinary Centre</p>	<p>Graeme Jewett, President & Chief Executive Officer, Marsan Foods</p> <p>Katherine Sullivan, Chief Executive Officer, Food and Beverage Canada</p> <p>Don Kilimnik, Vice-President, Grand River Foods / DC Foods</p> <p>Norm Beal, Chief Executive Officer, Food and Beverage Ontario</p> <p>Del Rollo, Senior Director, National Industry and Government Relations, Arterra</p> <p>Barb Callander, Vice-President, Operations Excellence and Learning, Maple Leaf Foods</p> <p>Carol Gardin, Director Corporate Affairs, Maple Lodge Farms</p> <p>Jason Crawford, Director, Industry Relations, Food and Beverage Ontario</p> <p>Luis Rivas, Vice President of Sales and Marketing, GS Dunn Limited</p> <p>Anita Stewart, Food Laureate, University of Guelph</p> <p>Adam Reynolds, Technical Manager, Marketing – Product Development Maple Leaf Foods</p>

Visit to Salerno Dairy and Dairy Innovation Centre	<p>Mario DiCunto, Operations Manager Salerno Dairy</p> <p>Kulwinder Singh, Production Supervisor Salerno Dairy</p> <p>Rob Goodwill, Chair of Board, Gay Lea Foods</p> <p>Rosemary MacLellan, Vice President, Strategy & Industry Affairs, Gay Lea Foods</p> <p>Ingrid Alaya, Director, Innovation Portfolio and Project Management, Gay Lea Foods Amanda Stewart, Assistant Product Manager, Marketing, Gay Lea Foods</p> <p>Paul Yorke, Lead Chef, Hamilton</p>
Archibald Innovations Inc	Bruce Archibald, President
Golden Horseshoe Food and Farming Alliance	Janet Horner, Executive Director
Ontario Agri-Food Technologies	Gord Surgeoner, Past President
Visit to Good Leaf Farms	<p>Gregg Curwin, Former Chief Executive Officer and Founder, TruLeaf</p> <p>Jeff McKinnon, Vice President and Chief Financial Officer, TruLeaf</p> <p>Paul Decoste, Manager, Good Leaf Farms</p> <p>David MacGregor, Director, AgVentures, McCain Foods</p>
Visit to Ontario Agricultural College, University of Guelph	<p>Franco J. Vaccarino, President</p> <p>Malcolm Campbell, Vice-President, Research</p> <p>Daniel Atlin, Vice-President External</p> <p>Mellissa McDonald, Director, Government Relations</p> <p>David Aitken, Community Engagement Coordinator</p> <p>Evan Fraser, Professor, Canada Research Chair in Global Food Security, Director, Arrell Food Institute</p>

	Gisele LaPointe Professor, NSERC/Dairy Farmers of Ontario, Industrial Research Chair in Dairy Microbiology
	Maria Corradini, Associate Professor and Arrell Chair in Food Quality
	Derek Vella, Manager, Guelph Food Innovation Centre
	Logan Emiry, Vice President Internal, Student Federation of the Ontario Agricultural College
	Jamie Naylor, Student, Department of Food, Agricultural and Resource Economics
	Connor Watson, Student, College of Business and Economics
	Amanda Norris, Student, Department of Food, Agricultural and Resource Economics
	Brendan McDougall, Student, Department of Food, Agricultural and Resource Economics
	Edwige Tia, Student, Department of Food, Agricultural and Resource Economics
	Andrea Bravo, Student, Ontario Agricultural College
	Andrew Nixon, Student, Gordon S. Lang School of Business and Economics
	Emily Duncan, Student, Arrell Food Institute
	Elise Richmond, Student, Department of Food, Agricultural and Resource Economics
	Abdul-Rahim Abdulai, Student, College of Social and Applied Human Sciences
	Elaine Jeffs, Vice President External, Student Federation of the Ontario Agricultural College

Visit to Barrie's Asparagus Farm and Country Market	<p>Tim Barrie, Owner</p> <p>Will Barrie, Business Partner</p> <p>Becky Barrie</p>
Visit to Willibald Farm Distillery	<p>Cam Formica, Co-Founder</p>
Visit to Martin's Family Fruit Farm	<p>Steve Martin, Retail Sales Manager</p> <p>Ken Martin, Manager of Growing Operations</p> <p>Peter Katona, Sales and Marketing manager</p> <p>Chris Taylor, Chief Financial Officer</p>
Visit to Elora Dairy Research Facility, University of Guelph	<p>Bev Livingston, Dairy Station Manager, Elora Dairy Research Facility</p> <p>Mike von Massow, Associate Professor, Department of Food, Agricultural and Resource Economics</p> <p>Dr. Stephen LeBlanc, Research Program Director, Animal Production Systems</p> <p>Rebecca Rebus, Dairy Facility Knowledge Mobilization Coordinator, Elora Dairy Research Facility</p> <p>Sarah Parsons, Graduate Student and Researcher, Elora Dairy Research Facility</p>
Visit to Chudleigh's Ltd	<p>Dean Chudleigh, Owner</p> <p>Joyce Hughes, Vice President Operations</p>
Visit to Wheelbarrow Orchards	<p>Heather Fraser, Co-Owner, Chief Cook and Bottle Washer</p> <p>Brad Fraser, Co-Owner, Marketing Manager / Farmer</p> <p>Pete Fraser, Promotions and Marketing</p>
Visit to Heatherlea Farm	<p>Pat McArthur, Co-Owner</p> <p>Gord McArthur , Co-Owner</p> <p>Melinda McArthur</p> <p>Don McArthur</p>

APPENDIX D: WITNESSES

DATE OF APPEARANCE	NAME, TITLE	ORGANIZATION
Monday, February 18, 2019	Tim Klompmaker, Board Director, Ontario	Chicken Farmers of Canada
	Yves Ruel, Director of Trade and Policy	
	Jack Greydanus, Chair	Canadian Hatching Egg Producers
	Salomon Compaoré, Economist	
	Phil Boyd, Executive Director	Turkey Farmers of Canada
	Emmanuel Destrijker, Executive Member	Egg Farmers of Canada
Tuesday, February 19, 2019	Judi Bundrock, Director of International Trade Policy	
	Mike Pickard, Vice-Chairman	Farm Products Council of Canada
	Carole Gendron, Director of Regulatory & Sectoral Affairs	
	Serge Riendeau, Chief Executive Officer	Canadian Dairy Commission
	Benoît Basillais, Director, Policy and Economics	
	Sylvain Charlebois, Professor in Food Distribution and Policy, Faculty of Agriculture, Dalhousie University	As an individual
Thursday, February 21, 2019	Martha Hall Findlay, President and Chief Executive Officer	Canada West Foundation
	Al Mussell, Research Lead	Agri-Food Economic Systems
	Tom Rosser, Assistant Deputy Minister, Strategic Policy Branch	Agriculture and Agri-Food Canada
	Frédéric Seppey, Assistant Deputy Minister, Market and Industry Services Branch	
	Doug Forsyth, Director General, Market Access	Global Affairs Canada

Tuesday, February 26, 2019	Pierre Lampron, President	Dairy Farmers of Canada
	David Wiens, Vice-President	
	Reint-Jan Dykstra, Vice-President	
	Alain Bourbeau, Director General	Les Producteurs de lait du Québec
	Murray Sherk, Chair	Dairy Farmers of Ontario
	Dominique Benoit, Member of the Executive Council and Treasurer	Dairy Processors Association of Canada
	Mathieu Frigon, President and Chief Executive Officer	
	Mark Taylor, Chief Executive Officer	Parmalat Canada
	Anita Jarjour, Director, Government and Industry Relations	
	Chad Mann, Chief Executive Officer	Amalgamated Dairies Limited (ADL)

APPENDIX E: WRITTEN SUBMISSIONS RECEIVED BY THE COMMITTEE

ORGANISME	DÉPOSANT
Agri-Food Economic Systems	Al Mussell
	Douglas Hedley
Canadian Hatching Egg Producers	Jack Greydanus
Chicken Farmers of Canada	Tim Klompmaker
	Yves Ruel
Egg Farmers of Canada	Emmanuel Destrijker
	Judi Bundrock
Parmalat Canada	Mark Taylor
	Anita Jarjour
Turkey Farmers of Canada	Phil Boyd



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