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## Wednesday, May 30, 2018

## Chair

**Mr. Pat Finnigan**

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● (1610)

[*Translation*]

**The Chair (Mr. Pat Finnigan (Miramichi—Grand Lake, Lib.)):** Welcome everyone.

[*English*]

The theme of our study is advancements of technology and research in the agriculture industry that can support Canadian exports.

With us today from the Agricultural Institute of Canada is Monsieur Serge Buy, chief executive officer.

I hope I pronounced your name correctly.

**Mr. Serge Buy (Chief Executive Officer, Agricultural Institute of Canada):** Yes.

**The Chair:** From the Canola Council of Canada, we have Mr. Brian Innes, vice-president of public affairs.

We will start with an opening statement of up to seven minutes.

Monsieur Buy.

**Mr. Serge Buy:** Thank you very much, Mr. Chair.

I'm pleased to be here today. I want to acknowledge today that the minister is in Texas. I believe a press release was put out. The press release indicates the partnership between Canada and Texas on agriculture. It mentions that Texas imported over $831 million in agricultural goods. It shows the importance of the agricultural sector. It's going to be a good part of my presentation and how innovation and research can help increase those exports.

The Agricultural Institute of Canada, AIC, was founded almost 100 years ago, in 1920, as a unifying voice for cross-sectorial research and innovation in Canada. We advocate on behalf of agricultural research, disseminate information, and create international linkages.

During the committee's recent travels, I know that you have seen first-hand how innovations and new technologies are making Canada's agricultural sector more efficient and increasing the value of products.

With exports valued at $56 billion a year, Canada is the fifth-largest exporter of agricultural products in the world. More than half the value of primary agricultural production in Canada is exported, and in some industries it's a far greater percentage: 90% of our canola and 95% of our pulses are exported.

Over the last 10 years much work has been done to open up new markets for agricultural products. Various free trade agreements that have been finalized are coming into force or are being currently negotiated, and they present many opportunities for Canadian agricultural producers and Canada's economy as a whole.

According to Agriculture and Agri-Food Canada, as a result of new markets opening up in 2014, Canadian exports grew 12% over its 2013 level. However, in its latest report, AAFC noted that our agricultural sector saw subdued growth in exports in 2016 relative to 2015 numbers: exports grew by just 0.6%.

While some of this can be attributed to world events and changing priorities for international trade, with exports to the U.S. softening, for example, but exports to China expanding, it points to a salient point: Canadian international ag exports are slipping.

The federal government's Advisory Council on Economic Growth singled out the ag sector as an area that has potential for sustainable growth and outlined several recommendations in order for its full potential to be realized. This report sets a lofty goal for Canada: to rise from the fifth-largest exporter to the second. Currently, the U.S. is the second-largest exporter of ag products, at 11.7%. Canada accounts for 3.5% of the total value of world agricultural exports.

Meeting Dominic Barton's goal is no small feat. However, Canada is in a unique position, and this situation offers both a challenge and an opportunity for Canadian agricultural producers. By making strategic investments in agricultural research and innovation now, we can give producers the tools they need to meet the global demands of the future, both supporting Canadian exports and strengthening Canada's economy.

If Canada is to meet the goals set in the Barton report, it will need to make agriculture a priority, and the government will need to make agriculture a priority.

Canada already has a history of excellence in agricultural technology and innovation.

Appearing alongside me is a representative of possibly the most well-known agricultural innovation in Canada: canola.

Greenhouse technology, such as that being pioneered at the world-renowned Vineland Research and Innovation Centre, uses robotics and automated technology in an indoor environment that can produce yields up to seven times higher.

In a true industry-led partnership, agricultural scientists from Dalhousie University have developed SMART balsam fir Christmas trees. While this may seem like a relatively narrow innovation, the potential market impact for it is significant both domestically and internationally.

AIC, together with the Canada Foundation for Innovation, released a report about Canada's agricultural innovation system. This report notes that unless we capitalize on our strong innovation potential, Canada's agricultural production will be unable to meet the world's growing demand and sustain momentum in today's changing global trade environment.

Key findings from this report are available in the package submitted to the clerk. I encourage you to review it when it comes from translation, as I've been told, so you'll have to wait a bit for that.

● (1615)

Evidence shows that investment in agricultural research has a high benefit-to-cost ratio, estimated at from 10:1 to 20:1. However, budgetary expenditures earmarked for agricultural innovation represent only 0.046% of Canada's GDP and have been steadily declining over the past three decades.

Couple this with chronic and systemic underinvestment, and that would suggest that, as a whole, our sector would have been better off with much larger investments in the years prior. Hindsight is always 20/20. The AIC believes that in order for Canada's agricultural sector to meet its full potential, a strong and inclusive demand-driven innovation system is key. In order to succeed, it must be supported by a science-based policy framework and an enabling regulatory environment. This in turn would encourage the adoption of innovation at the farm and producer level.

A whole-of-government approach to innovation, and not one by just one department, is needed in order to meet these goals. In some cases, duplication of needless administrative burdens—red tape—is impeding the development and use of agricultural technologies. This government has taken some steps in the right direction with funding of, for example, an innovation supercluster in agriculture, one focused on protein.

While it should be noted that we may not fully understand the market impacts of the supercluster initiative for many years, as it is in its infancy and untested, this is a step in the right direction. Another step should be for the government to consider the role of universities and colleges in agricultural research and innovation. Faculties of agriculture not only train the next generation of innovators but also represent a crucial part of agricultural research and innovation in Canada. This means that if we are going to meet the objectives set out in the Barton report, the government will need to increase its investments in academia.

Something that can't be ignored is the delay between agricultural innovation at the research or lab level and the adoption and use by farmers and producers. Cost is often an issue. We all know that being an early adopter of new technology is always more expensive, but a major obstacle to the adoption of these new digital technologies is in some cases the lack of access to rural broadband Internet. In order for those technologies to actually benefit the producers and improve our exports, producers need to be incentivized to adopt those technologies. Something as simple as high-speed broadband Internet could mean that a farmer is able to use a technology that makes their product more desirable to international markets.

Budget 2018 was appropriately dubbed by many the “science budget” and was lauded by the science community, including AIC. Much support was provided for various scientific research undertakings across many sectors and levels. We are recommending that a strategic lens be applied to existing funding programs and policies, that the government identify the potential for growth in specific international markets, and that it take strategic actions to align research funding priorities and frameworks accordingly. This could include creating an attractive climate for private investment and collaboration, innovative and accessible funding mechanisms, and support for participatory research, knowledge transfer, and more.

The benefits of increasing our agricultural exports can be found across all sectors of the economy. Greater exports mean better, higher-paying jobs in Canada. The innovative technologies required to increase the output to meet those goals also facilitate domestic growth. Canada can rise to meet the challenge head-on if strategic investments are made in the agricultural research and innovation sectors. Having a multi-faceted approach means having many beneficiaries. Support today means a greater benefit tomorrow.

Thank you very much.

● (1620)

[*Translation*]

**The Chair:** Thank you, Mr. Buy.

[*English*]

Now, Mr. Innes, go ahead for up to seven minutes, please.

**Mr. Brian Innes (Vice-President, Public Affairs, Canola Council of Canada):** Thank you, Mr. Chair, and thank you to the committee for the invitation. I'm pleased to be here today to share with you the Canola Council's view on how we can grow canola exports through research and innovation.

First, I'd like to describe a little bit about the Canola Council. We're a value chain organization representing the canola industry: the 43,000 Canadian canola farmers, the seed developers who develop the seed for growers to put in the ground, the processors who turn the seed that farmers produce into oil for humans and meal for livestock feed, and the exporters who send that seed for processing at its destination.

International trade and innovation are the lifeblood of our industry. As Serge mentioned, canola is a Canadian invention and is now often the single largest source of farm income for Canadian farmers, thanks to this research and innovation.

More than 90% of the canola we grow is exported to markets around the world, and we have a plan to export even more. Keep it coming is our industry's plan to increase demand for canola oil, for canola meal, and for canola seed, and to meet that demand through sustainable production and yield improvement, reaching 26 million tonnes of production by 2025.

To put this into perspective, when our industry achieves our goal, it will have added $4.5 billion in canola exports per year, and as we all aim to meet the government's target of $75 billion in agrifood exports per year, creating the conditions for export growth through research and innovation is a key part of our industry's contributing $4.5 billion to this target.

Today I wish to share three conditions that are needed to enable innovation to drive canola exports: first, create a favourable climate for private investment in seed innovation; second, maintain research partnerships between industry and government; and third, promote science-based rules internationally.

I'll speak first to the importance of a positive regulatory environment and an investment climate that encourages private sector investment and innovation.

In the canola sector, innovation in seeds is really driven by private investment. As a result, it's very important that the regulatory and investment climate for canola seed innovation support a predictable path to market. When new seed innovation such as biotech traits cannot be commercialized, the path to market is not predictable for that private investment.

Currently there are three canola seed traits, developed using biotechnology, that cannot be commercialized because they are not yet approved in China. They have been approved in Canada since 2012 and have been approved in all other major canola markets. When they are approved, these seed traits will help Canadian farmers adopt innovation and be more competitive internationally.

We were happy to see Minister MacAulay raise the importance of these approvals with his counterpart in China just two weeks ago. Industry estimates that approval of these traits alone will allow growers to produce $400 million more canola on the same amount of land. This is a step change for canola productivity. This improved productivity will come from new seed genetics as well as from the traits that are marketed in combination.

As we look forward, we also need to think about our regulatory approach to plant breeding innovation and ensure that it continues to support investment. As a member of the Canada Grains Council, we support the recommendations to the committee that they made several weeks ago.

Second, maintaining research partnerships between industry and the federal government is very important for continued innovation. These partnerships support such public research as the agriscience cluster and are key for our prosperous future together.

Through the canola agriscience cluster, federal investment has encouraged private investment and has allowed us to advance public research. The cluster has helped us maintain access to critical markets, has allowed us to preserve biodiversity, and has allowed us to discover the health properties of canola.

For example, through the research cluster the blackleg risk mitigation plan was developed. It reduced the impact of this disease on canola plants and the potential for it to be transmitted to Chinese rapeseed crops. It's a great result, because blackleg is a disease that hurts our farmers, and it's something that's also a market access challenge for our access to the Chinese market.

Our cluster research has also allowed us to keep biodiversity top of mind for our producers. Cluster research has been instrumental in updating economic thresholds for using insecticides to prevent such insects as diamondback moths from eating canola. By using insecticides only when there is economic need, our growers are now allowing beneficial insects to flourish and wild pollinators to flourish as well. We're not done yet, though.

● (1625)

Every year, the Canola Council brings together growers, life science companies, university researchers, and Agriculture Canada scientists at our Canola Discovery Forum to determine the research needs and opportunities that are most important for the sector. It's been a fantastic forum to coordinate and prioritize research needs, ensuring that investments are made in projects that bring the greatest returns.

We hope innovation and knowledge transfer will continue for canola in the current agriscience cluster application to the Canadian agricultural partnership. We're excited about new opportunities to use canola protein for humans, to lower greenhouse gas emissions by using nitrogen more efficiently, and to improve yield while sequestering more carbon in the plant.

This brings me to my final point.

In order to have predictable and stable trade, Canada needs to promote science-based regulation internationally. To achieve this, we need our scientists to be able to work with scientists in other countries. This means that regulatory agencies like the Canadian Food Inspection Agency and the Pest Management Regulatory Agency need to have both the mandate and the resources to promote science-based trade internationally. Whether it's regulations and standards around food and feed safety, crop protection products, or plant health, enabling more canola exports requires a team Canada approach that includes our scientists.

In closing, canola has grown into a Canadian success story because research and innovation have allowed us to be globally competitive. We're excited to help meet Canada's target of $75 billion in exports by 2025. Supporting a favourable investment climate will be a big part of that. Helping us to have timely approval of biotech traits, continued research partnerships, and the promotion of science-based rules internationally are all necessary to help us continue supporting a quarter million Canadian jobs that are currently supported by the canola sector.

Thank you very much.

**The Chair:** Thank you.

Unfortunately, the bells are ringing, and we'll have to return to the House, but we do have your presentations.

First, we'll go in camera briefly.

[*Proceedings continue in camera*]