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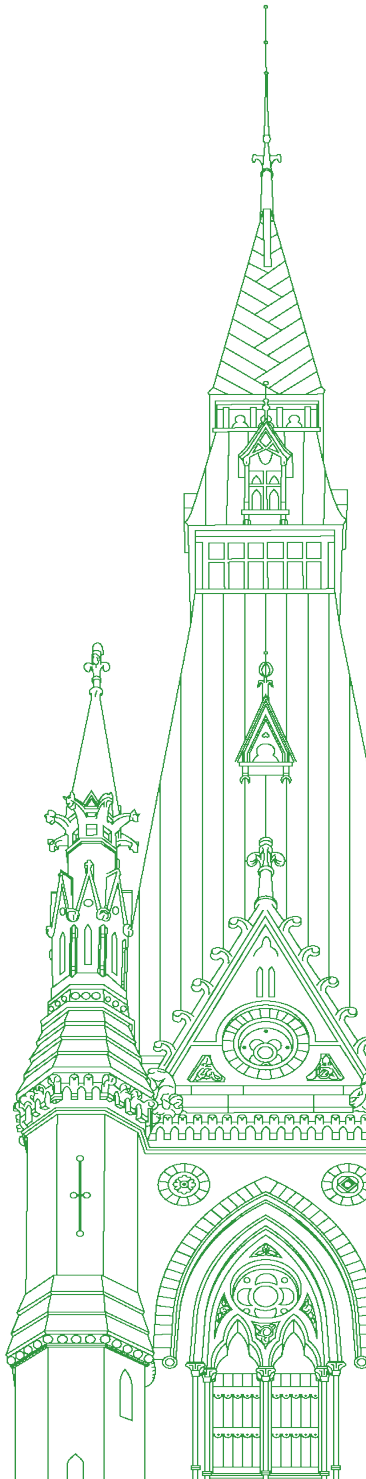

Chair: Mr. Kody Blois

Standing Committee on Agriculture and Agri-Food

Wednesday, September 28, 2022

● (1700)

[*English*]

The Chair (Mr. Kody Blois (Kings—Hants, Lib.)): I call this meeting to order.

Welcome to meeting number 28 of the House of Commons Standing Committee on Agriculture and Agri-Food. I'm going to start with a few reminders.

Today's meeting is taking place in a hybrid format. The proceedings will be made available via the House of Commons website. Just so you are aware, the webcast will always show the person speaking, as opposed to the entirety of the committee. Screenshots are not permitted, and, of course, following the health guidelines according to the Board of Internal Economy is required.

Pursuant to Standing Order 108(2) and the motion adopted by the committee on Monday, May 30, 2022, the committee is resuming its study of global food insecurity. This is something that we've been studying since June, and we're turning to a domestic focus.

I'd like to welcome the witnesses to our panel right now. We have three different witnesses in the room.

I see Mr. Perron's hand, and I want to let him know that there were sound checks done ahead of time for interpretation services. Mr. Lemaire failed his technical test, but all of the other witnesses passed. He had to travel at the last minute and forgot the headset that was issued by the House of Commons. He is in the second panel. If the interpretation services are not adequate and the earbuds he has do not work, he unfortunately will not be able to participate. Everyone else did go through that service.

I want to start with the panellists who are here.

On the screen, we have Dr. Evan Fraser, who is the director of Arrell Food Institute at the University of Guelph. He is joining us by video conference.

From Cereals Canada, we have Mark Walker, vice-president of markets and trades. Mr. Walker joins us today in person in Ottawa. It's great to see you, Mr. Walker.

We also have, from the Global Institute for Food Security, Dr. Steve Webb, who is the chief executive officer. He is here via video conference from Saskatoon. Dr. Webb, it's great to see you. I had the opportunity to join you in April in Saskatoon, and I certainly appreciate the work that you do.

We're going to give five minutes for opening statements. We are a little time-constrained today because of the votes, so we're going to move as quickly as possible.

I'm going to start with Dr. Evan Fraser.

You have up to five minutes.

Dr. Evan Fraser (Director, Arrell Food Institute, University of Guelph, As an Individual): Thank you. What a great opportunity.

In these brief comments, I'd like to lay out four points for you to ensure that Canada uses advanced agri-food technologies to both expand exports, which was the question I was asked to ponder, and at the same time be a global leader in what we're calling the “digital agriculture revolution”, which is a way of addressing climate change. We're looking for some win-wins here.

First is the obvious: We have to invest in our infrastructure more. Today, as we know, the Prairies are almost a unique resource globally in terms of their ability to produce grains and oilseeds as well as plants and animal-based proteins. That capacity goes through the Rocky Mountains on a very small number of train lines, and every few years that service is disrupted.

Just last week, I was on a panel with the vice-president of operations for the Port of Vancouver, and he discussed how the bottlenecks are spreading even now as we speak. The fragility of our trading system harms our ability to be that breadbasket for the world that Canada aspires to be, and we need to make our transportation infrastructure more of a focus.

The second point is to create financial incentives to reward farmers who adopt greenhouse gas mitigating management practices and then market ourselves to world markets as sustainable agriculture. By embracing what some of us are calling regenerative agriculture, meaning encouraging farmers to use more complicated crop rotations that take greenhouse gases out of the atmosphere, and by using smart tractors that are very, very efficient with fertilizer, agriculture can become a source of the climate solution as opposed to a source of greenhouse gas emissions. Doing that will allow us to build a global sustainability brand that will be a trade advantage in an increasingly climate-concerned world.

Without giving too much away, on October 25, my institute, the Arrell Food Institute, together with the CEO's office at Royal Bank and the Boston Consulting Group, is releasing the first of a series of reports that tackle that issue. The punchline of these reports is that we need a federal carbon pricing mechanism that captures agriculture, sends the signals to farmers to do the right thing and gives us a basis on which to build a sustainable trade brand.

Third, if we want to produce the food, we have to train the right people, and this requires us to address the labour shortage. This means we have to train people, encourage young people to come into agriculture and rebrand agriculture away from the idea that it involves a straw hat and a red barn and towards the understanding that the farmer of the future is as likely to wear a lab coat as she or he is to drive a tractor. Agriculture is part of the innovation economy, and we need investment in our curriculum of skills that we train people with. If Canada wants to expand our exports in the long term, we need a technologically savvy workforce who are ready to drive innovation.

Fourth, and finally, my last point is that we need to invest in the tools of what some of us call the “digital agriculture revolution”. The same tools that gave us smart phones and are transforming medicine are finding their way into barns and food processing facilities as controlled environment agriculture, vertical farming, and robotic harvesters and milkers, allowing us to boost production while reducing inputs, along with more efficient processing facilities and smart packaging. That's just a tip of the iceberg of what technology can unlock for us.

I think Canada needs to be at the head of this wave of innovation. We should do this by creating ag-tech innovation zones, giving particular areas preferential tax and immigration status, land-use planning permissions and competitive utility rates, thus germinating a Canadian Silicone Valley for food.

There's a lot of good stuff already going on in the world and in our country. A quick example of a public-private partnership that is run by the Weston Family Foundation is a homegrown innovation challenge designed to spark innovative thinking on these technologies in our country.

To close, there are four points: expanding our transportation infrastructure, creating carbon markets and a global sustainability brand, training the next generation to be technologically savvy users of this digital agriculture revolution and creating ag-tech innovation zones.

These four strategies would allow us to grow exports in the long term and also allow us to reach that vision that the advisory council for economic growth, the Barton report, gave us in 2016, which is that Canada should be the world's trusted supplier of safe and sustainable food in the 21st century.

With that, I'd like to thank you and open the floor for questions, or whatever you want, Mr. Chair.

The Chair: Thank you, Mr. Fraser.

You're actually below time, and that was very well done.

We're now going to turn to Mr. Walker. You have up to five minutes.

We will get the chance for questions after we're done with all our panels.

Mr. Mark Walker (Vice-President, Markets and Trade, Cereals Canada): Thank you, Mr. Chair and members of the committee. Thank you for having me here today.

My name is Mark Walker, and I'm the vice-president of markets and trade at Cereals Canada.

Cereals Canada is a national industry association for wheat, durum, barley and oats in Canada. Our membership includes a full value chain, from farmers to crop development companies to grain handlers and exporters.

Our members are focused on the benefits of export-led growth, facilitated by access to diverse global markets. Canadian cereals are a staple food export to every corner of the world. In the last half decade, Canadian wheat exports have reached over 80 countries. In an average year, Canadian farmers plant 35 million acres of cereals, resulting in 27 million tonnes of exports and over $9 billion in export revenue.

For generations, Canadian farmers have grown crops that feed the world. While global populations have grown, the demand for food has grown with them. Canada's cereal growers have risen to this challenge by embracing innovative practices while increasing our country's ability to produce for ourselves and for export. Improved seed varieties have led to greater yields across our industry, and new crop production technologies have allowed producers to grow their crops more efficiently while reducing their environmental footprint.

In the 1980s, wheat yields averaged 27 bushels per acre across 27 million seeded acres. While seeded acres of wheat have fallen to 15 million, our yields have increased to over 50 bushels per acre. The precision and success with which growers farm today is a testament to decades of enabling regulations, investment in research and a willingness to innovate. Government's role in this progress has been notable and is greatly appreciated.

As our industry undertakes to manage growing seasons increasingly characterized by drought, excess moisture and a volatile climate, all while seeking to ensure consistent production for export, we would highlight the continued role that government has to play in this space.

We believe export success begins at home, with Canadian production of sustainable food. Farmers need access to science-based regulations to support the productivity, reliability and quality of Canadian exports. A trade environment that facilitates the production and export of Canadian agriculture products is key to strengthening Canada's contribution to global food security in the coming years.

Outside of our borders, industry and government can also work together on market development and market access initiatives to cultivate opportunities for growth and diversification across more than 80 markets that purchase Canadian cereals.

Cereals Canada houses a dedicated team of experts focused on market maintenance, market development, market access and trade policy. Our team of experts tirelessly represents the Canadian cereals industry across the world to our international customers and international domestic governments to ensure that Canadian cereals make their way to global markets in the most efficient way possible. Where barriers arise, we proactively seek solutions.

Agriculture and Agri-Food Canada's AgriMarketing program, which we have successfully subscribed to for over a decade, plays a key role in this work. As we diversify our international markets for wheat, barley and oats, we will continue to look to this incredibly important program to build on our successes and advance global food security.

In addition to our markets and trade team, Cereals Canada's technical team of experts works with international customers to ensure that they get the most and best use from Canadian cereals. Canadian wheat is used as an “improver” wheat around the world. Blending Canadian wheat with lower-protein, lower-quality alternatives improves the function and use when making food products for customers. In an environment of rising food costs and supply disruptions, our experts are working with international customers on how to use Canadian wheat to its maximum value.

Using our equipment and expertise, our teams work with customers to streamline various processes within their production systems. For example, through our understanding of the requirements of various customers, our pilot mill in downtown Winnipeg has helped reduce the number of milling cycles required to produce the flour for our customers' end-use products, saving resources and increasing affordability.

Earlier this month, members of the same team provided a workshop at the African Milling School in Kenya to help train millers from across Africa on best practices when using Canadian wheat. Last week, we hosted a group of North African durum millers for conversations about this year's harvest to outline quality expectations for use in their mills. Several years ago, we undertook a significant knowledge transfer exercise, helping to open a technical facility in Morocco focused on durum wheat, milling and couscous production.

Increasingly, our conversations with global customers highlight concerns regarding the tightening supplies of wheat and the role that our organization can play in meeting those challenges. Ultimately, a stronger trade environment, supported by enabling domestic policies, will enhance contributions to global food security while unlocking greater diversification opportunities for the development of the Canadian economy.

Thank you. I look forward to your questions.

The Chair: That's two for two.

Thank you very much, Mr. Walker. We're right on time.

Dr. Webb, we'll go over to you for up to five minutes.

Dr. Steve Webb (Chief Executive Officer, Global Institute for Food Security): Thank you and good afternoon, Mr. Chair. Thanks for the invitation to be here today.

The Global Institute for Food Security is a government, industry and academic partnership.

I'd like to begin my testimony with a critically important statement: Global food insecurity is global insecurity.

Norman Borlaug noted that you can't build a peaceful world on empty stomachs and human misery. Mr. Chair, at no time has this statement been more poignant than it is now.

Global population is expanding rapidly. We have the challenge of feeding a growing world with limited resources of land, water and nutrients, as well as challenges both natural and entirely self-inflicted, such as Russia's invasion of Ukraine. These all threaten the resiliency of the global food system and our ability to feed the world sustainably.

However, there's a solution to these challenges. In Canada, we are one of a handful of nations that are net producers of food, and we do so in a manner that's economically, environmentally and socially sustainable. We have the food, fuel and fertilizer that the world needs, and our agriculture and food sector is poised to feed a growing world. However, to succeed we need to support the industry with appropriate policies that enable us to take advantage of the opportunities before us.

The previous two witnesses mentioned the Barton report, and they identified the opportunity here. The report's right, so today I'd like to recommend four domestic policy opportunities that can improve Canada's exports on the global stage.

The first is around innovation. We cannot continue to tackle today's and tomorrow's challenges with yesterday's tools and technologies. We need innovation to help deliver the greatest positive impact through our agriculture and food sectors. Unfortunately, Canada's innovation input does not produce the returns on investments that we should expect.

The most recent Conference Board of Canada report ranks our nation as eighth in investments but 23rd in outcomes achieved. We need to remedy this situation by creating a coherent, integrated, national innovation strategy. Innovation is a team sport, and we can no longer focus on revamping one part of the system without consideration of all areas involved.

The next policy recommendation is to drive major capital investments into infrastructure. We can't recommend a policy to improve Canadian exports without addressing the infrastructure to support this, such as rural wireless connectivity, ports and rail systems. Investments in our infrastructure will ensure that Canada remains competitive and regains its reputation as a reliable supplier. Canada must own this.

The third policy recommendation is around regulatory modernization through the creation of a transparent, predictable, science-based, interactive and enabling regulatory framework. Our agriculture and food sectors are impacted by regulatory complexity and bottlenecks that limit producer and consumer access to the latest proven innovations. A highly functional regulatory framework is a competitive advantage for Canada. It builds trust, both here domestically as well as internationally. We know this can be done, but it shouldn't take a crisis for things to work. Let's lay the building blocks now for modernizing our regulatory system to embrace a science-based approach that supports innovation.

The last policy recommendation I'd like to highlight relates to sustainability. Canada is one of the world's most sustainable producers of food. We need to be proud of the strides we have made and how far we've come.

On changes in agronomic practices, Dr. Fraser mentioned regenerative agriculture, such as no-till practices. Variable rate fertilizer application in western Canada, and in particular in Saskatchewan, has resulted in 22% more land being used in annual production, with the elimination of summer fallow. Remarkably, on a production intensity basis, farmers in western Canada have decreased nitrogen fertilizer use by 28% per bushel per acre over the last 30 years.

When we consider policy changes such as recent discussions to reduce fertilizer emissions, and by extension usage, we must consider the unintended consequences of such policies. Not doing so will paint an inaccurate picture of how sustainable Canadian agriculture is and will lead to public mistrust of our resilient and sustainable agriculture system. This will in turn negatively impact export opportunities. We need to lead the way on this. Canada should not be following.

One last point I'd like to leave with the committee is that we need to bring all parties to the table together to address these challenges. GIFS model of industry, government and academia partnership embraces the best of all three of the stakeholders needed to advance innovation. We need to capture the wisdom of the room with all of the stakeholders.

As I wrap up, I'd like to thank you, Mr. Chair, and members of the House committee, for the invitation and the opportunity to share my thoughts with you today. I look forward to questions.

Thank you.

The Chair: That's three for three. Well done to our witnesses for timing.

Colleagues, because there was some delay with the votes, we have about 45 minutes per panel. The way I'm going to do this is that each party will get a first six-minute round and then we will allow two and a half minutes for the Liberals and the Conservatives each on the second round.

Mr. Barlow, you're going to lead off for the Conservatives.

Mr. John Barlow (Foothills, CPC): Thank you very much, Mr. Chair.

Thanks to our witnesses. I appreciate your patience as we sort of get back to normal with votes. Unfortunately, that does delay committees sometimes.

For Dr. Webb first, I appreciate your comments about the need for science-based decision-making and a science-based regulatory regime. In your opinion, would the fertilizer emissions reduction policy be a decision or a policy that's based on sound science? If not, why?

Dr. Steven Webb: I would like to say that the intention of the policy is right, in the context of reducing emissions. However, the approach is only being looked at in the context of the emissions standard.

We need to take that holistic production intensity approach to ensure that we have a policy framework that delivers economic, environmental and social outcomes that lead to sustainability. Again, if you look at the results that I've mentioned—the 22% increase in land in production as well as the 28% reduction in nitrogen use per bushel per acre—these are data points that can inform policy to ensure that we have the one that creates the most competitive environment for Canada in the global marketplace.

Mr. John Barlow: To that point, I appreciate that you mentioned that our producers have already reduced fertilizer use by 28% in many parts of the country.

You talked about the narrative around this. If reducing emissions is indeed our goal, which is very laudable, would it not have been more beneficial in the narrative, and certainly to our producers, to say to other countries around the world that if they need to reduce emissions, why not take a look at what Canada is doing? We are the gold standard. We have already reduced fertilizer, so take a look at our innovation and our technology and learn from our practices here in Canada. Would following our standard not have been a more successful approach to reducing emissions in other countries?

Dr. Steven Webb: That is the opportunity for Canada to lead the way and to provide and share those innovations.

Today all of the witnesses who are appearing in front of this committee are members of the National Index on Agri-Food Performance. That index is a coalition of over 100 organizations, which includes federal government departments as well as provincial departments, industry players large and small, and all of the producer groups. Evan and I are part of the index from the not-for-profit community. It's a very interesting Canadian solution to benchmarking economic, environmental, social and food integrity opportunities to showcase and highlight them and have Canada lead the way.

We should not be following. We should not be ashamed of the impact that innovation has made in agriculture.

The first time I came to western Canada, I was 14 years old. Almost half the land that I saw was under summer fallow. Now it's not, so thank you.

Mr. John Barlow: Thanks, Dr. Webb.

I want to turn to Mr. Walker now.

I know you talked about transportation. Eight union contracts with railways expire on December 31. Everything I've heard is that we could have our yields up about 50% compared to last year, which was admittedly a difficult year.

What impact has rail capacity had on our ability to meet some of our goals in terms of trade opportunities and moving goods? Is the industry potentially looking at what could be happening later on this year?

Mr. Mark Walker: Thank you for your question.

You made some good points about harvest and yields. At the end of the day, Canadian exporters need trade infrastructure that keeps up with capacity to meet growing export demand. We know that for cereals, this year's harvest is going to be 56% larger than last year. Harvest was 80% complete across Canada as of last week. With this in mind, our export sector is certainly eager to work with the railways to ensure that Canadian grain gets to market in a timely and efficient manner.

Mr. John Barlow: Are there some specific steps that the industry has looked at in terms of rail service? Is there federal policy that we can use to ensure food security not only domestically but to meet demand globally as well?

Mr. Mark Walker: I'm a markets and trade expert. I do some work on transportation policy, but Cereals Canada is a member of the Canada's Ready coalition. We have a landing page, canadasready.ca, that outlines our asks of government, as well as the railways, moving forward into this critical harvest. I will provide that information to the committee so that it can be included as part of the study.

Mr. John Barlow: I have time for one last quick question. It's for Dr. Webb as well.

You've talked about infrastructure, ports and rail. Is there something specific on the rail side when we see that these union agreements could be expiring on December 31? What would you like to see there from a federal policy to ensure that rail keeps moving?

Dr. Steve Webb: When even the threat of strikes comes up, we've seen that it creates uncertainty in the supply chain. Any way to mitigate labour disruptions would be beneficial to all in the system.

The Chair: Thank you, Dr. Webb. Thank you, Mr. Barlow.

We're going to turn to Mr. Drouin for six minutes.

Mr. Francis Drouin (Glengarry—Prescott—Russell, Lib.): Great. Thanks very much to the witnesses for being here.

I have a quick question on transportation. Maybe Mr. Walker could comment. I would also like to get Dr. Fraser's opinion, because he's mentioned that transportation is important.

Recently I found out that the delta for a train to be on time is about four hours. If you're four hours before, you're on time. If you're four hours after the time you've set, both companies that are operating in Canada say you're on time. Are they actively trying to work with your members to reduce that delta so that they're on time? How does that compare to the U.S., for instance?

We know there might be strike potential in the U.S. as well. We often hear about CN and CP, but I don't know what's happening in the U.S. If you're talking to some of your counterparts in the U.S., what's the relationship down there with the rail companies?

● (1725)

Mr. Mark Walker: Rail times are down across the network, by weeks, is my understanding. We have half the capacity we did this year compared to last year. Beyond those statistics, I can't speak to specifics, but certainly I can look to provide that information to the committee.

Mr. Francis Drouin: Okay.

Dr. Fraser, I think you mentioned the VP for the Vancouver port authority. What was he or she saying—I don't know who she or he is—in terms of trying to expand the network so that we can get grains out to the marketplace more quickly and on time?

Dr. Evan Fraser: Well, he was making a couple of key points last week. It was an event organized between the Canadian embassy in Japan and the Japanese embassy in Canada and the mutual chambers of commerce to discuss better connections between Canada and Japan on agricultural exports.

There were two main points. One was the extraordinary logistical challenges the port authority was having in terms of just physically bringing that volume of stuff into the area and in an environment of extraordinarily constrained labour conditions, and then getting it onto the ships and getting the ships out. He was laying out a series of innovations using technology they had embarked on that was going to try to relieve that bottleneck, but then he made the very obvious point that as you move back up east out of Vancouver and into the Rocky Mountains, you end up with these tiny umbilical links between the Prairies and world markets. The absurdity just struck me—well, not the absurdity, but the fragility of that image of Alberta, Saskatchewan and Manitoba and how all of the food production in this enormous area the size of Europe is going through essentially a small number of rail lines and through a couple of passes. It's just the inherent fragility of the system that we've inherited and that we've allowed to continue. There has to be a way of reducing the bottlenecks that emerge in that system, because, as we just heard, the system buckles. Every couple of years it buckles.

Certainly the article in the Financial Post last week by Jake Edmiston suggests we're into another situation this year of not being able to be that breadbasket that our country should be.

Mr. Francis Drouin: Yes, and nobody is expecting us to move mountains, if I can—

Dr. Evan Fraser: Literally.

Mr. Francis Drouin: But we've noticed, actually, the fragility of that supply network. When the B.C. flood happened, we noticed it. Obviously, it's a danger.

Dr. Fraser, while I have you here, it's good to see you.

The second point you mentioned is financial incentives and carbon markets. Having spoken to farmers, I know they are ready to participate in a carbon market, even for carbon offsets for other companies. Sometimes the problem is this: How do you measure it and how do you make it less cumbersome on farmers, meaning not having auditors come on your land and perform audits, which increases the red tape?

Have you seen technologies that could reduce that burden on farmers so that they can participate in that marketplace?

Dr. Evan Fraser: You've hit the proverbial nail on the head there. The technical language is the measurement, verification and reporting system, the MRVs, to measure both the additional carbon that is sequestered by, say, a change in management practices, as well as the permanence of that carbon in the soil.

Up until now, most of the MRVs have been based on audits. They have been cumbersome and extremely expensive to administer. It costs more to administer them than the value of the carbon at current carbon market prices. However, I am pretty optimistic that with a bit of a sprint and some concerted effort, we could move an MRV out of the field and into a remote sensing process. Really, what we need to be working towards is what they call “passive collection”, meaning satellite imagery tied with soil science monitors through an Internet of things network. It's the sort of stuff that GIFS and Steve work on. I know we're working on it. The Royal Bank project that I alluded to is very focused on this stuff.

Over the next two or three years, can we marshal the science to move MRVs from a ground level, ground truth monitoring system to something than can be done by remote sensing? The short answer is yes, but it's still going to take a little bit of work. The academics I work with are very keen to work with Agriculture and Agri-Food Canada and the Living Labs network to further that.

Mr. Francis Drouin: Okay. Thank you.

Dr. Webb, I know you've made some mention about the fertilizer emissions. I'm just asking, because I have 20 seconds, if you've made a submission to the consultation.

Dr. Steve Webb: Yes.

Mr. Francis Drouin: Perfect. Thank you.

I'm done.

The Chair: Thank you, Dr. Fraser, Dr. Webb and Mr. Drouin.

[*Translation*]

Mr. Perron, you have the floor for six minutes.

Mr. Yves Perron (Berthier—Maskinongé, BQ): Thank you, Mr. Chair.

I'd like to thank the witnesses for being here today.

Dr. Fraser, I'll continue with you. Try not to speak too quickly, as it can sometimes make the interpreters' job more difficult.

With regard to soil performance verification tools, you explained that, rather than going and taking measurements physically, they could be taken using satellite imagery. Did I understand correctly?

[*English*]

Dr. Evan Fraser: Thanks for the opportunity to clarify, and also for the reminder to slow down. I appreciate both.

The state of the science right now is that we currently measure soil carbon using soil probes, soil sensors, which require people walking into the field and actually taking soil samples and measuring them. Increasingly, the goal is to use satellite imagery, which is now of a sufficient resolution that satellites are increasingly able to distinguish between major crop types, and then use the size and the colour of the foliage—the amount of green and the amount of red the plants reflect back—as a way of interpreting and interpolating how much carbon is being absorbed by the soil.

Now, this requires lots of artificial intelligence algorithms to link observations on the ground with the observations from the satellite. There's some scientific research that definitely needs to be done, so I do not want to say we are ready to launch a measurement, reporting and verification system using only remote sensing yet, but I think that with a few years of work—collecting soil data, relating it to remote sensing data—we should be able to build artificial intelligence algorithms that will predict, based on a small questionnaire that farmers would fill in, plus the remote sensing data, how much additional greenhouse gases are being absorbed by the soil.

That's the trajectory the scientists are on right now.

[*Translation*]

Mr. Yves Perron: Thank you very much for the clarification. That's much clearer.

So, I understand that the research hasn't been completed and that investment will be required to speed up the digital revolution that's under way.

Earlier in your brief, you also state that we need to fund sustainable practices, recognize what producers do and support them financially. How do you connect those together?

I see that you're asking for significant investment. It's not that I disagree—quite the contrary—but can you explain your vision?

● (1730)

[*English*]

Dr. Evan Fraser: There are two parts to the vision.

One is largely related to farmers who are currently producing grains or oilseeds, and livestock. A lot can be done to encourage those farmers to adopt management practices and technologies that are more energy-efficient, more efficient in terms of nutrient use and other inputs, and as Professor Webb said, management practices such as more complicated crop rotation that would help the soil build up organic matter. There's a wide range of technological and management practices a farmer can use in order for a farm to become a sink for greenhouse gases rather than a source of emissions; however, at the moment farmers are not incentivized to do that.

In a study I led a couple of years ago, we showed farmers areas where they could manage their farms more sustainably. Their response to us was, "Yes, we know that, but we don't get paid for it." The concept that, say, the Royal Bank is playing with is this: Can we establish what we might call carbon farms, where farmers are financially rewarded both for the food they produce as well as for the greenhouse gases they absorb? That would be one part of the vision.

The second part of the vision is with regard to greenhouses, vertical farms and alternative protein supplies. I'm aware of, and participating in, initiatives in Israel or Singapore where the truly most cutting-edge science is being applied to food systems, and I'm worried that Canada doesn't have a comparable or equivalent sort of zone or nucleus of technological innovation in agriculture. It's specifically things like vertical farming or cellular agriculture. I think we are producing—

[*Translation*]

Mr. Yves Perron: I'm sorry to interrupt you, but I'd like to get Mr. Walker's opinion on this issue.

Mr. Walker, you mentioned your pilot mill, which has helped reduce the number of milling cycles. After hearing Dr. Fraser's explanations, I'd like to hear what you have to say, in 30 seconds, on these types of innovative practices.

[*English*]

Mr. Mark Walker: Thank you for the question.

Our team of experts works with our customers based on their production needs for the end-use product. We have experienced situations in which a miller will come to us and say, "I'm having a conversation with my baker. They want something, I'm doing something, and there's a bit of a disconnect." Our team, because we have both experts in-house, can have a conversation with both of them, be the go-between, as it were, and find a solution that works for both, because in this way they're quite complementary. That work has helped us help our customers around the world make the most efficient use of cereals, whether it's upcycling different kinds of bran or, as I mentioned, reducing the milling cycles, to make sure that what's being undertaken is exactly what's needed and that what's not needed is cast aside.

[*Translation*]

The Chair: Thank you, Mr. Walker and Mr. Perron.

[*English*]

Mr. MacGregor, you have six minutes. It's over to you.

Mr. Alistair MacGregor (Cowichan—Malahat—Langford, NDP): Thank you very much, Mr. Chair.

I'd like to use the beginning of my six minutes just to read a notice of motion into the record, and I know the clerk has a copy of that motion in both official languages. The motion is as follows:

> That, pursuant to Standing Order 108(2), the committee undertake a study on profit-driven inflation in the grocery sector and the costs of groceries going up while large chains are making record profits; that the committee examine the record profits of large grocery chains and their CEOs in relation to employee wages and the cost of groceries in Canada; that the committee also examine the ability of large grocery chains leveraging their size to cut into the earnings of Canadian farmers; that the committee invite witnesses with specific knowledge on profit-driven inflation and affected stakeholders from the industry, including grocer CEOs, economists, unions and farmers or representative organizations; that no fewer than six meetings are set aside to hear from witnesses; that the committee report its findings to the House and that, pursuant to Standing Order 109, the Government table a comprehensive response to the report.

That's just a notice of motion for all of my colleagues to consider in the coming days.

With that, Mr. Chair, I'll continue with my questions. I want to join with my colleagues in thanking the witnesses for appearing before our committee and helping to guide us through this study.

Dr. Fraser, I'd like to start with you and the Arrell Food Institute. I can remember when our committee visited the University of Guelph back in 2018, and we were really impressed with some of the amazing work that your university is undertaking.

I'm glad you mentioned climate change in your submission and mentioned it in your opening remarks. One of our earlier witnesses on this study was Oxfam, and they noted in their look at this issue that over the last 20 years there has been an 819% increase in weather-related humanitarian funding appeals. We have a huge crisis going on right now in the Horn of Africa. The head of the World Food Programme was in the news today, talking about the crisis that exists there. They are experiencing severe droughts that have impacted the ability of local farmers to produce food for the local population.

Then of course the region was hit with the war in Ukraine. Ukraine, being a breadbasket for the region, essentially had its exports of grain cut off for a number of months, and we're still recovering from that backlog. Also, climate change is impacting our farmers' abilities. My province of B.C. was cut off from the rest of Canada last November, and we know that farmers in the Prairies have experienced extreme droughts and extreme flooding events, which have impacted our ability to produce to our full potential.

At the same time that our country is trying to increase its production, we're also fighting this rearguard action against what climate change is doing to our production. We know that countries around the world are struggling with the same problems, but they don't have the resiliency and technological know-how or the funding resources that our government has.

I was wondering if you had any thoughts on how Canadian expertise and know-how could be used in places like countries in Africa to help build that local resiliency. When the rug is pulled out from underneath them, such as when a country like Ukraine suddenly has its exports cut, what can we do to build the resiliency and how can Canada step in to fill that void? If you have any thoughts on that in the next couple of minutes, they would be appreciated.

● (1735)

Dr. Evan Fraser: You should take my class in this course.

Voices: Oh, oh!

Dr. Evan Fraser: Thank you for the question.

Resiliency often has different layers or different lines of defence. The ability of the ecosystem to produce food in a drought is the first line of defence. A farmer can build up soil organic matter and plant some windbreaks. Those are very practical things that don't necessarily need a lot of technology.

Working with the Oxfams or the Canadian Foodgrains Banks of this world to do on-the-ground development work in remote or vulnerable locations is a very, very good first start in building up the resilience of the agro-ecosystem. Then there's what I consider a technology layer. Can we use a drought-resilient seed? There are lots of challenges with how to use different kinds of seeds more or less equitably, but there are seeds we can breed to become more drought-resistant. Can we use remote sensing data, getting back to satellites, to predict when droughts might emerge so that we can help the World Food Programme position itself six, eight or 10 weeks in advance of a crisis? That's sort of a middle level of defence, with agro-ecosystem at the beginning and technology at the higher end.

There are also community-level defences and people working together: Can we invest in civil society?

Finally, your ultimate line of defence is organizations like the World Food Programme.

I think the appropriate strategy is to work at a portfolio level, at these different scales of defence, to build a comprehensive climate resilience portfolio. The specifics of how you do that would be different in Canada versus the Horn of Africa, but the fact that you have these layers of defence is pretty common across the world. That's where I would go.

Mr. Alistair MacGregor: Thank you.

That takes me to my six minutes. I appreciate it.

The Chair: Thank you, Mr. MacGregor and Dr. Fraser.

Colleagues, we have five minutes left in the first panel.

Mr. Epp, you have two and a half minutes, followed by Mr. Turnbull.

Mr. Ted Falk (Provencher, CPC): Thank you, Mr. Chair.

Thank you to our witnesses for coming—

The Chair: Mr. Falk, I was told that your mike wasn't....

First of all, I apologize. I thought it was Mr. Epp. It's over to you now for two and a half minutes.

● (1740)

Mr. Ted Falk: Okay. Thank you, Mr. Chair.

Thank you to all our witnesses for attending and for their testimony here.

Yesterday I had the privilege of listening to David Beasley, the former governor of South Carolina and the current executive director of the UN World Food Programme. He was here in Parliament giving a presentation.

He said a few things, but he reiterated, Dr. Webb, some of the things you talked about—the looming global crisis that we face and the geopolitical instability that will be created by a food instability problem if we don't address that problem. You mentioned in your report that we need to consider innovation and regulatory issues and that regulatory issues need to be science-based. Could you expand a little bit further on regulations that we need to be innovative about?

Dr. Steve Webb: I think one of the opportunities for us in Canada is to have a regulatory system. A regulatory system is important. It builds confidence both domestically and internationally. What we have is a very complicated system that creates a lot of bottlenecks.

We celebrated the approval of gene editing by Health Canada, but we're still awaiting the CFIA's approval to be able to practice the technology. For perspective, that is about a decade behind where the United States was on the same ruling. Why do I know that? It was my team at Dow AgroSciences that led that first inquiry into the U.S. regulatory system. I think we need a process that's interactive and that can collaborate in work and provide feedback in real time to the companies that are submitting proposals, engaging stakeholders as well as the regulators.

Look, the COVID-19 vaccines went from idea to product in less than a year. We did not sacrifice safety and we did not sacrifice efficacy. It was done in a way that works. Again, we don't need a crisis to make the system work—

Mr. Ted Falk: I have just a few seconds left and I would like to get in another question, if I could.

You talked about capital investments. What is the most strategic capital investment we could be making now to become global leaders in food security?

The Chair: You have 15 seconds, Dr. Webb.

Dr. Steve Webb: It would be port and rail.

Mr. Ted Falk: Okay. Thank you.

The Chair: Mr. Turnbull, it's over to you for two and a half minutes.

Mr. Ryan Turnbull (Whitby, Lib.): It's great to have all the panellists here.

I will direct my first set of questions to you, Dr. Fraser. I note that you made some really good suggestions in your opening remarks, all of which I've taken note of. In addition to that, though, I read a recent article in the Financial Post that you wrote and that I thought was really good. In it you said that the global food system depends on three basic assumptions—seamless trade, stable geopolitics, and cheap energy in a moderate climate. I would say today, and I think you said in the article, that those assumptions are not being met any longer, and it's naive for us to think that we can rely on a food system built for a different era.

My question to you is this: In addition to the things you've already said, is there anything else you'd like to tell us about how we build the food system for the 21st century?

Dr. Evan Fraser: Great. I'll answer very quickly.

Food insecurity is a function of people not being able to afford enough to eat. If we want Canadians to be more food secure, we need to address the cost of living and housing. This moves us out of food and into wages and the cost of living. I think the best levers to deal with the food insecurity problem are housing-related and wage-related.

In terms of the food production side, it's carbon neutrality, technological innovation and, probably, more resiliency, meaning less of this dependence on very long supply chains that wind through mountains that could be flooded out. We need to recognize that we are entering the age of disruption and need more backup plans and redundancy in our food systems. It's whatever we can do to build redundancy.

Those would be the two key pillars I would jump on immediately.

Mr. Ryan Turnbull: Thank you, Dr. Fraser.

Dr. Webb, I'll go to you for one quick question, with limited time.

I note that in your opening remarks, you focused on innovation and investment. I also note that your organization, with many partnerships, has done a really great job in developing a national index on agri-food performance, focusing on a set of sustainability indicators. I think you said we should be very proud of this. We should be.

One of those indicators was sustainable finance. I want to ask you whether there are opportunities within the realm of sustainable finance that could benefit the agri-food sector in terms of this conversation.

● (1745)

The Chair: You have about 25 seconds, Dr. Webb.

Dr. Steve Webb: Thank you for the opportunity.

I think, at the end of the day, the short answer is again yes. You like that answer. It's right across the entire ecosystem we're working in, from farm to research to innovation to the ability to bring it to the marketplace, and being able to look at it in the context of how we even enhance the trade opportunities.

Again, I think it's definitely a key element in an integrated solution space, which we need to pursue as a nation.

The Chair: Thank you, Mr. Turnbull.

Thank you, Dr. Webb.

Colleagues, this concludes our first panel, but please don't go far. We are going to turn panels over very quickly.

On behalf of the committee, let me thank Mr. Walker, who is in the room, and Dr. Webb and Dr. Fraser, both of whom joined us.

These are really important insights. Thank you for the work you do and for your testimonies here today.

Don't go far, colleagues. We're going to turn this over in two minutes.

● (1745)

(Pause)

● (1745)

The Chair: Okay, colleagues, we're going to get started again. I know everyone is enjoying getting back in person and getting the chance to connect, but we have to get some business done.

On our second panel today, we have, from the Canola Council of Canada, Chris Davison, who is the vice-president of stakeholder and industry relations. Mr. Davison is in the room. It's great to see you.

From the Canadian Federation of Agriculture, we have Scott Ross, who serves as the executive director. Mr. Ross, it is great to see you on video conference.

We also have Ron Lemaire, who is the president of the Canadian Produce Marketing Association. Mr. Lemaire, we are going to give your microphone the best chance we can, and you are up third.

Mr. Davison, you have up to five minutes. I'm going to turn the floor over to you.

● (1750)

Mr. Chris Davison (Vice-President, Stakeholder and Industry Relations, Canola Council of Canada): Thank you, Mr. Chair and members of the committee. Thank you for the opportunity to be with you today and to join you with my fellow panellists. As mentioned, my name is Chris Davison, and I'm the vice-president of stakeholder and industry relations with the Canola Council of Canada.

The council encompasses all links in the canola value chain. Our members include canola growers, life science companies, grain handlers, exporters, processors and other industry participants. Our shared goal is to ensure the industry's continued growth and success and to do this by meeting global demand for canola and canola-based products, which include food, feed and fuel.

Canola's success is Canada's success. Our industry represents almost $30 billion in economic activity annually, some 207,000 jobs, $12 billion in wages and the largest share of farm cash receipts in the country. Our strategic plan is built on three key pillars: sustainable and reliable supply, differentiated value, and stable and open trade.

In appearing before you today, I was asked to focus my comments on domestic policy recommendations that can improve Canadian exports on the global stage. As an industry that exports 90% of what we produce as canola seed, oil and meal, that is music to my ears. In responding to this request, I'm going to group my remarks into three areas of interest: market access and trade, regulatory initiatives and innovation.

Before doing so, however, I want to acknowledge the very real food insecurity challenges we face. Certainly the war in Ukraine and other recent events and developments have brought this into focus; however, food insecurity is not an episodic occurrence. It may be more acute or exacerbated at different points in time, but it is systemic in nature and, as we know, has both domestic and international dimensions. Canada generally, and our industry specifically, is in the fortunate position of being able to help address some food insecurity challenges. It is a well-established fact that Canada produces more than it needs for domestic purposes, and as I mentioned previously, canola is no exception.

That said, we are not without our challenges. The biggest among those, and the one with the most direct implications in terms of our ability to contribute to the alleviation of food insecurity, is meeting the demand challenge. Demand signals paint a general picture of significant demand growth for the foreseeable future, driven by global production challenges, geopolitical events and interest in healthy vegetable oils, among others. These demand signals have in turn served as a catalyst for the development of expanded processing capacity in Canada, as reflected in recent investment announcements and activity totalling close to $2 billion.

Therefore, it is an exciting and dynamic time for our industry, but in order to realize this growth potential and play a continued and arguably enhanced role in helping to address food insecurity, meeting demand is job number one. Market access and trade, current regulatory initiatives, and innovation all have a critical role to play in this regard.

With regard to market access and trade, it is no secret that open borders and open markets are the best way to help keep food plentiful, and they play an integral role in price stability. Market access and trade in the face of the war in Ukraine as well as other factors, including post-COVID protectionism, intensified competition, and the impacts of climate change, to name just a few, are critical. Accordingly, and as part of the broader Canadian agri-food sector, the canola industry is supportive of and an active participant in efforts to open new markets, encourage and demonstrate Canadian leadership in international fora with regard to rules-based trade, and strengthen advocacy capacity and government-industry collaboration.

In terms of current regulatory initiatives, of which there are several, I would simply say that we need to double down on our commitment to the development and implementation of science-based and evidence-based regulations that enable development, commercialization and access to the tools needed to realize increased production to be able to meet demand. We need to do this to provide clarity, enhance our competitiveness, attract additional investment and ultimately keep and put new tools in the hands of canola growers as they navigate an increasingly challenging production landscape.

With regard to innovation, it is well recognized that innovation has driven canola to become one of the world's most important oilseeds and Canada's most valuable crop, and we are poised to do even more with not just domestic, economic or environmental benefits as the result, but also in terms of our ability to help address food insecurity.

This past spring, we released a refreshed canola innovation strategy. It outlines a vision for near-term priorities to support the continued growth and development of our industry, including meeting the demand requirements referenced previously. The strategy encompasses four pillars: performance, precision, protection and product. If successfully implemented in terms of collaboration, effort, funding and regulation, this strategy will support the next phase of growth of the Canadian canola industry by improving performance, further increasing precision, protecting the crop and markets, and focusing on canola's strengths as an oilseed crop.

This will not only create more economic activity but also enhance our ability to address global food insecurity challenges as a result of the productivity gains it delivers. We would be pleased to share a copy of the innovation strategy with members of the committee if it is of interest.

● (1755)

By way of conclusion, the world wants and needs more Canadian canola. We need to work in partnership if we are going to work effectively to deliver it, inclusive of addressing food insecurity challenges as well as other shared objectives. We must also recognize that our ability to do so is in no small part dependent on our competitiveness in global markets. As we take domestic policy decisions, we must do so in a way that does not add costs that render our products less competitive.

Thank you for your time today. I look forward to our discussion.

The Chair: Thank you very much, Mr. Davison.

We're going to turn to Mr. Ross and the Canadian Federation of Agriculture for five minutes.

Mr. Scott Ross (Executive Director, Canadian Federation of Agriculture): Thank you, Mr. Chair and committee members.

I'm speaking to you on behalf of the Canadian Federation of Agriculture, representing approximately 190,000 farm families across Canada from coast to coast to coast. I would like to thank you for the opportunity to speak on global food insecurity.

Earlier this week I attended a presentation by David Beasley, executive director of the UN World Food Programme. He emphasized that a lack of fertilizer and production issues in major agricultural regions will result in a dramatic increase in the number of people globally impacted by acute food insecurity, already at 345 million people worldwide. The gravity of this situation is only heightened by the link between food insecurity and civil unrest, with his remarks noting the urgent need to maximize global food production and enhance resilience in agri-food systems.

Canada is blessed with an enviable endowment of natural resources and highly efficient agricultural producers, yet we're not immune to the global challenges posed by the COVID-19 pandemic, the war in Ukraine and climate change. In this era of increasingly connected crises, an overreliance on either international trade or domestic production leaves nations vulnerable to supply chain disruptions, with potentially devastating effects.

For example, farmers across eastern Canada continue to experience uncertain access to fertilizer and recognize that scarcity of this essential input is potentially a reality for years to come. Policies like the tariff on Russian fertilizer only contribute to higher prices for essential inputs, as producers already contend with historically high operating costs. There remains an acute need for relief from this financial hardship.

Global food insecurity requires a multi-faceted whole-of-government approach, supporting resilient food supply chains and maximizing food production. In my comments today, I'll touch on a few areas of critical importance in this regard.

First, on trade, at the 2021 United Nations Food Systems Summit, UN members agreed that the attainment of the SDGs will depend on fostering stable local food systems, supported by fair and rules-based trade. No international policy should create impediments to countries building their own agricultural infrastructure. The world needs strong rules-based trade that enables policy measures promoting stability of supply, such as safety nets, orderly marketing and supply management.

Canada's response to climate change is also a clear example of policies that have the potential to affect resilience and our capacity to produce food. Producers need policies that incent climate-resilient practices without constraining productivity. This requires collaboration between farmers and governments to leverage farm-level expertise. CFA continues to call for a working group of farmers, officials and technical experts to identify pragmatic climate change incentives that support continued productivity growth.

On infrastructure, physical and natural infrastructure is also central to our resilience in the face of climate change. Continued investment in the national trade corridors fund is essential to diversifying and strengthening our channels to market. CFA also supports the continued development of ecosystem services programming, such as the reverse auction program announced in budget 2021 for wetlands conservation and restoration. Recognizing farmers for their contributions to flood plain management and other public environmental goods is critical to the sector's long-term resilience.

On disaster responses and recovery, resilience also requires a coordinated approach to disaster response and the identification of measures that could mitigate and prevent future risks from occurring. CFA continues to call for collaborative post-disaster reviews as part of the AgriRecovery framework, bringing together key stakeholders after the initial disaster response to assess and identify best practices and needed changes, and to help design off-the-shelf programming responses for similar situations in the future.

Finally, with regard to labour and preservation of farm assets, maximizing Canadian food production requires access to labour and policies that preserve strategic agricultural assets. CFA is working closely with CAHRC and Food and Beverage Canada on an industry-led national workforce strategic plan to address the acute and systematic labour shortages that constrain our productivity. While industry-led, we look forward to engaging you in the coming months on the collective actions needed to tackle this chronic issue.

We must also work to ensure food security isn't sacrificed to conflicting interests. A prime example is a plot of Crown-owned farmland in Surrey, B.C., being put out for sale despite housing one of the most productive and climate-resilient horticultural operations serving the B.C. market. This may seem minor in the face of this global issue, but the loss of that land would be a permanent blow to food security in that region, demonstrating how policies across government can unknowingly add to existing food insecurity concerns.

In conclusion, global food insecurity is complex, with dramatic implications for political and economic stability around the world. We welcome this committee's commitment to explore Canada's role in responding to mounting global food insecurity. As you deliberate further on this topic, I would leave you with these four key areas where Canadian policies can have a direct and positive impact.

● (1800)

First is a strong international presence supporting rules-based trade that supports nations in promoting the stability of infrastructure and supply.

Second is a working group with farmers to ensure environmental policies support enhanced resilience and productivity.

Third is collaborative AgriRecovery reviews to mitigate and prevent future climate risks.

Last is a holistic approach to labour and the preservation of strategic productive assets in Canada.

I thank you for your time and welcome any questions you might have.

The Chair: Thank you, Mr. Ross. I gave you a few extra seconds, but you can buy me a beer next time you see me. I'm just joking.

Mr. Lemaire, we'll go over to you for five minutes and we'll go from there.

Mr. Ron Lemaire (President, Canadian Produce Marketing Association): Thank you very much, Mr. Chair and committee members.

On behalf of the Canadian Produce Marketing Association, which represents over 840 companies growing, packing, shipping and selling fresh fruit and vegetables domestically and globally and supports roughly 249,000 jobs across the country, I'm happy to present today on global food insecurity.

We all recognize that the topic of food insecurity is complex. Agriculture and agri-food play a key role in addressing solutions. The question we must ask is how agri-food can work across multiple jurisdictions and ministries, both domestically and globally, to ensure at-risk populations have the appropriate housing, employment, education and money to access food. Then there is the question of healthy food production and availability, and how agriculture can meet global challenges.

The pandemic is but one factor influencing global food insecurity; in many ways, it has further highlighted an already significant issue. Supply chains continue to be strained. Climate change has impacted our markets in Canada and globally. The war in Ukraine has added additional strain to an already fragile food system. As we know, war and other factors have led to a price increase in essential production inputs and commodities such as oil and associated fertilizer. This has directly resulted in price inflation, which has directly influenced food insecurity.

CPMA feels that food needs to be seen as essential and perishable food as a priority in all policy and programs, with consideration of fast lanes for both import and export models globally.

According to the Canadian Federation of Independent Business, nearly two-thirds of businesses said that a mandatory reduction of nitrogen-based fertilizer would decrease the profitability of their business and 42% said it would be challenging, as they have already reduced their nitrogen fertilizer use.

Instead of a nitrogen fertilizer reduction, given the difficult times that farmers are in, the CPMA suggests what Canadian researchers are encouraging farmers to do, which is to implement best practices to control or reduce nitrogen emissions. Some of these practices include conservation tillage, annual soil testing for nitrogen and rotating nitrogen-fixing crops.

The numbers don't lie. The Food and Agriculture Organization reported that an estimated 720 million to 811 million people in the world were food insecure in 2020. Similarly, in Canada, 2021 statistics show that 15.9% of households in the 10 provinces reported being food insecure. This is a grim reminder, but also an opportunity for Canada to drive change domestically and be a global force to address international needs.

As the only G7 country without a national school food program, we edge closer to the reality of investing in children's nutrition. The CPMA is a member of the Coalition for Healthy School Food, which is a non-partisan organization working to advance and support a national nutritious school food program, which would allow Canadian children to receive nutritious food at school using a cost-sharing model. By doing so, we would work towards achieving the United Nations' sustainable development goal number 2: ending hunger, achieving food security and improving nutrition.

Domestically, I feel there are two key areas of focus, which are community change and industry support. How do we enable social programs that enable Canadians to buy the food they need and enable programs that support agri-food production and innovation? Examples like the surplus food rescue program and the local food infrastructure fund had an impact, but the withdrawal of funds from these sources left many NGOs without the ability to be sustainable within a perishable food system. As a recipient of surplus food rescue program funds, I saw first-hand the invisible food network, which is 61,000 charities and non-profits that support our efforts to address food security. All rely on a complex system of donations, logistics and funding. Second Harvest has reported that with $25 million in funding last year, they had requests for over $84 million for food that they were trying to support, which shows a dramatic need in the communities across the country. I will commend Second Harvest, as 71% of the funds were distributed to BIPOC community networks.

Food security is complex and requires aligned policies and programs to support the ability to produce, access and pay for food. The Canadian government has an opportunity to strengthen our supply chain to meet the dietary needs of Canadians and the rest of the world.

I greatly appreciate this opportunity to speak to the committee and to answer any questions you may have.

Thank you.

● (1805)

The Chair: Thank you very much, Mr. Lemaire, and we're going to do just that.

Colleagues, we only have about 25 minutes left. There might be some small room to extend our time, so just assume that you're only going to get six minutes per party. If I do have a little bit of room, I'll try to give a little bit extra to the Liberals and Conservatives.

Mr. Epp, we'll start with you.

Mr. Dave Epp (Chatham-Kent—Leamington, CPC): Thank you to the witnesses. I'd like to spend six minutes with each of you.

I'll start with canola and Mr. Davison. There is the dynamic of the food versus biofuel debate with the expansion of facilities in the Regina area in the context of fertilizer emission target reductions. Can you comment?

Mr. Chris Davison: Yes, I would say that the topic is increasingly framed as food versus fuel. I think it's increasingly becoming food and fuel as we have to deal with both food security and energy security as a result of recent geopolitical developments and other considerations.

Let me just say that as part of global efforts to address climate change, more and more countries are introducing renewable fuel mandates as part of their efforts to reduce greenhouse gas emissions. Certainly biofuels in the context of the transportation sector, which we know accounts for about 25% of total GHG emissions both globally and here in Canada, are a key driver for that, and biofuels are a proven and viable solution to decarbonize transportation fuels—

Mr. Dave Epp: Thank you. I'm going to have to ask that you send in the innovation strategy. I just need to get a few more questions in. Thank you.

Mr. Ross, you touched on fertilizer accessibility. In eastern Canada, obviously we've been importing a lot. We've collected $37 million in fertilizer tariffs.

I have two questions. What do we need in order to use Canadian fertilizer nitrogen, particularly in eastern Canada? What should we do with the $37 million?

Mr. Scott Ross: In terms of your second question, what I hear from eastern Canadian farmers is that these are very challenging times in terms of the operating costs they're experiencing and a sense that the money needs to be directed towards targeted financial relief for those impacted by the tariff itself.

When it comes to accessing nitrogen for subsequent years, I think the biggest need we have right now in Canadian agriculture is clarity and certainty in what the future holds so that people can plan accordingly for next year. Right now there's a bit of an absence of clarity around the policy landscape for the future, and there are concerns around the future availability and pricing of nitrogen. I think there's certainly a need for a longer-term strategic discussion here, but in the immediate term, we need clarity on what the future holds.

Mr. Dave Epp: Thank you, Mr. Ross.

Mr. Lemaire, California, which is one of the major vegetable and produce producers, is short of water. What else can we be doing in Canada, particularly in our greenhouse industry? What else does that industry need for infrastructure in order to displace imports and become more food secure in our produce sector?

Mr. Ron Lemaire: That's a great question.

The greenhouse industry has a huge opportunity, especially in areas like strawberries and even melons, which are now being tested and sold back to the U.S.

We need energy and access. We need to look at the carbon strategy to try to support the greenhouse industry more effectively, as well as have a strategy that can ensure we have the labour that's necessary to support efforts to expand. We're losing greenhouse business to other countries.

Mr. Dave Epp: Thank you, Mr. Lemaire.

I'll concede to my colleague Mr. Lehoux.

[*Translation*]

Mr. Richard Lehoux (Beauce, CPC): Thank you, Mr. Chair.

Mr. Ross, you talked about the labour shortage, among other things. Labour is a very important factor.

Can you give us some concrete examples?

My question is for both Mr. Ross and Mr. Lemaire.

● (1810)

[*English*]

Mr. Scott Ross: In terms of the labour shortage, I can give you some examples of the implications. Certainly one thing we have experienced through the pandemic is continual pressure on labour-intensive forms of agricultural production like fresh fruit and vegetable production, in particular where producers are left making very difficult decisions around the future of their operations due to a scarcity of labour. One of the challenges that I think has arisen—

The Chair: Pardon me; we're having trouble with translation, I believe. I'm going to keep talking in English until Mr. Perron can hear me in French. I've stopped the clock.

We're now corrected.

Mr. Ross, it's back to you.

Mr. Scott Ross: I'll just conclude and note that what we do hear about is continued pressure on some of these very high-value forms of production to move to less labour-intensive forms of production that are more mechanized to avoid labour pressures.

Our strategic approach with CAHRC is very multi-faceted and touches on everything from perceptions and awareness of the industry to workplace culture and HR practices to the need for improvements to our immigration regime and temporary foreign worker programs.

[*Translation*]

Mr. Ron Lemaire: Thank you for the question.

My answer is almost the same as Mr. Ross's.

[*English*]

I feel that we need to look at it.

[*Translation*]

I don't know if you'd like to ask another question.

Mr. Richard Lehoux: If I may, Mr. Lemaire, I'm going to add something to my question.

Did the changes that were made to the program in the last year spark any reaction on the ground? Did that improve the situation?

Mr. Ron Lemaire: I'm going to answer in English, as I don't have a lot time.

[*English*]

Yes, we did see a change. We did see movement in our temporary foreign worker program and in access to labour, but as Mr. Ross mentioned, as we move to more technology and more of the skilled labour that's required to drive change, we do require increased immigration. We do require targeted strategies that bring in the right skill set for the right areas of the supply chain.

Our biggest challenge now is actually post farm gate. After the grower grows it and it goes into the supply chain, the warehouses and repacking facilities do not have the labour to move the products through to the consumer. The push with the emergency post farm gate shift to 30% foreign workers has helped.

The Chair: We'll have to leave it there.

Thank you, Mr. Lemaire and Mr. Lehoux.

We have six minutes. We're going to turn back to the Liberal bench.

I'm going to start with Ms. Taylor Roy. If you do want to split your time, I'll leave that to you guys to decide.

Ms. Leah Taylor Roy (Aurora—Oak Ridges—Richmond Hill, Lib.): Thank you, Mr. Chair.

First of all, thank you to the witnesses for being here on this very interesting topic. We could go on and on, because there are so many aspects of food insecurity.

You talked about increasing supply and said that it's the supply that we need to focus on. I'm wondering what your thoughts are on decreasing food waste, because obviously we can also address food insecurity by dealing with the 40% of food that's wasted. Especially on the producer side, the agriculture side, how you are addressing that aspect so that less food is wasted and more makes its way to the ultimate consumer?

Perhaps Mr. Ross, you could start with that.

Mr. Scott Ross: Yes, sure.

I would simply say that at a high level I think one of the key focuses from our perspective is on improving data management and data systems to ensure there is that sort of adequate insight into supply chain dynamics to prevent food waste wherever possible.

I think we experience and operate, depending on the sector, in a very just-in-time delivery model in Canada. With the increasing disruptions we're seeing in climate change and the labour-related disruptions up and down the value chain, as we talked about, it becomes increasingly problematic to manage. I think it's really predicated on collaboration in the supply chain, on sharing of information and strengthening the relationship between buyers and sellers to ensure that there are both risk-sharing relationships and trust-based relationships to drive forward together and ensure that. A lot of the supply chain waste we experience doesn't necessarily fall within one entity; it crosses the relationships between multiple players, and that relationship is critical.

Ms. Leah Taylor Roy: Can I just ask you a quick follow-up on that? Do you feel that there's a lot of effort or a lot of focus being put on that aspect currently?

● (1815)

Mr. Scott Ross: I will say that I sit on the steering committee on the grocery code of conduct process, and I think there's a lot of discussion there. We are under some confidentiality obligations, so I can't get into too much detail there, but I will say that building improved supply chain dynamics, building trust and building transparency in the system is an essential tenet in that entire discussion and process that we're involved in.

Ms. Leah Taylor Roy: Okay. Thank you.

I have a quick question for Mr. Lemaire.

You mentioned the national school food program, I believe. I'm a big proponent of that, of healthy food and dealing with food insecurity in Canada.

I have a question. We talk about the supply and demand balance. In Canada, demand and appetite have grown for certain types of foods because of the lower food prices, which have been kept down over the decades. I'm wondering what role you think education has in actually switching food consumption behaviours and how that can help with food insecurity.

Mr. Ron Lemaire: It certainly does. We saw some of this shift during the pandemic when people were looking for solutions on how to prepare food and how to store it. People were going back to home gardens and community gardens. That is foundational for shifting and changing behaviour and the knowledge of food.

That knowledge of food is key. How do we drive that through the school system? How do we move us back into an environment where Canadians understand how to buy, how to store, how to prepare and how to get the most out of their food?

Ms. Leah Taylor Roy: Thank you very much.

I'll share the rest of my time.

Mr. Tim Louis (Kitchener—Conestoga, Lib.): Thank you for that. I appreciate all the witnesses.

I'm going to talk to Mr. Ross from the Canadian Federation of Agriculture.

You talked about incentivizing climate-resilient policies, how the farmers want to do this and how we can support that productivity growth. You mentioned recognizing farmers for wetland protection. Can you give some examples of what is already happening and how we can take the next steps to do that?

Mr. Scott Ross: I'll speak to one particular example, the Canadian Wetlands Roundtable, where there's a lot of work under way currently on developing valuation metrics for some of these ecosystem services. Across the board, I think that is one of the fundamental challenges in pursuing good ecological services programming. It's making sure there's a concerted effort, with the right people in the room working on creating valuation models or means of putting a price on the public good that producers are providing.

When we look at things like emissions reductions, we see that many of the practices farmers are being asked to employ predominantly have public good and public benefit without necessarily a corresponding private benefit. Addressing that divide is fundamental to this entire discussion and why there is this need to continue exploring programming in this space.

Mr. Tim Louis: I appreciate that.

Just to stay on there, you mentioned four lessons that we've learned. One of them was “a holistic approach to labour”. Can you expand on what you meant by that, and how we can learn from taking a holistic approach to labour?

Mr. Scott Ross: Yes, certainly. Right now I'm co-chairing the national agriculture, food and beverage manufacturing workforce strategy with the Canadian Agricultural Human Resource Council and Food and Beverage Canada. We are engaging industry stakeholders from across Canada across a series of different pillars, speaking to everything from the need for immigration reform and improvements to our temporary foreign worker programming to perceptions in career awareness to HR best practices, workplace culture and beyond.

I think what is critical here is engaging stakeholders from across the country, because there is no one entity that can tackle this issue, nor any person who can put their hand up and say, “We've done enough here”, because clearly the problem is getting worse, not just in agriculture but up and down the value chain. We've never heard so much from our producer members as we have over the past year about challenges in the food processing world relating to labour. I think we do need to take a value chain approach, but certainly one that is pan-Canadian and engaging the entire industry, because we need buy-in and support from all the stakeholders across the country.

The Chair: Thank you, Mr. Ross. Thank you, Mr. Louis.

I want to recognize that MP Lapointe is in the room. We welcome to the agriculture committee the member for Sudbury, I believe. Although it's not a massive agriculture area, I know the Minister of Agriculture was up in that area in northern Ontario this summer. I wanted to make sure that was on the record.

Mr. Perron, you have six minutes.

[*Translation*]

Mr. Yves Perron: Thank you, Mr. Chair.

I'd like to thank the witnesses for being here.

I'm going to continue with Mr. Lemaire.

You mentioned the labour problem. You've seen a change thanks to the 30% threshold in agri-food, among other things.

If you had to quickly recommend a specific change to the government, particularly with regard to the temporary foreign worker program, what would it be? What change would you like to see changed tomorrow morning?

● (1820)

Mr. Ron Lemaire: Thank you for the question, Mr. Perron.

[*English*]

Immediate change for tomorrow would be easing and reducing the administrative burden on the farmer and also on those post the farm gates.

The challenge many farmers go through is the administrative burden of trying to go through the process of getting the labour in, and that is fundamental. Lots of these farmers, especially in the fruit and vegetable sector, do not have large operations, and the administrative burden that they have to deal with is extremely difficult. This goes back to issues Mr. Ross and our organization, the fruit growers of Canada, have been dealing with—reducing the red tape and improving and streamlining the system.

[*Translation*]

Mr. Yves Perron: In a few seconds, do you think that if we were to give fruit and vegetable producers greater financial security, the country's food resiliency would increase?

Mr. Ron Lemaire: Yes, I feel it would be a great opportunity to improve things for everyone.

Mr. Yves Perron: Thank you, Mr. Lemaire.

Mr. Ross, you said that the tariff on Russian fertilizer had contributed to higher prices. We've also had discussions with your Quebec counterpart, the Union des producteurs agricoles, which is asking for support to help farmers deal with the sudden inflation.

Are you still discussing this issue with the government? Have you received a response?

[*English*]

Mr. Scott Ross: We have ongoing dialogue on that front. I will note that the CFA has a cost of production committee that is exploring strategic responses to what we see as the concerns arising from the inflationary pressures on our sector.

I think this is a new norm that we're going to be dealing with for quite some time, so internally we are working very concertedly at coming together with some recommendations and ideas around how we need to be responding strategically to this issue, because it's not going to change overnight, nor will it necessarily abate in the coming years.

All I can attest to is that I will have more to share soon on that front.

[*Translation*]

Mr. Yves Perron: You mentioned the need to create a working group with farmers. Can you take 30 seconds to tell us more about that?

[*English*]

Mr. Scott Ross: There are so many different environmental policy initiatives under way right now that are interrelated in many areas, and what is needed critically, from our perspective, is a group that leverages farmers' technical experience and expertise in production on the ground with academic and technical experts and government officials to come together and ensure that the solutions we're putting forward are practical, do not constrain productivity growth for Canadian agriculture and will achieve the emissions reductions that are intended.

It's really just making sure that we're leveraging all the available expertise that's out there.

[*Translation*]

Mr. Yves Perron: You talked about collaborative post-disaster reviews as part of the agrirecovery framework. We had a rather striking example of a disaster in eastern Canada. Can you tell us more about that? Have you had a positive response? Will that collaborative review group be put in place?

[*English*]

Mr. Scott Ross: What I was referring to in my remarks was more disaster recovery response after the fact to identify prevention and mitigation measures. What's happening in the east right now in our discussion and dialogue with our members is an effort to identify what needs to happen in the immediate recovery response period. At this point in time, it's hard to determine exactly what that looks like, as there is still fact-finding going on about the scale and extent of impacts and what it will mean for recovery for Atlantic Canada.

We are connecting our members from across the country to learn from things like the atmospheric river flooding that happened in B.C. and responses that took place there. We're trying to ensure that we are providing connectivity across the country, but it's still very early days to comment on what's taking place there, other than to say that the devastation is significant and that we continue to hear very troubling reports about the impacts this is going to have on next year's production.

[*Translation*]

Mr. Yves Perron: Thank you very much, Mr. Ross.

Mr. Davison, I would feel terrible if I didn't ask you a question before my time is up.

You mentioned the importance of having science-based regulations. Can you explain that in a minute or less?

[*English*]

Mr. Chris Davison: We talked about the importance of domestic policy to support exports, and it's very important. I think one of the previous witnesses on a previous panel referred to the need to have regulations in place that provide a clear pathway to support the innovation that was referred to earlier. We need a well-established, clear regulatory pathway that provides predictability for the developers of new technologies and innovations. They need to have a clear understanding of what that pathway is and the timeline from research and preliminary development through to commercialization, because the goal is to get these innovations into the hands of frontline producers who are doing the work for us so that we can increase our export capacity. That starts with production.

We need a clear signal from regulators. We need alignment internationally so that we have common standards and we need a risk-based and evidence-based system that supports those regulations.

● (1825)

The Chair: Thank you, Mr. Davison. Thank you, Mr. Perron.

Mr. MacGregor, you are going to finish us off for the evening. You have six minutes. It's over to you.

Mr. Alistair MacGregor: Thanks, Mr. Chair. I will bring it home for all of you.

Mr. Ross, I'd like to start with you. Certainly you are someone who wears many hats and you are no stranger to our committee.

We know that worldwide the losses in agricultural production due to climate change number in the billions of dollars. We know that future projections show that the situation is only going to get worse. We certainly have our own experience here in Canada.

We are very familiar with the amazing efforts that farmers are putting in place to reduce their emissions and to create carbon sinks, but I also want to change the conversation a little bit to how we are trying to prevent climate change from impacting production. Farmers are putting a lot of effort into increasing efficiency and increasing their production, but climate change is fighting this rearguard action that could take a big chunk out of that production as a result of forest fires, droughts and floods.

Do you have anything to share about the ways that farmers are trying to deal with that, whether it's employing new crop varieties or using different farming techniques to maybe innoculate themselves against extreme weather events? Do you have anything you could share with regard to the feds needing to step in a little bit more? It could even touch on some of the business risk management programs that help farmers get back up on their feet as quickly as possible.

Mr. Scott Ross: One element I'll touch on builds on Mr. Davison's comments on the need for regulatory modernization to allow access to new technologies and products to ensure that farmers can employ new varieties. This is something that is being done across Canada as these things become available to deal with the new pressures we are experiencing. However, the time lag on approvals delays our ability to leverage those technologies, so it is critical that we streamline our regulatory processes to make sure they are risk-based, outcome-based and targeted to ensure that farmers have the tools they need.

When it comes to risk management, I will say there is a real need, when it comes to disaster responses in particular, to take a step back, as I referenced in my comments. Bring industry leaders, technical experts and government officials together in the aftermath of disasters to learn from what happened and identify mitigation practices and prevention measures in a public-facing fashion. Start employing progress in those areas, so that when similar disasters happen in the future, we have learned lessons and employed improvements in programming, infrastructure and on-farm measures.

It is an opportunity for shared learning and common understanding to help ensure that we have that feedback loop and can respond in kind.

Mr. Alistair MacGregor: I appreciate that. Thank you.

Mr. Lemaire, I'd like to turn to you. In your opening remarks, you talked about the energy requirements of our greenhouses. In a previous life, I was involved in the construction of a greenhouse and putting together the boiler that keeps that facility warm, so I know how complex they are and how intricate those piping systems are.

In terms of energy, is there more that the Canadian government could be doing to help you access renewable forms of energy, whether it is reducing the costs of existing hydroelectric sources or tapping into geothermal energy? I wonder if you have any comments to share about that.

I'd like to have one more question too.

Mr. Ron Lemaire: You will. I'm going to be very quick and concise.

What you are talking about is a growth plan, and resiliency comes from a sound growth plan. Yes, Alistair, everybody is looking for new energy forms, but we have to look at everything as an integrated model. That includes our infrastructure, our people, our energy, our inputs and, as Mr. Ross noted, regulatory modernization.

As we bring all that together—the elements around climate change and the impacts that we're dealing with, atmospheric rivers and everything else—we can navigate it if we have a growth plan with those integrated pieces in place across multiple ministries. That's where the agriculture department has to lead and bring everybody else in to drive change.

● (1830)

Mr. Alistair MacGregor: The last question is for you as well.

I was at the breakfast event that you hosted last week. You were talking about half your plate being fresh fruits and vegetables, and you made mention of the national school food program that we want to see brought in.

Food security for our children is also linked to their health security. Maybe you could bring us home by linking those two concepts and telling us why healthy, nutritious food and food availability for children are so important in their growth and development and in health outcomes.

Mr. Ron Lemaire: Food security builds.... As we heard from one of the other witnesses, it comes back into your housing, it comes back to employment and it comes back to the affordability and availability of food. When children eat, they learn better. They are enabled and they're empowered to grow and develop, and that is our future.

If we are looking at our future, the foundational attributes come back to a school food program that can be delivered and supported, but it is linked also to all of those other key components, including affordable housing, as well as the key areas of getting people working and engaged in the economy.

Mr. Alistair MacGregor: I appreciate that.

Thank you to all of our witnesses.

With that, Mr. Chair, I'll cede my time.

The Chair: Thank you very much, Mr. MacGregor.

On behalf of all committee members here in the room, let me echo the thank you to our witnesses.

To Chris Davison, Ron Lemaire and Scott Ross, thank you so much for your leadership in agriculture and your testimony here today.

Colleagues, that marks the end of the first meeting on this particular study. On Monday we will be carrying on with the study of Bill C-234. That is what is on the schedule. The clerk has worked to make sure that we have witnesses there, so we will continue on.

Thank you. Enjoy your weekend.

The meeting is adjourned.