HOUSE OF COMMONS
CHAMBRE DES COMMUNES
CANADA

Standing Committee on Agriculture and Agri-Food

AGRI • NUMBER 031 • 2nd SESSION • 41st PARLIAMENT

EVIDENCE

Monday, May 12, 2014

Chair

Mr. Bev Shipley

Standing Committee on Agriculture and Agri-Food

Monday, May 12, 2014

● (1530)

[*English*]

The Chair (Mr. Bev Shipley (Lambton—Kent—Middlesex, CPC)): I'd like to call our committee to order, please, as we continue with our study of innovation and competitiveness.

For the first hour, we have the Canadian Renewable Fuels Association, Scott Thurlow, president.

By video conference from wonderful warm Windsor, Ontario, we have from the Ontario Greenhouse Vegetable Growers, George Gilvesy, the general manager. Welcome, George. With him is Leanne Wilson, science coordinator.

Because we have had the odd freeze on the videos from time to time, we will start with the greenhouse. Then, if we get an interruption, which I hope we don't, we can repair it and go to Scott.

With that, I'm not sure who's going to make the presentation, but I would open it to the Ontario Greenhouse Vegetable Growers.

Welcome to our committee.

Mr. George Gilvesy (General Manager, Ontario Greenhouse Vegetable Growers): Thank you, Mr. Chairman.

My name is George Gilvesy. I'm the general manager of Ontario Greenhouse Vegetable Growers. With me is Leanne Wilson, who is our science coordinator.

As far as the freezing, that's pretty symbolic of greenhouse growing because we do things in a controlled environment; it's perhaps appropriate that we're on the video screen.

I'll give a little background to the committee about the Ontario greenhouse vegetable sector. It accounts for 63% of the $1.24 billion in farm cash receipts attributed to the Canadian greenhouse vegetable sector. Ontario boasts one of the largest greenhouse vegetable regions in North America, with 2,398 acres of greenhouse tomato, pepper, and cucumber production. These vegetables are also produced on a significant scale in British Columbia, Alberta, Quebec, and the Maritimes. The Ontario greenhouse vegetable sector is also a significant part of the rural economy, accounting for some 10,000 jobs annually.

The Ontario Greenhouse Vegetable Growers, or OGVG as we call it, is headquartered in Leamington, Ontario. it is the grower organization for all tomato, pepper, and cucumber greenhouse farmers in Ontario. Our mandate is to provide market access for producers and ensure the opportunity for economic success.

Mr. Chairman, our sector is one of the fastest growing agriculture sectors in Canada. The scope and growth of the Ontario greenhouse sector is relatively unknown outside of our growing region, as few people understand Ontario's market dominance position across North America. This market dominance extends from eastern Canada, down through the southern United States, principally east of the Mississippi, and is maintained through the months of April to November. There is approximately 70% of our production that is exported to the United States.

Leamington has experienced an increase in gross domestic product of some 10.6%, during the period of 2011 and 2012. Leamington's economic development manager has attributed this growth in jobs and GDP primarily to the 205 acres of growth of the local greenhouse vegetable sector. At close to $1 million per acre, this private investment in high-tech greenhouse production facilities has been a real boost to the economy. The growth of the sector is expected to continue.

The goal of the Ontario greenhouse vegetable sector is to achieve sales of some $1 billion within 10 years. This goal will only be achieved by investing with government and other stakeholders in innovative R and D policies, to drive the production of year-round environmentally sustainable greenhouse produce that is safe, fresh, and at a quality that meets the needs of our growing customer base.

As far as enhancing agricultural sustainability, greenhouse vegetable farming is one of the most sustainable and productive forms of agriculture in Canada. We are able to produce 10 times more food per square metre than field producers because of our nearly year-round production under controlled environment conditions. That helps us to maximize production of high-quality produce. The controlled nature of our production system also allows us to efficiently utilize typical agricultural inputs, for example, water and nutrients, as well as other inputs which aren't as easily used in field production, for example, bumble bees for pollination, CO_2 to increase photosynthesis, and good bugs to do the job of pesticides. Overall, greenhouse vegetable production allows Canada to maximize the production of healthy food while minimizing the strain on Canada's finite agricultural resources.

With regard to investment in innovation, that is critical to our sector's global competitiveness. Our farmers face stiff competition from other high-tech greenhouse farmers, as well as low-cost producers. OGVG and our members are therefore committed to investing in innovative research and development initiatives in order to enhance our global competitiveness.

Government plays a critical role in innovation by supporting R and D projects that are applicable to the agriculture sector. OGVG is very grateful for the R and D support that the government has provided the greenhouse vegetable sector in the past. In particular, we are appreciative of the $2.7 million in support through the agri-innovation program, for our project, Advancing the Ontario Greenhouse Vegetable Sector: Global Competitiveness Through Innovation. During the past five years a total of $8.3 million was invested in projects to benefit Ontario greenhouse vegetable farmers.

● (1535)

On challenges and barriers to innovation, given the nature of our production system, our sector relies heavily on the use of experimental greenhouse facilities to conduct our innovative research, in particular the Agriculture and Agri-Food Canada Greenhouse and Processing Crops Research Centre in Harrow. We greatly value the accessibility to this facility and the world-class researchers within, and strongly request that the federal government ensure there is continued support and investment in greenhouse research facilities and researchers.

Access to research funding is a challenge. It becomes increasingly challenging to maintain a research program for our sector when government programs only allow for projects of four to five years, and transition between programs, for example, Growing Forward 1 and 2, often results in a significant gap in funding and a loss of research capacity. The flexibility within these programs is also very limited and can often stifle innovation. We strongly encourage the government to engage with stakeholders early on in the planning of Growing Forward 3, for example, so that constructive feedback can be provided to ensure a smooth transition, and an effective and transparent program can be initiated.

On another topic, improving food security, one of the most important components of food security is providing Canadians with reliable, safe food. Ontario greenhouse vegetable farmers are committed to food safety, with each farm being required to undergo an annual third party food safety audit. Many of our growers have also implemented advanced traceability systems that allow produce to be tracked from the consumer back to the exact section of the greenhouse where the produce was harvested. Through our sector's food safety and traceability programs, we are well prepared for any potential food safety incidents.

In September 2012 the Canadian Horticultural Council's greenhouse committee wrote letters to the Minister of Agriculture and Agri-Food and the Minister of Health to convey our concerns regarding the government's level of preparedness in the event of a food-borne illness incident. These letters were written in response to the highly publicized and devastating 2011 E. coli outbreak in Germany from European sprouts. This event taught us many things, including the openness of the global food system, for example: a Europe with no borders; the importance of industry and government being prepared with spokespeople and a crisis management plan; and most important, the value of a comprehensive traceability system.

Canada is recognized globally as having a world-class food safety system, and it is this reputation that needs to be maintained through the development and implementation of an innovative crisis management plan that takes the needs of the government, consumers, and the agricultural sector into account. We encourage our government to review Canada's planning so as to minimize the negative impact of a situation similar to what Europe experienced.

As far as new markets and market access are concerned, greenhouse vegetable farmers operate in a fiercely—

● (1540)

The Chair: Excuse me, George. You're well over the time. I'm going to give you 30 seconds just to wrap it up, if you would, please.

Mr. George Gilvesy: I thought I had seven minutes, Mr. Chairperson.

The Chair: Yes, but you're at almost nine.

Mr. George Gilvesy: Really? I didn't realize that.

Nevertheless, we're doing a fair bit of work in developing new markets. One of the things we're looking at is developing the Pacific Rim. We're going to investigate new markets and we ask that the federal government continue to provide financial and/or policy support for these endeavours.

In conclusion I just want to say that the greenhouse vegetable sector is investing in innovative new processes, practices, and products to ensure the sustainable production of safe products that meet the needs of our various customers.

With that, we have left you the presentation, Mr. Chairman, and look forward to the committee's questions.

The Chair: Thank you very much.

I want to now go to Scott Thurlow from Canadian Renewable Fuels Association.

Mr. Wilson Scott Thurlow (President, Canadian Renewable Fuels Association): Thank you very much, Mr. Chair.

The Chair: For seven minutes.

Mr. Wilson Scott Thurlow: I actually thought in greenhouses things got shorter.

Voices: Oh, oh!

Mr. Wilson Scott Thurlow: I'm very happy to be here today on behalf of Canada's biofuels industry to talk about innovation in the agricultural sector.

Canada's domestic biofuels industry, one that takes homegrown agricultural products and converts them into clean-burning renewable fuels, is the very definition of innovation. Founded in 1984, the Canadian Renewable Fuels Association is the country's leading advocate for the economic and environmental benefits of biofuels, and represents the full spectrum of Canada's domestic biofuels industry.

Across the country, Canada's renewable fuels plants are generating gross economic benefits in excess of $3.5 billion per year to the Canadian economy, and have created more than 14,000 direct and indirect jobs.

l am also very proud to be here with the Ontario Greenhouse Vegetable Growers, especially knowing that one of our member ethanol plants is now pumping carbon dioxide into a greenhouse adjacent to their operations in Chatham. Soon they will be pumping waste heat into the Truly Green greenhouse complex as well. Biofuels producing tomatoes, healthy local tomatoes with a low carbon footprint, encapsulates both the spirit and necessity of Canadian innovation in agriculture.

l could easily use my time here today just reading out a list of all the sustainable, value-added co-products that CRFA members are currently producing. Instead, l will give you all cookies of one of these co-products, biodiesel-based glycerine, from the processes we have in Hamilton where we can take corn oil off of an ethanol plant, spin out that corn oil, turn that corn oil into biodiesel, take the glycerine off of the biodiesel, and turn that glycerine into the cookies that I presented to you earlier today, or I could just list all the other things we are doing and move on.

In seriousness, our industry is at the forefront of that very innovation this committee is seeking to study. Just two weeks ago Mr. Joe Preston, the member for Elgin—Middlesex—London, rose in the House of Commons to talk about one of our members, IGPC, which produced its billionth litre of ethanol in Aylmer, Ontario, right in the middle of Ontario's corn country. IGPC is now looking at expanding its ethanol refinery so as to produce ethanol from more sources, as well as recycling the refinery's carbon dioxide into vegetable oils.

This farmers cooperative is one example of how, through chemistry, our members are innovating their processes to make more than ethanol and dried distillers grains. CRFA members are producing a wide array of products that form the feedstock for many other industries: food, pharmaceuticals, alcoholic spirits, chemistry, personal care products, soaps, fuel additives, sugars, and the automotive sector, to name just a few. There can be no doubt that Canada's renewable fuels industry is truly expanding from biofuels to the bioeconomy.

Recognizing this, CRFA launched our industry's new vision and action plan, “Evolution and Growth”, last month here in Ottawa. I believe all committee members received their copies in advance of my testimony. This is the first comprehensive plan on renewable fuels in Canada for several years, and it sets a clear pathway forward for continued growth and expansion of biofuels use and production. It also showcases first-hand the exciting work being done by our members.

More than anything else, our industry was designed as a business risk management tool for farmers so that when there was a downturn in commodity prices, farmers would have a guaranteed local market for their products. This year, this winter, the original goal of the renewable fuels regulations and the renewable content requirements have never been so acute. We had a bumper crop across the country and we couldn't get it out to market.

Biofuels production was again shown to be a welcome value-added process for these grains, spurring local investments in rural areas and creating fuel with significant environmental benefits.

One area where we haven't seen the development we'd like is in the advanced fuel sector. This year we will finally see commercial developments in North America for cellulosic biofuels. One of our member companies, Enerkem, will be making cellulosic biofuel in Edmonton on a commercial scale, and it will be made from garbage. Other facilities opening in the U.S. will be using agricultural residues as their feedstock.

Ladies and gentlemen, these processes are no longer visions of a distant future. They are happening now. The time has come for us to do more. Canada needs more renewable fuels and the waste and GHG-saving benefits that biofuels provide.

The question is this: what do we need to do in order to spur additional innovation so that these products are made and used here at home in Canada? Our report, “Evolution and Growth”, answers this with six policy recommendations, all of which fit hand in glove with innovations in the agricultural sector.

● (1545)

CRFA's policy recommendations would create a fair value for greenhouse gas reductions, support innovation and investment in Canada, increase renewable diesel content from 2% to 5%, deliver modern fuel blends to consumers at the pump, increase domestic production and use of advanced biofuels, and finally, recommend building a comprehensive bioeconomy strategy for Canada.

These recommendations are interwoven with one another and can all be reflected as individual policies to further drive innovation and biofuels production in Canada.

I would like to take a few moments to highlight a couple for you now, but I am happy to answer questions about all of them.

Business support programs have been an incredible business risk management tool for building our renewable fuels industry like we have in Canada. They also attract investment like a beacon, and with that investment comes innovation.

Before 2008, there were very few plants to speak of in Canada. Because of programs like eco-energy for biofuels, we helped share the risk with investors, biofuels innovators, and government to ensure that private investment was there to expand this industry. When this program expires, our first generation biofuels producers will be well positioned to stand on their own and compete in a global biofuels market.

Programs like the government's Growing Forward 2 program and the agri-innovation program under Growing Forward 2 are also extremely important. Our members have supported them from the outset. As my friend said, we need to see flexibility in these programs to ensure that innovation in the agricultural sector continues.

AIP needs to provide applicants with that flexibility, which will allow innovation to flourish.

As a national association and as a member of Canada's bioeconomy network, the Canadian Renewable Fuels Association supports the creation of a national bioeconomy strategy or framework going forward.

Our largest trading partners in Europe and in the United States already have detailed strategies in place and are investing billions in their bioeconomy sectors through direct capital grants and procurement policies. Today, Canada lacks such a framework to coordinate policy and that is deterring innovation and delaying approvals for new products and technological upgrades to existing facilities.

Canada competes fiercely with the United States' biofuel producers whose approval processes for new technology are much faster than our own. U.S. producers export significant amounts of product into Canada and will continue to do so. While Canadian companies are left waiting for technology approvals, our U.S. competitors are benefiting from this technology and then selling their product into Canada.

Ultimately, with the exception of the convenience of transportation, Canadian producers have higher costs to access the Canadian market than our direct competitors from the United States.

Simply put, as an industry and as a country, we cannot afford this to continue.

Thank you. I would be happy to answer any of your questions.

● (1550)

The Chair: Thank you very much, Scott and both of our witnesses.

We will now go to questions from our committee.

I'll go to Madam Brosseau, for five minutes, please.

Ms. Ruth Ellen Brosseau (Berthier—Maskinongé, NDP): I'd like to thank our witnesses for their presentations today and also for the cookie, which will be useful later because we have 17 votes, so we might need a snack in the House.

Mr. Thurlow, you mentioned the eco-energy for biofuels program. Can you give me examples of where the program was successful and where it needs improvements?

Mr. Wilson Scott Thurlow: Absolutely. I think the successful side of the equation is the ethanol side of the eco-energy program. We saw plants created from scratch as a result of having strong government support, and we've seen those plants flourish in Ontario, Manitoba, Saskatchewan, Alberta, and Quebec.

Where we haven't seen the same success was on the biodiesel side of the equation. Again, we're not pointing fingers, but the program was set up and a lot of applicants put forward submissions and they were granted, but shovels never got into the ground. That's unfortunate. I think a couple of factors influenced that. The first was the global recession. Let's be clear that people who had great ideas prior to the global recession saw their capital tighten significantly.

Two years ago we had been seeking changes to that program so when projects stopped moving forward, the capital that had been directed toward those facilities could be redirected within the program. The Minister of Natural Resources at the time chose not to follow that course of action, but as a result, we are in a situation right now where we could have seen more biofuels expansion.

Ms. Ruth Ellen Brosseau: I've heard about fuel pumps that can dispense fuels with an 85% renewable content. In the United States, they have about 30,000 of them. Do we have any here in Canada?

Mr. Wilson Scott Thurlow: We have four. It takes a long time to get you 85% in Canada.

The reality though is that our fuel markets are very different. There are far more independent owners in the United States so they're more willing to try different fuels, different combinations. We would like to see more pumps that can dispense higher level blends of ethanol, absolutely. We'd like to see that number go up, and it's particularly important that we have these pumps in place by 2017. In 2017, new fuel economy standards will be in place for vehicles for the entire North American footprint. Those vehicles will need a higher octane fuel. There is no cheaper or cleaner source of octane than ethanol. We think consumers should have the choice at the pump to choose those higher octane blends to make the technologies they purchase in 2017 and beyond meet the fuel needs they have.

Ms. Ruth Ellen Brosseau: What is the primary source of funding for innovation in your sector?

Mr. Wilson Scott Thurlow: The primary source of funding for innovation in our sector would still be the private capital markets—there is no doubt about that—but business support programs like AIP, for example, act as a beacon to attract that investment to Canada. Other programs like Sustainable Development Technology Canada's Tech Fund and eco-energy are all programs that are very successful at drawing international capital to Canada so that it can redouble on private investment and ensure that long-term stable investments happen in Canada.

Ms. Ruth Ellen Brosseau: I'll move on to OGVG.

You guys mentioned some challenges with programs as they are right now, such as the significant gap—four to five years—in funding. Both of you agree that's not very flexible. Could you go into more detail regarding those statements? Also, could you comment on what you're doing regarding food safety and traceability?

Ms. Leanne Wilson (Science Coordinator, Ontario Greenhouse Vegetable Growers): Sure. I'll comment on the first part, and then maybe George will comment on food safety and traceability.

In terms of the programs, I guess the issue we've had in the past has just been with the time it takes for different programs to start up. In the case of Growing Forward 1, by the time it actually got running and applications were sent in and approved, there was usually a lag of about six months to a year before we would actually get the program started. The funding usually ends up running out before the end of the program, and then there's a gap. When Growing Forward 2 started, we put in applications right away, but then it was six months to a year before those applications were actually approved.

You end up having gaps of six months to a year between research programs, during which time you don't know whether or not you're going to be funded. Those gaps create a lot of problems with continuity and with getting research scientists, who will move to other sectors or industries, as well as with research technicians and people you have to hire on a contracting basis. They will move to other jobs, and then by the time you actually get funding, you will be in a gap and you'll be delayed again just trying to find people to replace them.

Programs that are supposed to be for five years end up getting cut down to more like three and a half to four years which, even if you get funding, makes it more difficult to transition to longer-term projects. You end up having to do short-term projects because you are not able to secure the resources necessary for those longer-term issues.

In general, those are some of the issues we've seen with the programming.

● (1555)

The Chair: Thank you very much.

We'll now go to Mr. Dreeshen for five minutes, please.

Mr. Earl Dreeshen (Red Deer, CPC): Thanks to our witnesses.

Perhaps, Scott, I could go to you first.

This study is on innovation and competitiveness. One of the things you spoke about was the new technologies that are out there in order to produce biofuels and how the byproduct from one stage of the operation becomes the feedstock for the next. Whether it's the use of cookies or any other type of process we have, I'm wondering if you can talk about some of the innovations we have in that area so we can concentrate on that part of the study.

Mr. Wilson Scott Thurlow: Absolutely.

As I said in response to the last questions, the core funding that we were able to attract allowed our companies to reinvest in research and development. I think the capital that was deployed from Sustainable Development Technology Canada was also very helpful in driving those things.

Now, asking in which direction we're going is like asking a scientist what they are going to invent next. We know we can spin off corn oil, and it can go either into food products or into biodiesel. We know we can fractionate corn germ and create personal-care emollients and cosmetic products. We know we can take waste heat and steam and pump them into greenhouses and improve the productivity of our friends who make greenhouses. Beyond that, who knows? We have scientists who are working on these types of things all the time.

Our number one priority is to improve yield so that we have that additional capital to deploy into research and development. That pivots back to one of our recommendations, which is to ensure that we can get these new available products approved for use either through the CFIA or through Environment Canada so that we can benefit from these technological developments as quickly as possible.

Mr. Earl Dreeshen: The other aspect of course is how grain prices compare to ethanol or biofuel prices. I'm not sure whether people are quite aware of how those fit together when you are taking the grain and moving it from one stage to another and you have byproducts to deal with.

I wonder if you could give us an idea of how the price structure ties into the availability of those dollars for people to do the extra research.

Mr. Wilson Scott Thurlow: The first website I look at every morning is the Chicago Board of Trade because it has prices for natural gas, prices for ethanol, prices for dry distillers grains, as well as the corn itself, and the feedstock that goes into it.

Absolutely. The assumption in your question is how price affects our ability to do research and development. When corn prices are high, times are a little bit tighter, and so it's tougher for our members to have that innovation. They hedge very appropriately. Some of them have accounts set aside for cash spotting. Some will buy corn six months to a year in advance.

The assumption is absolutely correct in that price has an incredible impact, and so I would compliment your government in ensuring there is that innovation capital there for research and development that complements the investments that business want to make.

Mr. Earl Dreeshen: Thank you.

George, could you outline some of the innovative policies you were describing before? We do have 70% of the production that's exported to the U.S., but it isn't just getting to markets; it's some of the things you are doing in the industry.

Could you perhaps outline some of the innovation you see in your industry?

Mr. George Gilvesy: One of the things we do in the market that's quite unique to.... It's not unique in the marketplace, but we do it aggressively, and that's the use of in-store demos in the United States, in particular.

We have a couple of products we grow, mainly the English cucumber and the mini cucumber. These are products not well known by American consumers, for example.

One of the things we learned at the trade shows we attended throughout the United States was that produce managers offered up that these in-store demos are a tool that really does work. That gave us an opportunity to showcase our English cucumber, have American consumers taste the product, and the next thing you know they are starting to buy it.

That's one simple thing we do that's putting Ontario greenhouse vegetables in the mouths of American consumers.

● (1600)

Mr. Earl Dreeshen: Can you talk a little bit about the advanced traceability you described as well, and how that fits into your marketing plans?

Mr. George Gilvesy: One of the things most of the major retailers, or definitely the advanced ones, throughout North America are looking for is the traceability on it. We were leaders certainly in the food safety aspect of it. We were almost first out of the box in the produce sector in Canada to provide a leadership role on the food safety certification of our growers. We have had mandatory food safety in place since 2006.

We also have mandatory trace stickers that go on every piece of fruit where applicable that can trace it back definitely to the farm. Now we're looking at through the produce traceability initiative, which is a global initiative, trying to identify a single methodology in advancing that to the total sector from the farm right through to retail.

The Chair: Thank you, Mr. Dreeshen.

We'll now go to Mr. Eyking, for five minutes, please.

Hon. Mark Eyking (Sydney—Victoria, Lib.): Thank you, guests, for coming today and for your presentations.

My first question is for the greenhouse growers, because as a greenhouse grower, I know the challenges you face. Most of our technology came out of southern Ontario, Leamington. Of course, Leamington is a leader in North America.

Because you have so many acres in the Leamington area, my first question is on the innovation you're doing with respect to water. As you're well aware, with the water you use, especially given the buildup of salts, you have to flush out the system.

What innovations are you using to recycle the water you're using with your crops?

Ms. Leanne Wilson: I'll address that question.

We've been doing a lot of research for the last three to four years, I'd say, on innovation to improve our recirculation. In general, most of our growers have always recirculated. It allows them to disinfect their water, rebuild up the nutrients they need, and recirculate it back through.

As you indicated, the problem is buildups of sodiums, chlorides, and other components the plants just can't take up. What we're looking at now is a variety of different options, whether those are fluidized bed technology that can remove some of these components, or different versions of our reverse osmosis systems. We're looking at that byproduct you take up and what we can actually do with it. Are there companies that could use it to produce something else? Is it a matter of just disposing of it properly somewhere?

It's still very much in the beginning stages. Our sector has gone over to the Netherlands to try to find out what they are doing, and they are years behind it. I think they have a 2020 deadline to get rid of their issues. We're actually quite leading in this area right now, and we're making a lot of effort trying to find it, but unfortunately, at this stage there's no real solution.

Hon. Mark Eyking: Thank you.

You brought up the Europeans and of course, you know that the free trade agreement is coming. One of the problems the greenhouse growers have always had was the peppers coming in, and some would say dumping them in. If you've been in the Netherlands, you would know their heating costs are lower too. We have pretty harsh winters here. They're lucky to drop to 3° to 4° below zero over there, whereas here we get 25° below zero.

For us to be able to compete with the Europeans, and it'll be interesting if we can even sell over there in the future, how are you dealing with your heating costs? Is there any innovation? Are you using biodigesters or what are you doing to help deal with your heating costs? A winter like this last one especially was brutal on the greenhouse growers. What are you doing on your heating costs for innovation?

Ms. Leanne Wilson: The heating costs, again, are one of our major costs. The growers have looked at a variety of things. As was already mentioned, where applicable, linking up the GreenField Ethanol and other plants that are producing waste heat, is obviously ideal. Some growers are looking at biomass options. About 30 of our growers use biomass quite heavily, whether that's construction waste or wood chips and other things. In general, overall, they're trying to improve production efficiencies, such as using a double-energy curtain to de-humidify the greenhouses better. We've had a number of research projects over the years trying to reduce the amount of energy needed to produce that crop.

● (1605)

Mr. George Gilvesy: I do want to talk about that pepper situation with Holland.

Hon. Mark Eyking: Sorry, if you can be quick, because I need to ask one more question.

Go ahead.

Mr. George Gilvesy: The bottom line is we are competitive with Holland. I didn't want to leave the misconception that we aren't competitive. That's why we challenged them. They were actually dumping in here. We won the case and we got 193% duty and the Dutch did not put up any data to prove otherwise. I just wanted to clarify that.

Hon. Mark Eyking: Thank you very much.

My last question would be on the biofuels.

We were talking about the Netherlands. I think the average household in the Netherlands is 20% garbage disposal compared to North America and they use so much of the garbage for biofuels, especially in the municipalities. They separate it. I think you alluded to this.

What can we do in North America? It has to be municipality driven to a certain extent and there'd have to be funding and incentives for us to hit some of the targets we should be hitting. What can we be doing to help? I'm guessing it has to come from the municipalities.

Mr. Wilson Scott Thurlow: The municipalities are already funding garbage. They call it tipping fees. Instead of having tipping fees that go to destroying land somewhere else, we would suggest that those tipping fees be directed at investments like the one that Enerkem made in Edmonton to diversify 95% of that municipal solid waste away from landfill and into a renewable content, whether it's a chemical like methanol or whether it's a renewable fuel like cellulosic ethanol.

Hon. Mark Eyking: But how can we—

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

We'll go to Mr. Payne, please, for five minutes.

Mr. LaVar Payne (Medicine Hat, CPC): Thank you to the witnesses for coming.

There are some very interesting innovation activities. You just talked about the one in Edmonton. I don't know if you can expand on that a little, Scott, but I find that interesting, to produce methanol. There is a facility in my riding that actually produces methanol from natural gas. Do you have any idea how that process is working? Are they actually producing methanol, or what is it they're producing?

Mr. Wilson Scott Thurlow: Again, I am a lawyer by training, I'm not a chemist, so with that background....

They are producing methanol right now and they will be in a position to convert that methanol chemically into a cellulosic fuel. My understanding is they will be doing so very soon. Their official plant opening is the first week of June.

Now, whether or not they will plan to continue selling methanol or cellulosic ethanol I imagine will be driven by, as Mr. Dreeshen pointed out, price—what product to create that they can get the most for.

I think more than anything else, though, this is finally a success story in cellulosic fuel, the new processes. This is also an agricultural story. DuPont and POET in the United States are looking at agricultural residues as the feedstock for their commercial operations in Iowa. It is going to be very successful. They're both going to be commissioning to be in full commercial operation this year. This is technology that will come to Canada.

Mr. LaVar Payne: Is this a test pilot program?

Mr. Wilson Scott Thurlow: No, these are all commercial-scale facilities. The one in Edmonton is 38 million litres a year, so that's approximately 10 million gallons. That's a small ethanol plant by comparison to some of the larger plants, but it's still a significant amount when you consider how much ethanol we use in the country, which is just over 2.1 billion litres for our mandated requirement. We can scale these up in the future. Again, I think as you can appreciate, it really is just about finding the feedstock at a low cost.

Mr. LaVar Payne: In terms of the biofuels, a lot of people are critical because they think that the grains might be used for food rather than for fuel. Do you have any comments on that?

Mr. Wilson Scott Thurlow: There is no one who is happier to debate the food and fuel argument than this guy right here. It's mostly simply not based in scientific fact or in economic data. We produce more food today on less land in Canada than we ever have in our nation's history. We think that the econometrics that are associated with the food and fuel debate have not been borne out statistically with data. The fact is, when we produce ethanol, we are only extracting part of the molecule, and we're returning everything else to the food industry through dried distillers grains or through some of the other co-products that I had mentioned before.

The bottom line is that the food and fuel debate does not pan out on the economics of scale, and we are creating additional value from that corn, or from that soy, or from that canola.

● (1610)

Mr. LaVar Payne: Thank you.

This question is for the Ontario Greenhouse Vegetable Growers.

You talked about traceability, and you talked about competition from high-tech greenhouses. Could you expand on what you mean in terms of the high-tech greenhouses? What are they doing that makes them so high tech and potentially more cost-effective?

Mr. George Gilvesy: I can maybe use the comparator to what low tech is to better describe it.

Mexico is quite well known, and Spain is well known for low tech. In their climates they don't require having the greenhouse totally enclosed, for example. Mexico is well known for shade cloth production. That's where they put poles in the ground and put a shade cloth over top. They're deeming that as greenhouse production.

What we're talking about is high-tech competition coming from fully enclosed greenhouses with computerized technology, water systems, hydroponic growing.

Mr. LaVar Payne: The interesting thing is you talked about traceability. In my riding, in Medicine Hat and Redcliff,there are a lot of greenhouses. There's an organization called Red Hat Co-op, and all the greenhouses are supplying tomatoes, cukes, and peppers. They do have a traceability system in the Red Hat Co-op. I took a tour there about a month ago, and it was quite amazing because they know exactly where that product came from, from which greenhouse. It has an excellent traceability system. They're marketing that product all over Canada and the U.S.

Do you have any other comments you'd like to add in terms of the traceability?

Mr. George Gilvesy: No, we're very familiar with Red Hat Co-op and Lyle Aleman. We have ongoing dialogue with him through the Canadian Horticultural Council greenhouse subcommittee.

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

Now we'll go to Madam Raynault, for five minutes, please.

[*Translation*]

Ms. Francine Raynault (Joliette, NDP): Thank you, Mr. Chair.

I would like to thank all the witnesses for their presentations.

Mr. Gilvesy, you didn't have time to get through your entire brief, which covers a lot. Would you like to go over some of the points in your brief that you didn't have time to present?

[*English*]

Mr. George Gilvesy: Is that to me from the greenhouse sector?

The Chair: Yes, she's speaking to you, George.

Mr. George Gilvesy: Okay. There was one point I didn't talk about, yes.

[*Translation*]

Ms. Francine Raynault: You prepared a great brief for us but you ran out of time before you were able to finish your presentation. Is there anything you'd really like us to know, for instance, regarding competition in the produce sector? Is there anything you'd like to add that you weren't able to cover?

[*English*]

Mr. George Gilvesy: Yes, I did have a point earlier that relates to how the greenhouse farmers face a serious threat to market access with the lack of an effective security mechanism. Farmers and marketers of perishable produce receive valuable protection within the United States market through various legislative and regulatory controls that are in place there. The failure of the Canadian government to enact similar provisions within Canada is becoming a significant trade irritant between the two countries and may result in the loss of protection provided to Canadian fruit and vegetable farmers.

Through the Regulatory Cooperation Council initiative set in motion by Prime Minister Harper and President Obama in late 2011, we've been given a significant opportunity to enact a fair and ethical licensing and payment protection system for perishable produce in Canada, and it's something that we think is very important in moving forward. In Ontario we export $500 million of produce to the United States. The loss of the protection of that due to this trade irritant will cause a bad situation for our membership.

We're looking forward to the Regulatory Cooperation Council finding some resolve for this. We're still optimistic with regard to that process.

[*Translation*]

Ms. Francine Raynault: What's your biggest R and D challenge? Is there a lot of lag time as far as the approval of research and innovation goes? Do you have to wait a while before your program or research is approved? What's your biggest obstacle?

● (1615)

[*English*]

Mr. Wilson Scott Thurlow: Are you talking to me or are you talking to them still?

Ms. Leanne Wilson: I'll answer. I would say the most serious challenge is the gaps, because you're not able to predict. If you knew you weren't going to get funding at all, you would scale down your research and move on, I guess, but because there are gaps, you're always waiting for the next funding program.

You're not sure where to go when everything is put on hold for a bit. That makes it very difficult to try to build a long-term research program and to secure resources, both the physical resources, such as experimental greenhouse space, as well as resources of researchers. I would say that the gap and the lag in approval times is really the biggest issue we have.

[*Translation*]

Ms. Francine Raynault: Thank you.

I believe Mr. Thurlow also wanted to respond.

[*English*]

Mr. Wilson Scott Thurlow: I was very confused, because you were looking right at me when you asked the question.

I would echo my friend's answer. I think the more funding that's available for research and development, the better. It's not as if there is a limitation on how much can be made available, though I will applaud the government's rigour in establishing the research chairs in the way they have done. I would also point out that there are very specific defined funds, whether it's through SDTC or the Growing Forward 2 program, that can be taken advantage of.

[*Translation*]

Ms. Francine Raynault: Mr. Thurlow, how would the government benefit from a greater investment in renewable energy? People want to use renewable energy, but that's not always an easy proposition.

[*English*]

Mr. Wilson Scott Thurlow: I think that is the most important question. It's not as if they can't invest in several different types of renewable energy at the same time. I think our focus would be on making sure that consumers have choice at the pumps to make their transportation technology work, with the fuels that they would like to see put in place.

Earlier we talked about having pump turnover. The reason the Americans have 30,000 pumps is that there is very aggressive depreciation for capital cost programs that are in existence. This is a recommendation that we would encourage. It will allow for individual fuel providers or new entrants to the market to share that risk with governments, so that fuels that are otherwise not available in Canada will be available to consumers.

The Chair: Thank you very much.

Thank you, Madam Raynault.

We'll go to Mr. Lemieux, please, for five minutes.

Mr. Pierre Lemieux (Glengarry—Prescott—Russell, CPC): I thank our witnesses for being here.

Let me start with the vegetable growers. I can just imagine that electricity must be one of the highest costs. Are you able to give us an indication, perhaps, for an average greenhouse operation, of what percentage of their input costs might be related to electricity alone?

Ms. Leanne Wilson: At this point in time, the electricity cost isn't high, actually, because it's just the basic cost of lighting and a bit of warehouse lighting. What is going to be an issue going forward is that right now the majority of our growers aren't using supplemental lighting to produce their product, but in order for us to go to 12-month production, which is what our major goal is, we're going to need supplemental crop lighting, and that's going to be an extreme cost.

We're talking about hundreds of thousands of dollars in electricity costs for individual growers so that they can actually produce 12 months a year, and current electricity prices are just not allowing that to happen. The reason growers aren't moving toward putting in supplemental light in Ontario is that the electricity cost in Ontario is so high that it's just not affordable. They can't make it—

Mr. Pierre Lemieux: What about in other parts of Canada, in other provinces, where the hydro rates might not be so high?

Ms. Leanne Wilson: There are a few growers in B.C. who do supplemental lighting. There's a grower or two in Quebec, as well. Even then, they struggle with the economics of it.

There are ways to get around it, with things such as combined heat and power, where you can produce your own electricity on site and sell the rest to the grid. In Ontario, they're trying to develop programs that will work there as well.

It's trying to figure out a number of different ways to make it, whether it's producing your own electricity, or off-peak electricity pricing, or different technologies that will allow you to reduce your cost to do that 12-month production.

Mr. Pierre Lemieux: Out of interest, how old is that technology of supplemental lighting and its being used on a scale by enough of the industry to say that it benefits the industry?

● (1620)

Ms. Leanne Wilson: Supplemental lighting has been around for years. What has changed is the type of supplemental lighting.

Historically, in greenhouse vegetables—floriculture is a bit different—it's been high pressure sodium, HPS, that has been used for years. Now there is more movement to LED lights. There's even movement to things such as plasma lights.

The technology itself has changed. The efficiencies of them have changed. We've done a lot of research on lighting to see which lighting is the best and which can use less energy. LEDs can use a lot less electricity than HPS. It's moving towards that technology that will provide more for the crop, more targeted spectrum of light, and other advantages with different lighting systems.

Mr. Pierre Lemieux: Thank you.

Let me move on to talk about the $2.7 million that's been given to the OGVG for science and innovation. I'm reading a project description here, and there are some very interesting initiatives: developing biological control programs for year-round greenhouse vegetable production; improving pepper and tomato in Ontario, and evaluating resistance of current varieties to causal viral pathogens. There's another one about consumer preference-driven development of tastier tomatoes on the vine. I imagine that's to appeal to the consumer, once again.

The eligible start date was about a year ago, April 2013. We're now in May 2014. Can you tell the committee what sorts of projects you have already initiated, or that are on your schedule to be initiated, with that $2.7 million?

Ms. Leanne Wilson: All of the projects are under way. There are five different projects. You've described three of them. There is also one on production efficiencies, and another one on diffuse plastics.

All of the projects are under way, some with Agriculture and Agri-Food Canada researchers, some with university researchers and private researchers. They're basically all under way on different projects, and they're all on schedule and doing well.

Mr. Pierre Lemieux: I'm assuming that these priorities came primarily from industry. In other words, your stakeholders identified to you what innovation and science-related projects would be of the greatest benefit to them.

Would that be a fair statement?

Ms. Leanne Wilson: Yes, that would.

We have an annual process. We involve our stakeholders, our growers, and we invite researchers as well. It's kind of a workshop exercise. The priorities definitely come from the grower end, and they're validated or vetted by the researchers to show that it's going to be good science or that the science hasn't already been done.

Mr. Pierre Lemieux: From how you answered my previous question, it sounds like there's a team approach, in terms of how or where the research is actually conducted. In other words, you have other stakeholders around the table, including AAFC researchers, university researchers, and private industry researchers, who are collaborating, working together, on these projects that are the priorities of your industry.

Ms. Leanne Wilson: Yes, very much so.

Mr. Pierre Lemieux: It sounds like a winning solution to me.

The Chair: On that winning note, thank you very much.

Thank you very much, Mr. Lemieux.

Now I'll go to Mr. Garrison, for five minutes, please.

Mr. Randall Garrison (Esquimalt—Juan de Fuca, NDP): I want to go back to one of the recommendations from the Canadian Renewable Fuels Association, your last recommendation about a comprehensive bioeconomy strategy.

Can you tell us a bit more of what you see that looking like and how you see us getting to that strategy?

Mr. Wilson Scott Thurlow: In five minutes or less, that's going to be difficult.

Mr. Randall Garrison: Take all the time you like.

Mr. Wilson Scott Thurlow: I don't think I need to do that.

I think the crisis we've identified within the bioeconomy—and that includes forestry; that includes the automotive sector; it includes chemicals, pesticides, and crop life and the agriculture industry—is that we all have different champions in government, and they don't always necessarily work with one another when they're developing policies. Even within one department you can have different subdepartments that are working at loggerheads with one another.

What we appreciate most about the European and American policies is that they do take a fundamental assumption, which is that we need to have sustainable products, and we need to use those sustainable products to expand our available resources for the future. That is kind of a condition precedent under which all public policy is undertaken. That is the ask that we have of Canada's government in the future. We would like to have a bioeconomy strategy, in the same way that we have a digital strategy, in the same way that we have any other strategy. It's important that we do so because it sends an important signal into the international markets that Canada is serious about the bioeconomy.

● (1625)

Mr. Randall Garrison: I was interested to hear you say the first thing you look at in the morning is prices. That raises the question to me about whether the market system actually provides good signals for the renewable fuels industry; in other words, it's influenced by a lot of other outside factors.

Mr. Wilson Scott Thurlow: Like the price of food, the most important price for renewable fuels production is the price of energy. We are making energy more affordable in the long term. We are recycling carbon within the natural environment, and using that product again in the hope of reducing our overall environmental footprint.

You're absolutely correct. There are some things that we simply can't control. What we can do, though, is best prepare ourselves for when those price signals change,so that we aren't exposed.

Mr. Randall Garrison: What do you think the role for the Canadian government is in responding to those kinds of signals?

Mr. Wilson Scott Thurlow: Well, I would tell you, and I would tell the committee, that the absolutely most important thing the Government of Canada has done and can continue to do is to have mandated requirements for inclusion of renewable content. As I said earlier, we'd like to see the 2% diesel mandate go up to 5%. On the ethanol side, we'd like to see the availability of renewable fuels up into the E20, E30 percentage for the octane potential that's there. That's something we want consumers to be able to have the choice to have. Right now they don't have a choice for those higher blends.

Mr. Randall Garrison: In terms of research for our product innovation, you said that obviously the private sector is the largest source of capital, yet you made an interesting comment about the government programs serving as a beacon to attract capital.

Can you give some examples of where that has worked, or where it might work?

Mr. Wilson Scott Thurlow: Certainly.

I think there is a strong biocluster in the Sarnia area. That started from the Sarnia ethanol plant and the chemical industry that was there. All of those projects had some government support. I think there are strong research elements. For example, the Enerkem system started at a university. These funding initiatives are important for ensuring that the most viable renewable fuels technologies get the international exposure to attract those other angel investments.

Mr. Randall Garrison: Okay.

The Chair: You have a little less than a minute, so a short question.

Mr. Randall Garrison: I'll go quickly.

You mentioned the conversion, essentially, of garbage to fuels. Is your association actually working and sponsoring research in this area?

Mr. Wilson Scott Thurlow: We don't sponsor research per se. We simply encourage governments to support more of it. There is a lot of different positions in Canada right now that are converting waste into various forms of energy, or heat, or fuels. Certainly, we are interested in anything that reduces waste and reduces the CO_2 footprint that we have on society. I think the Enerkem footprint is a fantastic one, because it takes a municipal solid waste problem and turns it into a renewable fuel solution.

Mr. Randall Garrison: Thank you.

The Chair: Thank you very much, Mr. Garrison. You're right on time. I appreciate that very much.

I want to thank our witnesses for coming out for our first hour today.

With that, we'll take a two-minute recess while we switch places and get ready for the next hour.

● (1625)

(Pause)

● (1630)

The Chair: I want to welcome our witnesses for the second hour.

We'll start off with Patti Miller, president of the Canola Council of Canada. We do have on video conference, from Edmonton, Ron Pidskalny, executive director, and then from Calgary, Doug Wray, chair of the Canadian Forage and Grassland Association.

We need a couple of minutes to make sure we have you guys hooked up, so I'll turn to Patti Miller first to make her presentation.

Welcome, Patti. You have seven minutes.

Ms. Patti Miller (President, Canola Council of Canada): Thanks.

Good afternoon. It's a pleasure to be here to share with you the canola industry's approach to innovation and competitiveness. I really appreciate the invitation to talk with you about something that's so crucial to the sustained profitability of our industry.

First, I'd like to remind you of who we are. The Canola Council is a full-value chain organization representing the entire canola sector in Canada: the life science companies that develop new seed varieties; the 43,000 canola growers who grow the crop; the processors that transform seed into oil and meal; and exporters who buy the crop from producers and market it around the world. Public and private sector investment and collaboration in innovation have been fundamental to the growth of our industry, and the economic impact has been significant.

Canola was developed by Canadian scientists using conventional breeding techniques in the mid-seventies, and today it returns the most income to farmers of any agricultural product in Canada. It contributes $19.3 billion to the Canadian economy annually, and supports almost a quarter of a million jobs. Last year, a record 18 million tonnes was grown by Canadian farmers, and this expansion has brought with it significant investment in Canada. For example, there's been more than $1.6 billion invested in processing capacity in the last few years, reflecting confidence in the opportunity provided by this sector.

The canola industries work together through the council to develop strategic plans with really specific measurable goals. Innovation has always been fundamental to these goals and plans. It's how we became competitive and it's how we'll stay competitive. Our latest strategy is called “Keep it Coming 2025”. It outlines our industry's vision of where we're going and what's needed to get there over the next 10 years.

I'll take a few minutes to describe the role of innovation in this plan. Our first priority is sustainable and reliable supply, more specifically, to sustainably and profitably increase canola production in Canada to meet global demand of 26 million tonnes of canola by increasing yield to an average of 52 bushels an acre, also to improve the quality characteristics of the seed, oil, and meal to meet new and existing customer requirements. Right now, the average annual yield in the Prairies is about 34 bushels an acre. We believe that in 10 years we can take that to 52 bushels. This will require better genetics and improved agronomic practices. Life science companies, our members, are investing heavily in Canada in research that will increase yields and create crops that are more resilient to stresses like drought, pests, and disease.

Sustainable supply will also depend significantly on improved agronomy. Research from the first canola research cluster, which was funded under Growing Forward 1 by government and industry, has given us new results that show it's possible to produce at least another 10 bushels an acre through improved agronomy. Our current canola research cluster, also jointly funded by the federal government and industry, will help us deliver those extra bushels and set us up for the future.

In the next several years, we'll see the convergence of genomics, metabolomics, biologics, high resolution sensor technology, robotics, nanotechnology, big data, and bioinformatics that will unleash even more innovation for canola producers and farmers in general. It will be critical that the government, academia, and industry continue to work together in these areas, not only in investment of resources, but also in collaboration on the research itself. New approaches to technology transfer are also going to be required. As a council, we'll focus our efforts on getting the right technology to the right growers at the right time. This is an extremely sophisticated industry and it's critical that growers make decisions that are specific to their farm in order to farm profitably.

Industry and government are investing, but the federal government's role in shaping the regulatory environment is also very crucial. The current variety registration review, initiated by Minister Ritz, is an important part of ensuring the regulatory framework responds to the needs of the value chain. It's essential that the value chain has the flexibility to adapt processes that encourage innovation. Of course, increasing canola supply is just one of three priorities in our plan, and just one of the areas where innovation is crucial.

Our second priority is differentiated value. Canola is only 5% of global trade in vegetable oil, but because of our investment in understanding the impact of canola oil on human health—on cardiovascular disease, diabetes management, and obesity—the world is chasing canola's healthy reputation.

● (1635)

To maintain our market share and to return the most value to our industry, innovation must continue so that our products evolve to meet demand. We will continue promoting canola as a premium product by uncovering and discovering more about its health profile and by demonstrating its quality characteristics. Continued research through our canola research cluster is an essential part of being able to communicate how canola oil improves health. It also demonstrates the value of canola meal to livestock producers. We look forward to continuing this partnership so that our customers understand the value of this crop.

Our third priority is stable and open trade. Ninety per cent of the canola crop is exported in the form of seed, oil, and meal. Trade is critical to our industry, and research and innovation play an important part in our efforts for stable and open trade. A key way of stabilizing trade and opening up new doors is to promote science-based decisions in regulatory environments around the world. That means investing in research to ensure that our customers are satisfied with the quality of our products, and to ensure that food safety measurements reflect the inherent safety of our crop. Efforts by the government to conclude agreements with Europe and Korea are critical for the Canadian canola industry to continue to prosper from international demand. Concluding agreements with Japan and the TPP are equally important for our industry.

In conclusion, we're leveraging the canola industry's greatest strength; namely, the willingness of our entire value chain to pull together toward the same goals. Innovation has been the cornerstone to our success, and the research partnership we have with the federal government is critical to achieving our future goals. We call our new strategic plan “Keep It Coming 2025” because that's what the marketplace is telling us to do, and we know it's what our industry must do if we want to be the global go-to solution for the food industry seeking healthier oils and high-quality animal feed.

Thanks.

The Chair: Thank you very much, Patti.

We're going to go to the Canadian Forage and Grassland Association. From Edmonton, Alberta, we have Ron Pidskalny, and from Calgary, we have Doug Wray, chair.

I'm not sure who's doing the presentation, so I'll leave that up to you folks.

● (1640)

Mr. Doug Wray (Chair, Board of Directors, Canadian Forage and Grassland Association): It's Doug Wray from Calgary. I'm going to make the presentation.

We very much appreciate the opportunity to speak to you about the innovation in the forage and grassland industry.

My name is Doug Wray. By way of introduction, my wife Linda and I operate a family ranch at Irricana, Alberta. We manage over 300 cows, background and grass the calves, and raise our own replacements. I'm speaking today as the chair of the board of directors of the Canadian Forage and Grassland Association. Joining me from Edmonton is Ron Pidskalny, our executive director.

We are a national non-profit association representing Canadians who produce hay and forage products, as well as stakeholders who depend on forage and grasslands to support their industries.

Forages are Canada's largest cultivated crop at almost 13 million hectares, representing 39% of the land devoted to cultivated crop production. Forages also occupy an additional 15 million hectares of native or natural pastures and range land. The livestock sector is the largest user of forages in Canada. Eighty per cent of Canada's beef production and 60% of a dairy cow diet depend on forages.

These 28 million hectares of forages generate almost $5.1 billion in economic activity annually. Of this total, the forage, hay, and seed export industries represent $288 million, with forage and hay exports currently experiencing about a 50% growth rate internationally. This is due to water quality and supply issues, population growth, and protein and fibre shortages in many regions of the world. Our forages are in demand.

Our export members have been instrumental in opening China to Canadian alfalfa exports, and this spring, Minister Ritz signed a trade deal with China to accept timothy exports.

This $5.1 billion of economic activity does not include $13 billion of indirect value contributed in ecosystem services to Canadians with regard to climate change mitigation; erosion control; pollination services; recreation; wildlife habitat preservation; and the regulation, protection, and improvement of water resources. We think this is a very important piece of the forage dynamic.

Society in general is unaware of forages' unique attributes relative to other crops. Forages are perennial species that regrow every spring, fix atmospheric nitrogen biologically, and enhance soil fertility. However, producer-funded check-off programs for research and other activities that exist for crops such as canola, and livestock such as beef, do not exist for forages, so we have no direct check-off to do our work with.

The Canadian Forage and Grassland Association interprets competitiveness as the ability to sustain an advantage over competitor nations. This advantage will develop through innovation derived from a consistent, long-term strategic plan that integrates activities across the value chain. A strong research program is the essential foundation that will allow the innovation required to drive competitiveness.

The reality is that Canada has experienced a substantial decline in investment and expertise in forage research. Between 1985 and 1998, research expenditures and scientific capacity declined by 55%. Since then, research capacity has continued to decline, funding has been inadequate and sporadic in nature, goals have been short-term, and there has been no long-term commitment to building or maintaining existing infrastructure.

Research investment to address priorities such as forage yield stagnation is required to reverse the removal of forages from cropping rotations in favour of annual crops like canola, corn, and soybeans. Dramatically reduced forage research funding has created a situation in which forage yields have not kept pace with those of annual crops, thus putting the livestock sector at risk. Producers are losing the financial incentive to grow forages and forage seed on productive land as a part of a perennial cropping system.

● (1645)

Evidence of a reduction in forage competitiveness includes the following: The national beef herd continues to decline despite recent record high prices in cattle markets. Land reclamation and restoration efforts and biodiversity initiatives are becoming a challenge as the availability of cultivated and native forage seed and inoculants decline, so the availability of the seed to actually do the reclamation work is an issue. Canada is losing its capacity to test new forage varieties nationally in 2014.

One solution is to integrate the goals in resources of both the public and private sectors. Our association's vision includes the renewal of the public sector's commitment to forage and grassland research, and a division of the research activities between the public and private sectors.

Public sector research would focus on the longer term goals where there is a need to solve complex technological issues, develop platform technologies, or overcome technological bottlenecks, particularly where private ownership of intellectual property is not in the public interest. Increasing intellectual capacity and expertise through scientific training, mentoring, and teaching would be a responsibility of the public sector, and also, areas where the private sector has vacated the market due to lack of commercial viability. We have some examples of that. Providing ecosystem services for the public good would be the final point for the public sector.

The Canadian Forage and Grassland Association has developed a framework for fair compensation for ecosystem services through the Commission for Environmental Cooperation, which is a tri-national organization created in conjunction with the North American Free Trade Agreement. Our pilot project catalyzes North American grassland conservation and sustainable use through beneficial management practices that demonstrate positive linkages between cattle production and native grassland conservation. The two work hand in hand for the benefit of both.

In closing, I will mention our three main recommendations.

Number one, improve foraging grassland research capacity by enhancing federal government support of long-term, innovative basic and applied research programming. Through innovative research, the issue of yield stagnation and declining competitiveness can be addressed, which will drive sustainable advances for foraging grasslands stakeholders.

Number two, assist in addressing the lack of availability of cultivated and native forage seed and inoculants through innovative research practices, and develop new and innovative capacity to test forage varieties nationally.

Number three, identify a means of capturing or compensating producers for the value of ecosystem services provided by forages and grasslands owing to their range of unique attributes, and the value to the Canadian economy and society.

That's our presentation. Thank you.

The Chair: Thank you very much.

With that, we'll now go to rounds of questioning. We'll start off with Madam Brosseau, please, for five minutes.

Ms. Ruth Ellen Brosseau: I'd like to thank our witnesses for their presentations. I've learned a lot.

I'm sorry, but I forgot the name of the last witness, who talked about forages. You commented that the private sector has vacated some areas due to market and commercial viability. Could you comment and give some examples of that, please?

Mr. Doug Wray: I certainly can.

The reality of the forage industries is they are perennial producers. If a plant breeder develops a forage variety that works very well, one of the attributes I want is long-term survivability and productivity. I have some in my pastures that are now 15 years old and haven't needed any reseeding; they're as productive as they were 15 years ago. If he's successful in providing the plant product that I need, I don't go back to buy more seed very often. That makes it a catch-22 situation, in that it doesn't provide an economic basis for continuing on when we're successful in developing the varieties that provide the kind of growth and productivity we need.

In the annual cropping scenario—and we just heard from the Canola Council—the producer goes back for more seed every year, and the market is very robust and economic in that regard. On the perennial side, it's a different game, because if you successfully provide a good variety and it lasts a long time and is productive over the long term, which is what I need as a rancher to be profitable, then you can see where the two don't fit economically in terms of that plant breeder continuing to produce more varieties.

● (1650)

Ms. Ruth Ellen Brosseau: Bill C-18 will be coming up once again in the House, and it will be at committee. I hear a lot of concerns about that bill, so I'm looking forward to having that come in. I don't know when it will be. I was just wondering if you can comment on how the government can continue to foster or better foster innovation.

Mr. Doug Wray: Well, we think that because of the environmental piece that provides benefits to all Canadians, there's a case to be made for public dollars to be spent on forage variety development, because when they end up on the landscape, they provide for healthier soils and more biodiversity. They support the wildlife element and the recreation element. All those things are side benefits to my successful ranching operation.

We think the public purse, the government, being involved in developing and working on innovative new varieties will allow us to remain competitive. Certainly the perennial plants have not seen the yield increases that the annual cropping world has seen, just because of the dynamics of the biology. Also, it's much tougher to generate those huge increases in yields.

Ms. Ruth Ellen Brosseau: I have some questions for Ms. Miller.

Your industry has been very successful, mostly because of innovation. I was wondering if you could comment on how important it is to ensure Canada does invest in public research, because we know success is based on innovation. Also, is the government doing enough with the programs as they are right now?

Ms. Patti Miller: Public research has been critical to our success, but I would look at it more in terms of not only the public research but also the public industry partnership. That's what has really driven canola's growth over the last few years.

It is important that the government continue to invest in its own research capacity, but also to work hand in hand with industry as you're establishing the priorities, and as you're looking at where to allocate what are very scarce resources.

Ms. Ruth Ellen Brosseau: In your industry, how much is public and how much is private?

Ms. Patti Miller: Trying to come up with a figure on what's been invested in canola research publicly or privately is a huge challenge. You have life science companies that invest millions and millions of dollars in individual variety development. I certainly know what goes through our organization in terms of project funds. At the last Growing Forward science cluster, the Canola Council saw the value chain receive $15 million in federal funding, and one of our member organizations, SaskCanola, a producer organization, received another $5 million. That's $20 million over five years of program funds alone. I think even within the federal government they do have challenges in trying to determine how much is spent on each commodity, but the department is doing work on that.

● (1655)

The Chair: Thank you very much, Madam Brosseau.

I'll go to Mr. Hoback, for five minutes, please.

Mr. Randy Hoback (Prince Albert, CPC): Thank you, witnesses, for being here this afternoon.

The canola industry has been an interesting industry to watch. I grew canola, and my dad started growing canola when it was still called rapeseed, I believe, so it's definitely matured from there. It used to be that if we got 18 bushels of Polish canola an acre, we were very happy. If we got 20, it was great. If you got 40, you were actually lying.

I look at the sector and how it has come along, not only the yield but also the economics of it. What has been the thing you could most refer to that explains why this sector is attracting foreign investment and why this sector is growing? What would that be? What has it been?

Ms. Patti Miller: It's hard to pick one single thing, Mr. Hoback. I think it's the combination of investing in a way that ensures farmers can grow the crop profitably, and the market really understands the value of that canola. It's the entire profit cycle. Consumers aren't going to be willing to pay for the crop if they don't truly understand its health benefits or its meal attributes. When they're willing to pay for the crop, it makes it more profitable for farmers to grow, and the more the industry will invest in it. That's how you get that sustained profitability cycle.

You talked about the yields. One of the things that really caused canola to take off was the development of herbicide tolerant technology in the 1990s. That's when you really saw the jump in yields. As an agriculture industry, we talked about that in the context of how good it was for the farmer. I think we also need to tell that story in terms of how good it is for the consumer. The use of herbicide tolerants means we are producing more food on the same amount of land. It means we're using less fossil fuels to produce a larger crop. It means we're using fewer crop protection products to produce more of a crop. There's a phenomenal sustainability story there that I think is going to help—

Mr. Randy Hoback: It's actually a very amazing story. When you look at zero tillage and how it came into play, the advent of Round-Up Ready canola, at the time, and how that fit into the rotations to allow weed control in that one year where they normally go summerfallow. Taking a lot of summerfallow acres out of the system, which is subject to erosion and all sorts of bad habits with summerfallow, actually created the ability to add a third or fourth crop, depending on where you are farming.

I find it really interesting, though. You've talked about this whole industry approach. That's one thing I've seen at the round tables. You have all the players in your industry, and you've been doing this for a while, basically identifying the markets, identifying the need, and telling the producers or the plant breeders, for lack of a better word, what they need to grow. How is that complementary to what you're doing? Isn't that very key to what you've done in the past, and is that key for what you'll be doing in the future?

Ms. Patti Miller: Absolutely.

When you have the entire value chain sitting around the table and making decisions in common and focusing, again, as I referred to before, very scarce resources, it's helping guide not only public resources and public investment, but also industry investment itself. That makes a huge difference to how quickly we can move forward.

As I said, we're 5% of the global oilseed trade now. On the world scale, we're small, so we need to be really focused. We need to have very specific goals and work on them together, and so it has been critical to our success.

Mr. Randy Hoback: Again going back to yield, in 2013 the average was 40 bushels an acre, which is, again, unheard of. In the days when my dad and I farmed, 40 bushels an acre was a good crop. Now we're hearing stories of 60 and 65 bushels an acre. I heard one neighbour say 70, but I think he has a bigger bushel than most people have. But you're talking 52 bushels in 2025. Who's going to take that? Where is it going to go?

Ms. Patti Miller: There is significant demand out there. When you look around the world, the challenges there are with cardiovascular disease, with diabetes, and with obesity, are not just a North American issue. Markets in Mexico, China, and Asia are really looking for a healthy oil, and canola fits that bill. There's a strong demand for it.

There's also a strong demand for canola meal. We've done studies that show the inclusion of canola meal in a dairy ration can increase milk production by a litre a cow a day. For markets that need to increase dairy production, like in China, it's a phenomenal product.

When we developed our new strategy, we actually looked at what the world needed before we looked at what we could produce, and we see that the demand is there.

Mr. Randy Hoback: It's fair to say that demand is overseas, though. It's something we're going to have to get to market.

Do you have any suggestions on how we can improve on that?

● (1700)

Ms. Patti Miller: Do we have any suggestions on the transportation system, is that what you're asking?

Mr. Randy Hoback: Yes.

Ms. Patti Miller: Historically the Canola Council hasn't been very involved in the transportation discussion. Our members have been through the Western Grain Elevator Association or the Canadian Canola Growers Association. Certainly with the launch of this strategy and what is a fairly significant goal, our board of directors is becoming more and more engaged in this. While I certainly don't have expertise on all of the regulatory web underneath the transportation legislation, we do know that we need to look at that infrastructure in a way that doesn't just deal with an 18 million tonne crop. This past year is not an anomaly. We need to look to deliver something even larger and more efficient. So—

The Chair: Thank you, Madam.

Thank you very much, Mr. Hoback. I didn't mean to cut you off, but we're well over our time.

We will now go to Mr. Eyking, please, for five minutes.

Hon. Mark Eyking: Thank you, guests, for coming today.

I'm going to start my question with the canola group.

Yes, it's a wonderful crop we have and when you look at the potential and how it's grown over the last century, it's amazing. My question is around the bees, because it's a crop that needs to be pollinated, right? Do you use neonics on the canola?

Ms. Patti Miller: Yes.

Hon. Mark Eyking: It's been stated in some circles that neonics have an effect on bees. With so many millions of acres and pollination being so critical for you, what's the researcher doing to make sure your bees are healthy and also that farmers can have the tools they can use to grow their crop? What challenges are you facing on that side?

Ms. Patti Miller: Actually canola is very beneficial to bees. We have done a lot of work as an organization. We worked with grower associations, and we worked with CropLife. We've also worked with the honey producer organizations themselves to talk about how canola interacts with the bee community and the impacts of neonics.

Canola is direct seeded into the ground, so there's no dust or any residue of neonics floating around. We've found a very vibrant dialogue between beekeepers and canola producers who talk when their beehives are next to a canola crop. If there's going to be some sort of application of products, hives are moved. It's actually a really good news story. Bees like canola and canola is good for bees.

Hon. Mark Eyking: So there's a good partnership and it seems to be working well. On the neonics it states that you can use them and grow crops and still have a healthy population of bees, if you do it the right way.

Ms. Patti Miller: Yes, absolutely.

Hon. Mark Eyking: I think I read that another challenge you have is with clubroot.

Ms. Patti Miller: Yes.

Hon. Mark Eyking: As a vegetable farmer we had clubroot in cole crops and I thought those were the only ones that got clubroot—unless canola is part of the cole crop family....

On our farm the pH had to be risen and you had to have crop rotation. How are you dealing with it when you have so many acres? Is it through crop rotation? Are you looking at new varieties? How are you dealing with it, especially if you have a cold year, when clubroot seems to do better?

Ms. Patti Miller: It is a disease that's causing significant challenges in our industry. There's no doubt about it.

There are a number of different ways we're working with the producer community to manage it. Number one is the development of clubroot-resistant varieties. Clubroot, as you know, is a soil disease. One of the biggest things you can do is keep your soil at home, be very diligent about cleaning the equipment, and don't move it to your neighbours or to other fields. Crop rotation can be an important part of helping contain clubroot. You don't want to keep growing the same variety on the same field, over and over again, and allowing those spores to develop. There are a number of ways that we're trying to mitigate that disease.

Hon. Mark Eyking: You don't have a clubroot-resistant variety, do you?

Ms. Patti Miller: There are clubroot-resistant varieties, yes.

Hon. Mark Eyking: Good. Thank you very much.

My next question is for the forage people.

You mentioned China where you're selling timothy. A few years ago I was in Saudi Arabia at a big show. It was mostly a horse show. I was amazed at the presence of Canadian forage in the Middle East, all different types of forage, everything from pellets to.... It seems to be a big market. How is that market for you? I think I've seen forage from a mix of alfalfa and timothy they were selling at this big show in Saudi Arabia. How big of a market is the Middle East for your forages? Are they looking for different products? How are you dealing with the Middle East?

● (1705)

Mr. Doug Wray: I'll let Ron take that one. He's probably more up-to-date on that field than I am.

Mr. Ron Pidskalny (Executive Director, Canadian Forage and Grassland Association): Thank you, Doug.

The Middle East is a growing market for us at the moment. We have been launching trade missions to the Middle East over a long period of time. It is one of our more important markets and our exporters are definitely interested in the Middle East market.

With respect to the numbers on the economic value, at the moment, we're exporting $161 million a year in forage products, and that's outside of seed. Most of our exports are to Japan and the United States. Those are our consistently largest export destinations, but we see the Middle East as a growing area. We just had an Ontario forage mission go over to the Middle East to build some linkages for us, so we're definitely interested in seeing that market grow.

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

We'll go to Mr. Zimmer, for five minutes, please.

Mr. Bob Zimmer (Prince George—Peace River, CPC): Thank you, again, for appearing before committee.

My first question is for Patti Miller.

We heard from my colleague across the way about different markets, but for us CETA has a huge potential upside across Canada. When it comes to commodities, you can list almost any one and it has potential in Europe.

In relation to innovation and competitiveness—you said that you're looking at a 20- to 25-year goal, so you're looking far out there—how has your organization targeted the CETA marketplace with innovation, or have you yet? They do have some very specific requirements of what you have to do.

How are you specifically targeting CETA in Europe?

Ms. Patti Miller: We were very active in discussions leading up to the conclusion of CETA. Europe is a significant biofuel market for us, so anything we do to increase yield, we can put oil into Europe for biofuel.

As you're well aware, European consumers are not too accepting of genetically enhanced crops so the regulatory process over there is a significant challenge. We spent a good deal of time talking with regulators in Europe, and also industry colleagues in Europe, about what can be done to make sure that the regulatory environment is functioning effectively. There are a lot of regulations in place and it's very easy for approvals to get stalled, so, you block the use of technology in Canada because one of our major markets doesn't accept it.

Mr. Bob Zimmer: Right.

There is obviously a discussion going back and forth because we've discussed low-level presence, and other things that we appreciate. From your perspective, have you seen any movement there toward being more receptive to the way we do things in Canada, or is it still a stalemate?

Ms. Patti Miller: It's still a significant challenge. There have been very interesting discussions publicly. There was one U.K. minister who advocated on behalf of genetically modified crops, which would have been practically unheard of years before, and fairly significant activists have come out in support of genetically enhanced crops now.

We haven't seen any movement on the regulatory side, but certainly the conversation is changing a bit.

Mr. Bob Zimmer: I know that canola, by design, is what it is. Are there other crops, oilseeds, for instance, that don't fall under that particular restriction that perhaps the canola growers would look at as an alternative? Are there other alternative crops that farmers could produce that would meet that demand?

Ms. Patti Miller: The important thing is that farmers can produce profitably. When you're looking at needing to get what we would perhaps call a conventional crop into the marketplace, the yield differences that Mr. Hoback referred to earlier would be a significant difference in profitability for farmers.

If consumers are able to pay for what it takes to grow a crop that yields a lot less and that the industry would have to have a separate pipeline for, then there are possibilities. But with the pace of population growth, that's a big challenge.

● (1710)

Mr. Bob Zimmer: Okay, thank you.

I have some questions for the forage guys in Edmonton and Calgary.

In relation to what I was asking Patti about, with CETA and the potential it brings, my colleague spoke about the Middle East. Is your organization targeting or seeing the potential of the European marketplace, and what are you doing in terms of innovation to target that market?

Mr. Doug Wray: I think for us, as I said in the presentation, the forage industry is primarily used by the beef industry and the dairy industry in Canada. Where we see ourselves fitting is in making the production of beef and dairy more economical within Canada, which then would certainly benefit our efforts to export on the beef side primarily.

We've been very active working with the Canadian Cattlemen's Association and the beef value chain round table on where the forage sector fits in their dynamic. I'm a cattle rancher, and I market my forages through beef cattle, so the more productive and valuable my forages are, that just enhances the beef production side for me. Whereas many of the other commodities sell direct to the producer, our commodity sells into the production of beef, dairy, bison, sheep, etc. It's a little different fit there.

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

We'll go to Madam Raynault for five minutes, please.

[*Translation*]

Ms. Francine Raynault: Thank you, Mr. Chair.

Thank you to the witnesses for contributing to our study this afternoon.

My question is for the Canadian Forage and Grassland Association representatives.

In your brief, you say, and I quote: “Dramatically reduced forage research funding has created a situation in which forage yields have not kept pace with those of annual crops, putting the livestock sector at risk.”

How do you plan to ensure that forage research is carried out, so you can keep your livestock well-fed and continue to raise cattle? Is your beef operation at risk?

[*English*]

Mr. Doug Wray: No. I'm happy to say that at today's prices, and under our current business plan and management, our beef operation looks very good. The challenge with producing forages that will support that beef industry is that we need a focused agenda on the part of industry and government to identify the key factors that will produce the most benefit to the beef and dairy industries from that forage production.

Two years ago in Calgary, the beef industry had a workshop where they identified the priority outcomes for beef research going forward. One of the four pillars of that discussion was forage productivity. Under that topic, four or five priorities that were established at that time have since then been well accepted in the research community as being the go-to objectives to produce the best outcome.

I think it takes a recognition of the value of doing the work, and then it takes a focused plan to achieve that value.

● (1715)

[*Translation*]

Ms. Francine Raynault: You also mention in your brief, “areas where the private sector has vacated the market due to lack of commercial viability”. Do you think the private sector will eventually put money into research, or has that aspect ground to a halt?

[*English*]

Mr. Doug Wray: Well, I don't think it's ever a dead issue. I think one of the examples of where the private sector has left a void at present is in inoculants for legumes. Alfalfa is fine. There's lots of alfalfa being grown and seeded, so there are alfalfa inoculants. But we have a new variety of sainfoin, for instance, that has been produced in Lethbridge by Dr. Surya Acharya. If that new variety does what we hope it will do, what he claims it will do, it can establish itself and maintain itself in a mixed stand, in a mixed pasture with alfalfa, and 15% sainfoin in that stand would mitigate the bloat risk. Now, as a producer, I can feel comfortable in having high-alfalfa pastures, which would increase my productivity. With that sainfoin in the stand, my risk of bloat drops dramatically.

The problem is we have no inoculant registered in Canada for sainfoin. Since there is a relatively small number of acres of it, private industry, on the commercial side of things, is not interested in advancing it. One of the challenges is the cost of getting it registered in Canada through the CFIA, which at this point is cost prohibitive.

We think there needs to be a strategy between government and industry to look at this problem and find a solution. There are two or three other legumes, such as cicer milkvetch—one that I use very effectively on my ranch—and things like trefoil. Those are small-volume crops that don't have an inoculant registered in Canada. Without the inoculant, it's a crapshoot whether you're going to get the nitrogen fixation and the side benefit that you get from that legume in your stand.

That's an example of a key issue right now.

The Chair: Thank you very much, Madam Raynault.

Now I'll go to Mr. Lemieux, for five minutes, please.

Mr. Pierre Lemieux: Thank you to our witnesses for being here.

This is a great discussion on technology and innovation within agriculture. Discussion did come up about Bill C-18. I want to touch on one of the key components. I know Ruth Ellen Brosseau was more concerned about the comments she's been getting on, for example, the move to UPOV 91. Actually, I'd like, for example, to ask the Canola Council their views on UPOV 91 and moving to it.

For those on committee who might not be aware, my understanding is that if you want to develop a trait on a plant, it could take anywhere from 10 to 15 years for that trait to be marketable. It can cost in the neighbourhood of $100 million to $150 million, depending on the plant, depending on the trait, but those are just ballpark figures. Many of our partners have moved to UPOV 91. I think we're lagging behind our trading partners by not having moved there yet. The idea is that by improving plant breeder rights, you encourage plant breeders to develop technology for sale in Canada to the benefit of Canadian farmers. I think we've seen that success story in canola, but I'd like to ask Patti about that.

What's the Canola Council's view on Canada moving to UPOV 91? What does it mean for your sector. What does it mean for innovation from the canola sector point of view?

Ms. Patti Miller: Life science companies' ability to capture value from their investments is critical to the success of the industry.

I can't comment specifically on UPOV 91, but that element has been very critical to the new varieties that have been developed, to the industry's ability to combat diseases, to improving yields, and to improving oil quality. Life science companies can continue to make the investments they do because they capture the benefits of those investments.

Mr. Pierre Lemieux: I think you captured it. If a company is going to invest the time, energy, and resources, which include the substantial financial outlay to develop these traits, they have to make sure it makes good business sense. If it doesn't, then it's a losing proposition, and farmers will lose in the end because they do not have access to that technology.

I think you gave a great example on herbicide resistant canola. Of course, the upswing for the farmer was tremendously higher yields. The upswing for the company that developed it was their selling seed that's used by farmers. It's a win-win all the way round. I think that's where we're trying to move with Bill C-18 and by ratifying UPOV 91.

From the forage industry perspective, I see that being a challenge. You mentioned that many farmers don't necessarily buy seed. The business case for trait development would be somewhat weaker, I would imagine, given the costs, the process, and the required resources. Certainly as a government, we would look to the sector to perhaps propose a model, a solution, or to coalesce around that priority of how to enhance or promote development of technology within the forage sector.

Are you bringing anything concrete to the table in terms of the industry working together to propose solutions that might involve better education for those in the forage industry to buy seed to promote the investment necessary to benefit from the technology that will come about from that? I'm wondering if either of you could comment on that.

● (1720)

Mr. Doug Wray: You're right. It is quite a challenge. The dairy industry uses alfalfa very aggressively and takes two, three, four cuts a year, and then replants every four or five years to maintain that productivity. There's a fairly robust market in alfalfa. I think it's true though that most of the genetics that are grown in Canada originate in the U.S. initially.

When we talk about perennial grass seed and some of the longer lived legumes, it's quite an economic challenge to build that business case to put the time and energy into producing a new variety. For instance, if it's a 10-year life cycle for a stand, or in some cases, if managed appropriately on the right kind of land, it can be...in my case, I have some 15-year-old pastures that are doing very well, thank you, so there's a real challenge there.

The key is for industry to identify the go-to traits that would have the most impact, and then work out a strategy with government to help deliver those traits. We're not talking about developing a new variety of canola every year; we see several varieties coming out every year. We're talking about if we had one good product every two or three years, that would take us a long way. The lifespan of a particular variety is much longer in the forage industry than it would be in the annual cropping industry.

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

We'll go to Mr. Garrison, the last questioner, for five minutes, please.

Mr. Randall Garrison: I want to follow along the lines Mr. Lemieux was going with the Forage and Grasslands Association.

I think you've identified something that's very important. Sometimes the market fails for various reasons, and I think you're in one of those areas where it's going to fail to produce the research. I wonder whether there's some kind of cooperative model whereby the benefits of the research belong to the members of your association. Is that a kind of solution that might be used to put forward this long-term research if the commercial companies aren't going to do it?

Mr. Doug Wray: I'm going to defer to Ron's understanding of that game for comment.

Mr. Ron Pidskalny: Thank you, Doug.

I think there is a place for that. What we see happening in forages is there is a very limited capacity to capture commercial value from seed, and it's due to the perennial nature of the crop. Also, if we look at the value chain, what the forages are doing is they're capturing value from sunlight and they're turning that into protein for human diets. So we're really in the solar energy business.

In that type of scenario, we really need to take advantage of the public sector expertise, which predominantly resides within Agriculture and Agri-Food Canada at the moment. We need to marry those resources up with the resources of the private sector. There are models that the public sector not-for-profit organizations could look at. We could bring the public sector and the private sector together to look at how we might be able to put the research resources into getting new varieties into Canada, and the new varieties we need.

One of the ways of doing that is to look at examples within Agriculture and Agri-Food Canada, like at Sainte-Foy, Quebec, which is really a stand-up model for core expertise in forages and grasslands. We also have that expertise available in cow-calf operations in Lacombe, Alberta. We also have that in Swift Current, Saskatchewan, in Lethbridge, Alberta, and other locations.

At the moment we have maybe one or two researchers in those institutions. We don't really see one or two researchers as constituting a core. We really need five or six researchers working together within that core in conjunction with the private sector working towards strategic goals that benefit the industry.

As an industry, we have a strategy in development where we're proposing to bring the public and private sectors together. We would like to call on our resources on the public side to help us develop a model, and we do have a means of capturing that value within the auspices of a not-for-profit organization, for the benefit of all Canadians.

● (1725)

Mr. Randall Garrison: Thank you.

I just have a minute left.

You made reference in your presentation, Mr. Wray, to the idea of trying to capture means of compensating grassland and forage producers for their ecosystem services, and I think you made reference to some progress that was being made under that. Could you come back to that point for us, please?

Mr. Doug Wray: Yes. We've just signed an agreement with the Commission for Environmental Cooperation, which was formed under the North American Free Trade Agreement, to see that production in all three countries in that agreement was operating more or less under the same parameters from the environment side. That commission is very interested in the concept that what's good for productivity in the grassland is also good on the environmental side in terms of carbon sequestration, cleaner air, cleaner water, all of those things.

We now have a project under way where on several ranches in western Canada, we're going to demonstrate the outcomes of those best management practices and hopefully extend those across the landscape.

That's a case where the rancher benefits from a best management practice and the public in general benefits from a better environment, to put it frankly.

The Chair: Thank you, Mr. Garrison.

I want to thank our witnesses for coming in today and being a part of this panel.

On Wednesday, just so that we wrap up and prepare for when we come back, we'll have a discussion on new business.

Thank you very much for coming out.

The meeting is adjourned.