HOUSE OF COMMONS
CHAMBRE DES COMMUNES
CANADA

Standing Committee on Agriculture and Agri-Food

AGRI • NUMBER 027 • 2nd SESSION • 41st PARLIAMENT

EVIDENCE

Wednesday, April 30, 2014

Chair

Mr. Bev Shipley

Standing Committee on Agriculture and Agri-Food

Wednesday, April 30, 2014

● (1535)

[*English*]

The Chair (Mr. Bev Shipley (Lambton—Kent—Middlesex, CPC)): I'd like to call the 27th meeting of the Standing Committee on Agriculture and Agri-Food to order. We move forward on another day on the study of the innovation and competitiveness in agriculture.

We have the pleasure to have witnesses in the first hour.

From the Canadian Seed Trade Association, we have Patty Townsend, who is the CEO. Welcome, Patty.

From the Canadian Horticultural Council, we have Anne Fowlie, who is the executive vice-president.

Ms. Townsend, you get to go first, and you have seven minutes.

Ms. Patty Townsend (Chief Executive Officer, Canadian Seed Trade Association): Thank you very much for the invitation. Three times lucky: we finally got here. We had cancellations and votes and all kinds of things going on, so it's nice to finally be here and meet with you.

I'm happy to come here to talk to you about the role of the seed industry as the foundation for agricultural innovation and competitiveness. I bring apologies from our president who is unable to come to Ottawa on this short notice. He is from Winnipeg and I don't fly him in unless it's a certainty, so you're stuck with me, but I'll do my best to make a contribution to your study.

The Canadian Seed Trade Association brings together 132 member companies. Our members are involved in all aspects of seed, from plant breeding and variety development, to production, processing, packaging, marketing, sales, and trade.

Our members range from single grower retailers to the large multinational companies, and from distributors of small packet organic herb and spice seeds to the world's giants of biotechnology. We have a very diverse membership. Our members have diverse interests and objectives. Many are competitors in the marketplace, but they come together as the Canadian Seed Trade Association in support of our mission, which is to foster seed industry, innovation, and trade.

Agriculture and Agri-Food Canada has estimated that nine out of every ten bites of food taken around the world starts with the planting of a seed. Seed is the foundation of the world's food supply and it's an important contributor to its supply of fibre, fuel, and industrial products.

Seed is the driver of the innovation that the world's farmers are going to need in order to meet the goal of feeding, fuelling, and clothing a world population that is expected to reach over nine billion people in about 35 years.

Studies have shown that over half of the yield in gain of most crops is from the genetic improvement that's delivered by seed, so farmers are looking to the seed sector, my members, to provide them with superior genetics so that they will improve productivity and protect the environment in which they operate.

Almost every week there is another announcement of a significant achievement in plant breeding and research by public and private investors and researchers. The impacts are already substantial. According to Science Daily there has been a step change in speed and cost-effectiveness. What previously took six generations to achieve can now be done in just two.

Recent achievements, ranging from the discovery of a gene that can improve photosynthesis, to genome sequencing for wheat and chickpeas, to the development of insect-tolerant wheat varieties promise future yield increases of more than 50% in the world's staple crops.

In the shorter term, advances are being made in drought and heat resistance, efficiency of water and nutrient use, disease resistance, and in the quality and health benefits of oils and meals. All of these and other advances are entering the innovation pipeline at a rapid pace and they hold great promise for farmers and consumers.

The question then is whether and how Canadian farmers will be able to access these advances. The answer is only when Canada's policy and regulatory environment facilitates investment.

Where the private sector is able to generate a return, it does invest. In 2012 CSTA's members invested over $109 million in research, plant breeding, and variety development. That's 5% of their combined sales and represents a 94% increase from the five years previous.

Most of that investment, however, has only been in three crops, canola, corn, and soybeans, where the operating environment facilitates a return on that investment in order to reinvest in the development of even better varieties.

Breeders and developers working with these crop kinds operate in a more flexible regulatory environment. For example, corn is not subject to variety registration, and canola and soybean registration has evolved to meet the needs of the marketplace.

These crops also have access to better tools to protect their inventions: new traits, attributes, and varieties. The development of hybrid corn and hybrid canola means that farmers purchase seed every crop cycle in order to continue to get the superior aspects of those hybrids. Improved performance and attributes in canola, corn, and soybeans have also been developed with the use of modern biotechnology, which allows for the use of more effective intellectual property protection tools like patents and technology use agreements.

However, private sector investment in some of Canada's other major crops, like wheat, barley, oats, flax, and pulse crops, has lagged. In 2012 only 8% of private sector investment was in cereals, 2% in barley breeding, 1% in flax breeding, and there was no significant investment in the breeding of oats or pulse crops.

To date, the Government of Canada has been the largest investor in plant breeding in these crops. But the government has been reducing and redirecting investment in plant breeding and research and is looking to the private sector to fill in, either on its own or in partnership with public institutions. The private sector is keen to increase its role, but that can only happen in a policy and regulatory environment that will foster investment.

First, our members need a continued commitment to regulatory and trade decisions that are founded in science. Science is reproducible and measurable. Regulatory processes that are based on science ensure that innovation is assessed in a consistent manner, giving confidence to consumers and to the developers of innovation. Public opinion, market acceptance, and other socio-economic factors are not consistent over time or geography, and they must not enter into regulatory and trade decisions made by governments.

Second, private sector investors need flexible, predictable, and enabling regulatory environments. The government has taken some substantial steps toward improved regulatory systems, including the removal of kernel visual distinguishability as a requirement for wheat variety registration, and the development of a framework that could, but doesn't yet, facilitate more efficient variety registration for all crops. However, there is still so much more to do. While I'm speaking of variety registration, I need to point out that the so-called three-part registration system implemented five years ago has not yet improved registration because even within the system, changes that should be simple have to be made by regulation.

We look forward to some of the provisions contained in Bill C-18, the agricultural growth act, which we hope you will soon have before you, and we hope that we will be appearing on it. Specifically, we support the ability to use foreign data for registration purposes and the ability to incorporate some documents by reference. The review of the registration system that was launched last fall is also positive for plant breeders and developers. We hope that it will give crop value chains the opportunity to design systems that will best suit their needs.

Third, in order for the private sector to invest, it needs to be able to generate a return that will cover its costs. That has not generally been the case in crops like wheat. One of our members provided us with a real-life example, FT Wonder, which was developed in Ontario. The company invested nine years and over $900,000 to develop and bring this soft red winter wheat to the market. After three years in the marketplace, the company had not even recovered half of its investment. Obviously, this is not sustainable.

Effective protection of intellectual property means that plant breeders and developers can set conditions on the use of their varieties for a specified period of time. The conditions can, and most often do, include remuneration or a royalty. For crops like cereals, pulse crops, flax, and other crops, the only real form of intellectual property protection is plant breeders' rights.

Bill C-18, as you know, strengthens plant breeders' rights, by giving breeders the ability to set conditions for a longer time and over more uses. For example, in addition to selling and advertising for sale, the breeder can set conditions on production, reproduction, conditioning, stocking for sale, and import and export of these varieties. At the same time, the bill entrenches an exception for farmers to allow them to save and store grain from protected varieties and to condition it for use as seed on their own farms.

Amended plant breeders' rights legislation will give plant breeders and developers increased confidence to invest in Canada, and it will also give international plant breeders and developers the confidence to give Canadian farmers access to superior varieties developed beyond our borders.

The last thing for today is that our members need improved access to markets. Canada is the world's fifth largest exporter of seed. Our production environment, comprehensive food safety regulations, seed quality standards, and efficient production and processing systems give us an advantage over many of our competitors. However, Canada is not able to capture some very substantial opportunities internationally because many countries impose barriers to trade that are not founded in science but are politically driven.

We appreciate that the government has adopted a very aggressive trade agenda. We encourage negotiators to remain steadfast in all negotiations in support of timely and science-based approvals and the development of trade-facilitating measures to address low-level presence of approved genetically modified events in shipments of grain and seed.

I apologize if I've gone over time, Mr. Chairman, but I will be happy to answer any questions you might have.

● (1540)

The Chair: Thank you very much for your presentation, Ms. Townsend.

Now I'll go to Ms. Fowlie, for seven minutes, please.

[*Translation*]

Ms. Anne Fowlie (Executive Vice-President, Canadian Horticultural Council): Mr. Chair and committee members, thank you for the opportunity to appear before the committee to speak within the context of your study on innovation.

[*English*]

Canada's horticulture industry is an industry that very much aspires to be innovative, profitable, sustainable, healthy, and bring health with the products we grow for the future and for future generations.

The council represents producers from across Canada primarily involved in the production and packaging of over 100 different fruit and vegetable crops, apples to zucchini, literally. Members include provincial and national horticultural commodity organizations, as well as allied and service organizations, provincial governments, and individual producers.

We represent members on a number of key issues, such as crop protection, access to a consistent supply of farm labour, food safety and traceability, fair access to markets, research and innovation, and government programs.

The mission is to ensure a more innovative, profitable, and sustainable horticultural industry for future generations. Producers are committed to ensuring that strong Canadian farms will continue to be able to provide safe, secure, and healthy food for families in Canada and around the world.

I believe we have a demonstrable record of success in this regard. It includes the seasonal agricultural worker program, established over 40 years ago, which was very innovative at the time; and establishment of the Fruit and Vegetable Dispute Resolution Corporation under article 707 of NAFTA. CHC was integral to the establishment of the Pest Management Centre, and the CHC office was previously recognized as IR-4 North as Canadian trials were coordinated with the U.S. IR-4. CHC also developed and established the CanadaGAP food safety program for fruit and vegetables grown in Canada, which was the first food safety program in Canada benchmarked to the global food safety initiative.

We also led a collaborative initiative, which included the World Wildlife Fund, to develop an integrative fruit production program for the industry. We're a founding member of GrowCanada, and an active participant in a number of value chain round tables and other collaborative initiatives, such as Partners in Innovation.

Improving food diversity and security in a buy Canadian for Canadians manner is a priority that will only be achieved through: dialogue, understanding, and strategic collaboration through adequate funding for research and innovation; appropriate actions to develop and implement policies and programs that foster producer profitability, and that includes traditional and non-traditional risk management programs; ensuring a favourable regulatory environment that is conducive to commerce; and timely access to new crop protection technologies.

As indicated by my colleague, these must be science-based, and we need proper dispute resolution mechanisms, whether it's here domestically or within any of our trade agreements. The language might be good, but they have to be practical. They have to work.

Research and innovation are critically important to maintaining the competitiveness of Canada's horticultural sector. The initial and subsequent announcement of the Canadian agri-innovation program, specifically the clusters, with the stated purpose to encourage key agricultural organizations to mobilize and coordinate a critical mass of science and technical capacity in industry, was certainly welcome. It was received with enthusiasm and a sense of opportunity.

Our industry rationalized its needs and priorities vis-à-vis research and innovation defined with theme areas: health and wellness, food safety and quality, production and production systems, environmental performance of the horticultural system primarily but not limited to pest management, as well as energy management and efficiency. Those themes have served us well and were reaffirmed in 2013.

The CHC-led agri-science cluster for horticulture was a multi-activity project funded by Agriculture Canada in the amount of just under $5 million for science cluster one with an additional contribution from industry of $1.4 million. We were fortunate within Growing Forward 2 to also secure funding for science cluster two.

There have been a lot of successes and accomplishments from cluster one, and we look forward to more success with cluster two. Certainly I would offer that in any future opportunities, should the committee agenda allow, to bring forward witnesses who could speak to those successes and the positive results of investments that have been made. It's important to speak to the people who are the practitioners.

● (1545)

The market access secretariat was created in 2009 as an initial response to the implementation of industry's recommendations to strengthen how Canada approaches market access. Again, there were a number of successes there, but more are to be had. There are other success stories waiting to be had. Most recently for us in our case, we were able to access the Chinese market for cherries in 2013.

Crop protection has certainly been the subject of previous attention and studies by this committee. Investment and innovation are required there through producers and through the manufacturers. We've been very much proponents for the establishment of the Pest Management Centre. I think that's really been one of the success stories of Agriculture Canada.

There is much to be done with pollinators as well in terms of innovation. I think horticulture is very much an exemplary model of how co-existence between production and pollinators can thrive, but there is going to need to be research and innovation taking place there.

Bill C-18, which was also mentioned by my colleague, and our president.... It must be Manitoba for presidents. Our president is from Winkler and he also sent his regrets, but he was with Minister Ritz in Winnipeg in December when, of course, the bill was tabled.

We are very much strong proponents of and support the amendments to plant breeders' rights legislation. As farms work to match production with the growing global population, it becomes increasingly important that they have the tools needed to continue to increase production. New varieties are an important segment of the growth, and strengthening plant breeders' rights in Canada to conform with UPOV 91 will encourage investment and breeding.

I must comment on the U.S. farm bill. I know it's often difficult to compare country to country and the programs in both because they never will be the same; however, certainly for us in our reliance on the U.S. market, we very much need to sometimes take stock of that and how it affects our competitive position. Certainly in the most recent farm bill, specialty crops, or horticulture as we refer to in Canada, were very much a winner, with significant increases in a number of areas that are important to us and that we compete directly with them, not only with the U.S. but abroad, regarding their market access program funding, other specialty crop programs, how they address foreign market access barriers, and of course, commitment to research and innovation. In developing our own programs, we cannot fully discount the strategies developed and applied in competing jurisdictions.

I think we also need to take some innovative approaches to succession planning. As we look to the next generation, I think we all recognize very much that there is a challenge and a need to have the next generation continue on with our farms.

The small business tax limit has not been changed since the mid-1970s. The limit uses a calculation that includes assets and debt to determine whether the business farm continues to be eligible for the exemption.

As the next generation becomes involved in the farm, there is a need to look at expanding the farm to ensure that the operation can sustain the growth or, in the case where there are brothers or what have you coming on, increasing the number of people who are dependent on the farm. We often see where this requires that the farm must purchase additional land and equipment, which very quickly results in the farm exceeding the $15 million limit, which forces the farm to pay much higher rates of tax. In some instances, we've had some of our members talk to us about succession. They've seen that bringing sons in increases their tax bracket from 25% to 47%. They don't object to paying tax, but is that an appropriate or innovative way to approach succession?

Changes to Growing Forward 2 that support programs for farms, such as agri-stability, must be rationalized, and the approaches reviewed as we look forward to an ex-strategic framework.

Opportunities are all around us, and the challenge is for all of us to ensure that they are fully realized. The Canada-U.S. regulatory cooperation council and associated work plan was, in many respects, innovative and very positively received and supported by us, and we hope it will continue. However, those initial objectives must be completed. In particular, when I look at the long-standing financial protection for produce sellers, I see that as a good example of something that has to be finished.

● (1550)

As always, we appreciate the opportunity to come before the committee and certainly would encourage or invite you as you travel the country to call upon us to visit any of our many members and see your investment at work.

The Chair: Thank you, Madam Fowlie, for your great intervention.

I appreciate both presentations.

Before we go to our committee, I'll note that it's not very often that we have students who come in and not only want to learn about what committees do, but also want to hear the interventions for the presentations of witnesses and the interventions of our colleagues on the committee.

We have with us Janet Buckingham from Trinity Western here in Ottawa.

We want to thank you for taking the time to join us. This is public, so if you have to leave before we're all done, you're welcome to do that, but we really appreciate the fact that you have chosen to come in and sit with our committee. All the best to you, and I hope we can give you some useful information as you go back, as we're studying innovation and competitiveness in agriculture. We're going through a study on that and it's really quite interesting as we bring in the diversity and the broad components across the agriculture industry. Thank you for joining us.

With that, I'll now go to Madam Brosseau, for five minutes for questions, please.

Ms. Ruth Ellen Brosseau (Berthier—Maskinongé, NDP): I'd like to thank our witnesses for their presentations and also welcome the students. It's always nice to have more people come in and take an interest in the ag committee.

I'll start with two questions that apply to both of you.

On Monday we had witnesses come in who commented on the fact that we are losing scientists. We are losing specialists to other countries. I was wondering if that is something you have encountered in your fields of expertise. If so, what can be done to counter that in order to keep the bright minds here and maybe attract more?

The second question is about the agri-innovation program. Has it encouraged R and D in our industry? What works and what doesn't work? What can we do when it comes to recommendations to make it better if needed?

● (1555)

Ms. Anne Fowlie: Certainly, with respect to your comment around losing the fine minds, or not acquiring them in the first place, it's very much a concern. For us it has been the subject of many, many resolutions at annual meetings over a period of time, as we saw that through natural attrition, or for other reasons, positions were becoming vacant and simply not being replenished. That is in part certainly due to constraints around government funding, and also to some changes in approaches in the private sector as well. From our perspective, there's a huge deficiency in a number of areas in our research capacity in Canada, whether it's plant breeding or other types of science and specialties in the different crop disciplines. That's very much a concern.

As far as agri-innovation goes, yes, certainly it has brought a different approach and is a compelling reason, I guess, to approach thinking within the industry in a more organized and forward-thinking manner. That's always a good thing. I think part of the challenge around the program, certainly with cluster one, has been in rolling out anything new, and the logistics around doing it, and the learning that comes from delivering a program. We're certainly looking forward to cluster two, and we hope that some of the challenges around the delivery, the rollout, and the processing of payments will improve. It's a program we support, and we very much would support a third iteration of a similar program in the next strategic framework.

Ms. Patty Townsend: We had a survey done.

Human resources, and scientific minds in particular, have been really huge issues for the seed industry, just as they are for the horticulture industry. A few years ago Dr. Bryan Harvey from the University of Saskatchewan did a study for us concerning the ability to hire brilliant minds. He looked mainly at the scientific side of things—plant breeders and technicians who support plant breeders—and he determined that just to make up for attrition in our industry, in the plant breeding and development industry, we would need to hire 600 new scientists every year, and we can't find them.

That is a big problem for us. We have been working very hard in partnership with GrowCanada and other organizations to build up the sort of respect and desire to stay in Canada and come to Canada. We have a number of projects on the go from those, starting at the young high school level and going right up to university level. We have had campus ambassadors on university campuses promoting our industry and the scientific side of our industry. We bring kids to GrowCanada to learn about the agriculture sector and about the opportunities there, so we are really pushing on that.

We do a survey of our members every five years, in which we ask them about employment, in addition to asking them about what they invest in plant breeding and research. Actually the last two surveys have shown a slight increase. We also do a survey about the ability to find people and hire people, and we are seeing in our membership a slight increase. I don't think we're out of the woods by any means, but we are having some better impacts.

The agri-innovation program is an interesting one. It's not one that our members use regularly. I have looked at the agri-innovation program for purposes other than funding research clusters and things like that. We've been looking at things like how we can better set up an environment that is conducive to investment. We look at how other countries do things. We try to do some international work, but we haven't been able to get funding for that. It would be nice if some of the programs could be more forward-looking around a kind of policy and regulatory structure rather than focusing specifically where they do now.

● (1600)

Ms. Ruth Ellen Brosseau: We also heard on Monday how the current programs have been kind of piecemeal over the past few years. Forward thinking and long-term vision are not things we see a lot of with the government, and those were things they called for on Monday. It's nice to hear again today that it's something the government should look at doing.

You mentioned bees and pollinators, and those are very important to agriculture, because without bees we will not have pollination and we will not have food. We've had witnesses come before committee and talk about bee losses, and about how this year we will probably have some more bee losses.

I was wondering if you could speak to the importance of the government investing more into research when it comes to bee health, because we all know it's very important to agriculture and industry and our future.

The Chair: The issue is that the question took us well over your time, so I'm going to ask if we might come back to that for an answer on the second round.

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

Mr. Earl Dreeshen (Red Deer, CPC): Thank you to the witnesses for being here.

I also would like to welcome the students for this discussion on innovation and competitiveness.

I think it's really important, especially when we have organizations such as yours that are really on the cutting edge in that regard.

Ms. Townsend, in your brief one of the things you spoke about was our trade agenda and where we're going, and also about how we have to make sure our decisions are science-based. Of course, as I've said on other occasions, there is a difference between political science and physical science. Since you, a physical scientist, are not going to say you could ever get to zero, while political scientists will say “hey” because they can't say that, it's something we have to be concerned about. Of course I think that's where low-level presence does come into some of the discussions.

I'd like to talk a little bit about the low-level presence aspect of it, and then I'd also like to go back and discuss UPOV 91 and where we see that going.

I know this is significant for both organizations, so perhaps you could start with the low-level presence and where you see that innovation, either in the science side or in the policy side, is going to help us do that.

Ms. Patty Townsend: I'll start on low-level presence. You only have five minutes, right?

Low-level presence is a huge issue in the seed industry. I know it's a huge issue in the grain industry as well. However, for the last number of years, our industry has been living low-level presence. With a lot of our seed companies particularly in the forage industry, for example, where Europe is their second largest market, and as you know, Europe has a zero tolerance for genetically modified products, forage seed is grown either on top of or right adjacent to huge fields of canola, soybeans, or corn, which are between 90% and 99% genetically modified. Reaching zero in a system where you're growing in an open environment, in fields that are often being planted with forage seed after a GM product, or even where bees, birds, and wind travel, is very difficult. In fact, it's impossible.

We've been working for a long time internationally to try to get agreement, particularly at the industry level, around some sort of policy that will facilitate trade while at the same time protecting the environment and creating predictability. In the seed industry, we are different from grain, because in seed, we very, very carefully try to keep our product separate. We have a huge amount of regulatory and other standards that keep us separate. We ensure that our product is separate. We have rigid seed standards that facilitate trade, and they have for a long time. We've been working to try to base a low-level presence policy on that.

In understanding low-level presence as a definition, it's a product that's already approved at 100% for food, feed, and environmental release, in a country where scientific processes are in line with international agreements. We're working very hard on it. It's very difficult. The capacity building is huge. There are a lot of countries that don't even understand what low-level presence is.

At the grain side of things, we're also very involved. However, things are kind of proceeding on two different tracks right now. In grain, as you know, the government has been working closely with industry, and there is a proposal for a policy for Canada. We've been working very hard on that as well. They don't want to talk about seed in that context, so we'll proceed on seed and then put the two together as we move forward on it. Hopefully, it will be in my lifetime that we have a process that will facilitate trade.

● (1605)

Mr. Earl Dreeshen: Perhaps, then, I could go to UPOV 91.

Ms. Fowlie, maybe I'll start with you, and if we have time, Ms. Townsend, we'll go back to that.

I know that there is an issue. Of course, this is something that we put in the new bill, and no doubt you'll have an opportunity, or hopefully you'll have an opportunity, to speak to that when we are discussing it.

Can you give us some idea of the significance of the UPOV 91? Particularly, I'm looking at the seed situation as far as farmers are concerned, so they can save and use their seed.

Ms. Anne Fowlie: I'll speak to it in part, and then I'm sure my colleague will have something to add as well.

As far as moving to—

The Chair: A short answer, please.

Ms. Anne Fowlie: Very short.

My previous life was in the potato industry, from 1978 forward. There were so many instances where we could not get new plant material in Canada because the breeders, whether it was the Netherlands or elsewhere, simply would not come because the protection wasn't here. We did not have the regulatory regime that was conducive for them to have the confidence to send their investment to Canada. It was a real obstacle which held us back in many ways.

Ms. Patty Townsend: It's the same situation particularly in the grain industry. We have members who have made deals with European companies to bring varieties to test in Canada, and they have backed out of the deal because we couldn't protect it.

Around farm safe seed, there is nothing in this new bill that prevents farmers from saving the grain of protected varieties that they produce on their farm, cleaning it, storing it for production, producing it, and saving it as seed for production of more grain on their farm. There is nothing in the bill that prevents that.

The Chair: I'd like to move on.

Thank you, Mr. Dreeshen.

Now we go to Mr. Eyking, for five minutes, please.

Hon. Mark Eyking (Sydney—Victoria, Lib.): Thank you, guests, for coming here.

I'd like to follow up on your comments on Bill C-18 and the seed issue. There are parts of this bill that are good, but the biggest pushback I'm getting is the classification that it's a privilege instead of a right. I agree with what you just said, but a lot of farmers are uncomfortable because a privilege means maybe you can, but maybe we can take that away from you.

Wouldn't you think that the wording should be a right instead of a privilege, that it should be a right that you can take these seeds and do what you just said?

The Chair: Mr. Eyking, that bill will be coming forward. You can use your question as you want, but that bill will be coming forward and we'll have the bill in front of us. You might want to stick to the innovation and competitiveness part of it.

Hon. Mark Eyking: Part of innovation is seed, and I'm just following on where the other—

The Chair: I know, but I'm just saying the time will go on you, that's all.

Hon. Mark Eyking: You can make a shortcut.

Ms. Patty Townsend: I really would like to answer that question.

The actual language in the UPOV 1991 convention is that it is an exception to the plant breeder's right. No matter what you call it—a right, a privilege, whatever you want to call it—it's still an exception to the plant breeder's right, and the language comes from UPOV 1991, which spells out very clearly what the farmer's exception is. So I don't think it really matters what you call it, it's still an exception to the plant breeder's right.

Hon. Mark Eyking: My question for Anne deals with our relationship with the United States, and you mentioned COOL, country-of-origin labelling. When I was in the vegetable business, I couldn't get certain products from the United States the farmers were using, and you'd see it advertised in magazines that they could use them. Are we getting any closer, and should we work more in tandem with the United States on research, on approving products that farmers can use, so we have the same tools in Canada as the United States has, and use their research and they use our research, so we're on a level playing field as far as products are concerned?

Ms. Anne Fowlie: There have been a number of improvements over time, but we're not there yet. Again that speaks to dovetailing our regulatory regimes. Based on science we're at a point now where there's a lot of work-share that goes on, where we do have joint submissions. PMRA and the U.S. EPA will do work-share and they will parse out the work so that there isn't that duplication. There have been some changes made to crop groupings and zoning that have all been very positive.

The biggest areas we see the differences in now are things like worker exposure, the timeline to be able to go back into a field after you've applied a product, cancer risk assessment. We're getting to a point where we are reasonably close.

● (1610)

Hon. Mark Eyking: With the Americans.

Ms. Anne Fowlie: With the Americans. But as with anything else, it seems like the toughest things are always the last ones to do. I think there needs to be some real good direction and policy to the regulators to really sort that out. It is one of the action items under the Regulatory Cooperation Council. There is a greater access to products, but it's still not a 100% level playing field.

Hon. Mark Eyking: Is the country-of-origin labelling having any effect on the produce industry in Canada?

Ms. Anne Fowlie: No.

Hon. Mark Eyking: Do we send stuff down there that gets repackaged into salads? Does it have any impact on us at all?

Ms. Anne Fowlie: Under the Canada Agricultural Products Act, there are regulations around things having already to be marked “product of Canada”, and if you are bringing in product from the U. S., say potatoes or apples, and repacking them here, they would have all the Canada branding on them but the packages would have to say “product of U.S.A.”. As far as our sector in particular is concerned, COOL is not a friction point. There are some others, but that is not one.

Hon. Mark Eyking: Do I have any more time, Chair?

The Chair: You have one minute.

Hon. Mark Eyking: My last question is dealing with GMOs.

Both your industries of course use GMOs, and there's some legislation. In Europe the labelling is different. Where do you see it should go? There is some sense in Parliament that some members might be bringing forward legislation dealing with the labelling. What do you think about that? Where do you think we should be going with your products in labelling and GMO? Should there be any regulations at all?

Ms. Patty Townsend: In one minute?

There is already a voluntary system for labelling of genetically modified products in place under the Standards Council of Canada, and a company can choose to label whether it is or is not a GM product. They just haven't found the need to do that.

Ms. Anne Fowlie: We need tools and I guess when it comes to labelling I don't know what negative labelling really accomplishes. I think there's an awful lot that needs to be done with respect to education and to create understanding. We need tools. If we're going to continue to profit, and provide healthy products, and sustain the world, we have to have all the tools and technologies, and whether it's pharmaceuticals or in food production, that applies.

I think there's been a lot of fear-mongering done. I look back to many years ago with potatoes in particular, because there had been tremendous advances made, and very positive ones in fighting pest and disease, but it was as Mr. McCain himself said at the time, it's not that it's bad science, it's just not good PR. We've evolved some, but there's still further to go.

The Chair: Thank you very much.

Your time is up, 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.

Welcome to the students. I'm hoping you'll learn something fantastic from this experience that you have here on the agriculture committee.

Ms. Townsend, in terms of your presentation, you talked about mostly the investments in corn, canola, and soybeans. I know that innovation certainly is a driving force in the industry. How has that changed in terms of the world economy, and how do you see that affecting the population growth? You did talk about additional food being produced to feed the world.

Ms. Patty Townsend: The reason the private sector invests 84% or 85% of its total investment in corn, soybeans, and canola is that they can recover their costs. Right now, in cereals in particular, they can't. The example I gave you of FT Wonder in Ontario is a pretty good example of that.

The private sector is gearing up to invest. They have a much more positive outlook with some of the changes government has made in regulatory areas and others. Bill C-18 certainly is a strong contributor to that. They are gearing up to invest. Where in 2007 they had predicted that they would only be investing about 2% of their investments in wheat, they're up to about 8% in 2012. They actually have turned more towards wheat because of some of the encouraging signs they're seeing.

I think there's still some work to do. Some of that work includes things like making sure our regulatory system is more nimble and flexible. We have been waiting for a simple regulatory change around the placement of soybean and variety registration, for example, for three years now, and it's just a simple regulatory change. We need to have a flexible regulatory system.

Canada is very well positioned to make a strong contribution and, I would submit, lead the effort to feed a growing population. We just need to make sure we have the environment, the policy and regulatory environment, in place to do that.

● (1615)

Mr. LaVar Payne: I know we're investing $3 billion in innovation and research, so I think we're trying to make sure that happens. Obviously, it's much more difficult to do it over a longer period of time. However, when you're looking at the various universities and other organizations who are doing research, they all have their issues. We did hear about some of that on Monday.

Is there a way that, through this research funding, some of these organizations that are applying for much more funding from various organizations could simplify their processes in order to make sure they don't have to do 10 or 15 reports for one particular project?

Ms. Patty Townsend: That's probably more of a question for Anne than it is for me.

In our industry, although they do build, and are continuing to build, private-public-producer partnerships, it's done with private sector money for the most part.

In the case of wheat, for example, Agriculture and Agri-Food Canada has made some announcements and discussions about how they're going to approach wheat breeding. They want to focus more on generally applicable research—disease resistance, mapping the genome, and some of those things that serve as a very strong foundational basis for the development of varieties—but the actual development of varieties they want to do in partnership with the private sector.

I think that's a great model. It's just a matter of making sure that once the private sector gets in on that partnership, they can actually navigate their way through the system to actually deliver the varieties to farmers.

Mr. LaVar Payne: Anne, would you like to comment on that as well?

Ms. Anne Fowlie: I have a lot of similar thoughts.

I guess the collaborative approach as to how the private sector and government are working together has changed, in part because of clusters, in part because of a lot of the rationalization that went on with regard to all of the research centres across the country starting back in the early 1990s. There certainly was a huge shift then.

I think that will continue. Certainly within the industry there's very much a lot of angst around all of the capacity they see being lost in terms of breeding programs and the expertise on the government side of breeding. There's a certain element of public good also that's associated with that, and that has to be maintained. I certainly would hope that we would not ever reach a point where our government would have very little role left in that area.

I think it's about the exchange of information, collaboration, people knowing what's going on within a sector across the country, both as an industry and even among the government researchers. I think there are some voids there that are starting to close. That goes as well for initiatives that we're involved in internationally, through the international potato group or others; we would be in other countries and hear about research that Agriculture Canada was doing that we had no idea was going on.

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

I will now go to Madam Raynault for five minutes, please.

[*Translation*]

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

Thank you, ladies, for being with us today. I would also like to thank the students for being here.

Ms. Townsend, on line 12 of page 2 of your document, you say:

> All of these and other advances are entering the innovation pipeline at a rapid pace and hold great promise for farmers and consumers. The question becomes whether and how Canadian farmers will be able to access these advances.

Could you expand on that? You also say:

> The answer is: Only when Canada's policy and regulatory environment facilitates investment.

Could you expand on that? Because on the next page, you say that there hasn't been a real improvement in investments in oats and pulses.

Why have these two products not benefited from significant investments? Is it because they are not profitable? Is it because people no longer eat them and no longer eat enough pulses?

● (1620)

[*English*]

Ms. Patty Townsend: On the first statement about all of the innovation that's occurring, I just wanted to point out that there is innovation occurring. Most of it is the result of improved genetics, and genetics are delivered by the seed.

The problem is that if it's the private sector, which is my membership, and the private sector is expected to deliver those things, they aren't delivering them in Canada, and they're investing in countries where they can recoup their investment.

In pulses, for example, the way that the pulse research right now is being done, the product sector can't compete because of how royalties are collected or not collected, and how it's funded through farmer check-offs and then directed to only one institution in Saskatchewan, for example.

In cereals, again, the private sector is not investing, because, as in the example I gave of FT Wonder, they can't recover their costs because farmers are saving seed. It's a blunt black and white statement that farmers will buy a bag of seed. The seed companies and the private sector and the public sector only have the opportunity to get remunerated on the sale of seed. Farmers buy a bag of seed and they just keep saving the grain to use as seed. They're only remunerated on one bag.

That's an extreme example, but that's what's happening in a lot of crops. It's not that there isn't a demand. I would tell you that the pulse industry is growing, they're becoming more and more innovative, but a lot of the private sector investment in the pulse industry is not happening in Canada.

[*Translation*]

Ms. Francine Raynault: So elsewhere, where it is profitable.

Ms. Fowlie, on page 11 of your document, in your message as executive vice-president of the Canadian Horticultural Council, you say:

> An even more devastating blow was the mid-November announcement that Heinz would be closing its Leamington, ON facility in 2014, putting 740 full-time workers out of work. It has been estimated that for every job in the plant, there were 2.5 to four jobs created outside of the plant.

This is a very significant job loss. That business closed its doors after being in operation for 104 years.

What happened to the agricultural producers? I have been an agricultural producer. I grew small cucumbers for a company I won't name that also saw that it would be cheaper and more profitable to have their crop grown outside Canada.

Quebec producers—I am, indeed, from Quebec, from the Joliette region, which is my constituency—this entire agriculture industry was lost and, as a result, so were student summer jobs and the transformation that was occurring in the region.

What happened to all these producers? How did they reorient themselves?

Ms. Anne Fowlie: I am quite familiar with the situation your region experienced.

Some continued their activities, but on a smaller scale, or decided to grow other products, while others retired from the industry. If I'm not mistaken, an announcement was made in the past few months.

[*English*]

There will be another company that will carry on, but on a smaller scale.

It's a combination of things, but certainly It's very much an impact on the area. As you've said, there are all the ripple effects. You don't have the summer students. You don't have the additional revenue going into the community from all the spinoff industries. It's a combination of things.

Sadly, we've seen such a loss in our processing capacity, whether it's in Quebec and Ontario or in other parts of the country. That again is a concern. That's technology and investment that are going elsewhere, and certainly that's not what we need or want.

The Chair: Thank you very much, Madam Raynault.

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

Mr. Randy Hoback (Prince Albert, CPC): Thank you to the witnesses.

Ms. Fowlie, you said that we're losing that capacity. Why are we losing it? What is the structural change that's happening in Canada such that they're going somewhere else? Have you identified it?

● (1625)

Ms. Anne Fowlie: Allegedly in those particular instances, not exclusively that one, certainly the repeal on the standard containers was cited as a reason for some changes, and also the differences in how companies were looking at rationalizing their investment and whether they would continue with existing investment or in fact make new investments. So there—

Mr. Randy Hoback: What are the factors in that decision-making process that would make them choose one area over the other? Is it lack of innovation, or is it because of taxation, or is it because of the working environment? What would be the factors?

Ms. Anne Fowlie: It would be taxation for some. Again, it's some of the regulations and, as I said, the repeal of standard containers. I won't go into that one, because certainly I think many of you heard a lot about that at the time—

Mr. Randy Hoback: That's another 25-minute debate.

Ms. Anne Fowlie: Exactly, and we appreciate that it's being held in abeyance, so carry on.

Again, it's a combination of things that are beyond our control in terms of the Canadian dollar or other things, but a lot of it does have to do with regulatory uncertainty. I think that as far as production capacity, quality of labour, and all those types of things go, we're second to none.

Mr. Randy Hoback: Ms. Townsend, one of the things I hear about when I go back to Saskatchewan is the actual increase in innovation and the increase in research and development in wheat, and how the handcuffs, which is the expression that's used back home, have been taken off wheat.

Can you highlight exactly some examples of what's going on in the innovation side, maybe particularly in wheat? I also give you the freedom to go into other crops, if you think there is something that gives us an even better example of what can happen when you allow innovation to happen.

Ms. Patty Townsend: Sure. I can give you some examples from some of our member companies. For example, Syngenta has hired a wheat breeder, and Bayer has substantially increased their production.

One of the things they said to us before some of these regulatory changes happened, which I'll get into in a second, was that it was easier for them to develop a new seed treatment or a new fungicide than it was to develop a new variety they could use that would be resistant to the pests they were trying to control.

Bayer has taken a more optimistic view. CPS, which used to be Viterra, has also started to take a more optimistic view of cereals.

There were a number of things that happened, such as changes in the marketing structures and the opening up of some of the classes of wheat for delivery, for example. Another example is the broadening of the Canadian prairie spring class for milling wheat, which was a big step.

A really, really big step that was taken was the removal of kernel visual distinguishability as a requirement for wheat variety registration. You can now bring in stuff that looks like hard red spring but has better attributes and maybe stronger straw and a higher yield, so that was a very positive thing.

Bill C-18 in itself, just that promise that finally after over 20 years we were going to bring our intellectual property protection regime in line with that of the rest of the world, created a lot of optimism. It's more optimism than anything.

I know there's a lot of work going on now around things like drought resistance. They're bringing in new variety, new germ plasm, to increase yield for the fuel industry, for the ethanol industry, so it is a very positive, bright scene out there right now, if they can get around the rail problems—but that's another story—for the cereal industry in particular in western Canada.

Mr. Randy Hoback: It's interesting, because I can remember being on this committee five or six years ago and Dr. Fowler, a plant breeder out of the University of Saskatchewan, coming here to tell us about how he had developed all these new varieties that were nicely grown in North Dakota and Montana because they couldn't get through the process here in Canada.

Has that improved now? Are we starting to see that ability to actually develop something here and actually market it here?

Ms. Patty Townsend: One of the changes that was made last February, actually, was an expansion of that new milling class that we call Canada's opportunity class. It does allow for the development of varieties that are closer to the U.S. dark northern springs, for example, or some of the harder spring wheats in Australia and around the world. That's been very positive, and we have seen a number of applications.

Some of the other things that are happening around variety registration, with the changes in voting and the reduction of the criteria that we hope will happen, are having some positive impacts and allowing a lot of breeders, public and private, to get some of their varieties into the market in Canada.

Mr. Randy Hoback: Are you guys doing anything in particular to encourage more students to go into that type of occupation and in that field? I think that one of issues that's been identified is that it's not as sexy as some other fields. What are you doing there?

Ms. Patty Townsend: We are trying very hard to do that. You're right. Plant breeding is not really a very sexy thing. Being a trait developer and working in biotechnology is for people who are inclined that way—not me. It is more attractive because it's more high tech.

Real plant breeding is difficult. We are seeing more students getting into plant breeding. There are education programs out there. Some companies are now running seed business courses. There's plant breeding 101 courses being offered and it is starting to pick up, slowly, but it is starting to pick up.

● (1630)

The Chair: I want to thank our witnesses, Patty Townsend from the Canadian Seed Trade Association, and Anne Fowlie from the Canadian Horticultural Council. Thank you very much for coming and for your great presentations.

We'll suspend for a couple of minutes while we get the next group in.

● (1630)

(Pause)

● (1630)

The Chair: Okay, our witnesses are ready.

From the Canadian Poultry Research Council, we have Mr. Bruce Roberts. He's the executive director. Welcome, Bruce.

Also on video conference from Winnipeg, Manitoba, where the sun has never quit shining and it has been warm all winter, we have Mr. Rex Newkirk, the vice-president of research and innovation at the Canadian International Grains Institute. Mr. Newkirk, welcome.

I will go to you, Mr. Newkirk, for seven minutes and your opening presentations.

● (1635)

Dr. Rex Newkirk (Vice-President, Research and Innovation, Canadian International Grains Institute): Thank you very much.

I wish it were sunny. It was sunny all winter, although maybe not warm as you mentioned.

Good afternoon and thank you very much for this opportunity to present our opinions regarding innovation in agriculture in Canada. I'm honoured to have this opportunity to meet with you today.

My name is Rex Newkirk, and I am vice-president of research and innovation at the Canadian International Grains Institute, an independent, not-for-profit institute that provides technical support to buyers of Canadian field crops from around the world. We've done this since 1972.

During my introductory statements, I would like to briefly introduce a few key points regarding innovation. I'd like to speak to the importance of innovation in agriculture and the role it has played in the success of the industry. I would also like to discuss the potential for innovation in the future and what needs to be done to meet this potential.

Innovation has been a key part of agriculture and will continue to be for the foreseeable future. Farmers have had to be very innovative to be productive and profitable, given the challenges of our environment and the distance to our key markets. Canadians have been at the forefront of things such as conservation and the implementation of direct seeding. Agriculture and Agri-Food Canada and university scientists have developed the principles and conducted the basic science required for this innovation. Once producers were introduced to the potential, they were often the ones who, with the assistance of Agriculture Canada and university scientists, developed the methods to adopt the technology. They started companies to produce the equipment required and have steadily made improvements and increased this productivity.

Life science companies have developed the chemistry required to use this technology, and the government, university and industry researchers have refined rotations to minimize disease and maximize profitability. Grain companies have been innovative in their approach to increase handling and transportation efficiencies resulting in one of the most efficient grain handling systems in the world.

Underpinning this market are the developments of new varieties of crops that combat disease and maximize productivity. The majority of grain varieties in the past have been developed by Agriculture and Agri-Food Canada, the Crop Development Centre, and other university and provincial breeding programs.

Going forward, as we heard from the previous speaker, many commercial entities are investing in new variety development, and they continue to develop new and improved varieties. These are just a couple of examples of the innovations we've seen in agriculture, and there have been many. The industry should be proud of its achievements with regard to production and grain handling.

Many would argue, however, that Canada is an expert at production, but that in the future we will need more innovations in food product applications to increase future markets and to promote processing of these commodities prior to export. We feel that innovations in production and grain handling efficiencies must continue, but much of the future prosperity is also reliant on innovation in food, feed, and industrial product applications.

The question becomes what must be done to ensure that research investments made result in innovations that benefit producers, customers, and Canadians. Recently, with the support of the Government of Canada and grain producers, CIGI has been doing a great deal of research on product applications leading to new innovations. Also, prior to joining CIGI, I developed a new product from canola and co-founded a technology company to take this product to market. This technology has now been bought by a multinational company and is being implemented as we speak.

Based on these experiences, we feel we can provide some insights into what we feel must be done to see successful innovations in the area of product application and processing.

First, an important and surprising observation is that food and feed companies do not usually drive the initial innovations. They are not risk-takers, but they will certainly capitalize on an opportunity once they understand it and see the value. The investments made by government and producer associations are best directed to the initial stages of development, in our opinion.

CIGI works closely with food companies to determine what the opportunities are and to identify potential product applications that would benefit these companies. Using public and producer funds, we collaborate with food centres and other researchers to start the product development. We demonstrate the new products to food companies and attempt to introduce the opportunities to them. If the company is sufficiently interested, it is asked to invest in refining the product to meet its needs and to refine the process. We work side by side with it, but under a confidentiality agreement, to move the product to market. We are currently in this process with several very large companies, and this process seems to be working well for us.

● (1640)

We feel the key to the success of new food product development innovations in the future encompasses these two components: initial public and producer investment, followed by commercial investment and partnerships. The key is to ensure that this transition happens at the right time, and that the right resources are in place to ensure the innovations being developed initially are commercially relevant.

One question you may be asking is what the role of government is in this innovation pathway. Certainly the investment, initial research, and product development is very important. This should be done in partnership with those with a vested interest in the success of the research. In our example this would be agricultural producers.

The research should also be driven by real needs and market opportunities. Organizations like CIGI, that have close working relationships with customers, make excellent collaborators on this research, as they bring the customers' insight to the table.

The government investment and research capacity is also very important. Without the right type of facilities and people with experience, the quality of the research will not meet the needs of the customer.

In my own example of developing a canola protein concentrate, without access to the research facilities such as Innovation Place bioprocessing in Saskatoon, as well as the food development centres, this technology would never have been proven to the point that it could be adopted by the industry, and therefore it would not have succeeded.

The investment of the governments, both federal and provincial, and the organizational capacity to develop and introduce innovations is very important in the future. I would also suggest it is very important that public investment should be sufficient to allow the development to a stage so that they can be introduced to the companies.

In the end, company investment is very important to the transition, as I discussed earlier. It is key. However, if public investment doesn't allow the product to be developed sufficiently so that these companies could then take on the next stage, the initial investment would be lost.

It is our belief that Canadian agriculture will continue to grow and be profitable, and that this growth will be based on innovation. With this approach that we've presented, we believe that we will see significant growth not only in commodity production, but also in new food and product applications as well as industrial and feed. This will result in additional ingredient processing as well.

Thank you very much for this opportunity. I welcome any questions you have regarding our proposal for the innovation pathway that we've identified.

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

Now I'll go to Mr. Roberts from the Canadian Poultry Research Council, for five minutes, please.

Dr. Bruce Roberts (Executive Director, Canadian Poultry Research Council): Mr. Chair, on behalf of the Canadian Poultry Research Council and its member organizations, I would like to thank you for the opportunity to appear before the House of Commons Standing Committee on Agriculture and Agri-Food.

The Canadian Poultry Research Council, or CPRC, was established in November 2001 to provide funding and coordination for national research activities for its members. Those members include the Canadian Hatching Egg Producers, the Canadian Poultry and Egg Processors Council, Chicken Farmers of Canada, Egg Farmers of Canada, and Turkey Farmers of Canada.

Poultry production and processing must continually improve productivity and efficiency in an ongoing search for cost control measures and innovative products. That's what keeps the price down. Canadian poultry research has achieved significant success in developing new, targeted approaches. One of the best examples of Canadian research success was the development of the omega-3 egg, a functional food with significant health benefits and a commercial opportunity for egg farmers, even though the university that developed it did not see any point to it and didn't take possession of the IP, intellectual property, which we've always found quite interesting.

Research and innovation are important to competitiveness; however, the concept of competitiveness is not always fully understood. Competitive markets grow but they also maintain their existing customer base. For many industries this means constantly offering new and improved products and services, with customer focus being on a product, and less frequently on the circumstances under which it is designed or produced. It isn't quite that way with agriculture lately.

The agriculture industry faces some relatively unique issues because of its nature by working with plants and animals. Consumers question how agricultural products are produced, as well as their attributes, more than in the past. Acceptable and often recommended past practices are now being questioned or changed.

The poultry industry has reacted to changes in consumer expectations in several ways, including a shift in our research emphasis toward poultry welfare and behaviour, alternatives to antibiotics, and the environment. The emphasis on these issues is designed to both expand the Canadian poultry sector and maintain the Canadian consumer's confidence in Canadian-produced poultry and egg products.

The federal government is an important partner in the research innovation value chain; however, Agriculture and Agri-Food Canada, AAFC, no longer has dedicated poultry researchers as they do in many other agricultural sectors. Some AAFC researchers conduct poultry-related research as part of their mandate, but those resources are few and narrow in scope.

CPRC has begun early discussions with AAFC to determine if existing government researchers working in other fields or other commodities can direct some of their research efforts to the poultry industry through the collaborative research and development program under which industry shares research costs with AAFC. This would provide the opportunity to expand our access to specialized research knowledge presently within AAFC for collaborative research projects in cooperation with universities and industry. We have followed this approach in our new poultry cluster. A strong partnership among AAFC, Canadian universities, and the poultry sector will continue to benefit the Canadian economy and society in general.

I thank you again for the opportunity to provide input to this committee in its deliberations.

● (1645)

The Chair: Thank you, Mr. Roberts, for your presentation.

We'll now go to rounds for questions.

I will go to Madame Raynault, for five minutes, please.

[*Translation*]

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

I would also like to thank our witnesses for being here.

I am an MP from Joliette, north of Montreal. We have a lot of poultry producers in my riding, especially in Saint-Félix-de-Valois. Of course, there are hatcheries there. Poultry is raised there, and there are processing plants. The poultry industry in my riding employs a lot of people.

As an aside, I sold poultry, laying hens, to be exact. People asked me why the truck was empty in the middle of the day. It's because you don't load poultry during the day. You do it at night because poultry get a little worked up during the day. In any case, when I was doing it, we loaded the trucks at night.

I have the French version of your document. It says that Agriculture and Agri-Food Canada indicated that farmers had generated farm cash receipts of close to $3.7 billion through poultry sales. That's a lot of money. That's 7% of all receipts from the sale of agricultural products.

Let's talk about innovation. A little further on in your document, it says that no researchers are really devoting their work to the poultry industry anymore. Will the fact that fewer researchers are focusing on that industry negatively affect it?

[*English*]

Dr. Bruce Roberts: Definitely. We will fall back. We already have. From the staffing adjustments in Ag Canada we've lost six positions: three researchers and three research associates. They were all dedicated strictly to poultry, quite a few of them in the area of poultry welfare and behaviour, something that is in the forefront now, which I'm sure you all have heard. It's a critical issue we are dealing with and it's relatively new, so we have a lot of work to do in this area. That loss has certainly had a significant impact, which we're doing our best to work with the universities, Ag Canada, and the provinces to mitigate.

● (1650)

[*Translation*]

Ms. Francine Raynault: There are also commercial barriers that are negatively affecting your industry, such as spent hens from the United States, and that are moving into the Canadian market. Is this disguised dumping going to hinder the capacity for innovation in your industry?

[*English*]

Dr. Bruce Roberts: That isn't an area CPRC gets involved in, although we have worked a little bit with the Chicken Farmers of Canada on some studies for them. Anything that reduces revenue puts pressure on the system essentially, but that's about as far as I can go with it. That's not an area that we have any responsibility in.

[*Translation*]

Ms. Francine Raynault: Do I still have some time left, Mr. Chair?

[*English*]

The Chair: You've got a minute and a half.

[*Translation*]

Ms. Francine Raynault: Perfect. Thank you.

I'm not talking about spent hens that come from the United States, but those that are in Canada. Once the hens are done laying or the roosters are done serving, does the industry get assistance to create new products or improve products that are already on the market? We know that this meat is not put in the garbage.

What does your industry do exactly to help all these poultry breeders when they come to the end of their active life in the industry?

[*English*]

Dr. Bruce Roberts: We call them spent hens, just older birds really. Depending on the area of the country, there may be demand for them as food processing but it requires specialized equipment. In Atlantic Canada, there is a large market from the fur industry for spent hens.

We have also supported several projects on looking at methods to increase the value of the spent hens to the industry and the processors. We don't want to just see them destroyed; we have environmental issues with that, so we have supported projects looking at producing high-quality glue from spent-hen material. That's been a very successful project we expect to move from our research efforts to industry to the processors and developers within the next couple of years. That is a major issue we've put a fair bit of effort into dealing with.

The Chair: Thank you very much.

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

Mr. Bob Zimmer (Prince George—Peace River, CPC): Thank you both for appearing before committee today. I have a couple of questions.

Rex, you said seed companies weren't necessarily risk-takers on innovation and also that research should be economically or commercially relevant. I couldn't agree with you more. Speaking of that and the relevance of that to our economy and the recent comprehensive and economic trade agreement, CETA, which we all know about, how is your organization leveraging innovation to address the potential of that huge European market?

It's a pretty broad theme, but can you speak to that?

Dr. Rex Newkirk: I think it's a great opportunity for us. One of the areas we are actively involved in is looking at food processing, looking at new uses for our ingredients. On our pulses side, we've primarily been selling most of our pulses to India. Now China has become a major buyer on the process side, to make vermicelli noodles and things. In Europe, there are greater opportunities as well, to move some of the more processed materials into Europe, and the free trade agreement should assist us with that process.

From an innovation perspective, it's really important to look at what stage it has to be at for a food company to take this on, for a processing company to come on. The point I was trying to make is that some of the early innovations where government, others, and we get involved is to introduce the idea, to get it to a stage where they can take it on, but it has to be directed towards what their needs are and then have them invest. I think Europe does offer a number of opportunities for us not only in pulses but in other ingredients as well.

● (1655)

Mr. Bob Zimmer: Thank you, Rex.

I have a similar question to pose to Bruce.

Chicken producers have come to my office to speak to supply management and different concerns that they have on that side of things. Likewise, they have also asked us to help with the development of foreign markets.

I would ask you what I just asked Rex. In the development of that and the potential of that, and I think through innovation, we can address...or possibly into the market with Canadian poultry as well....

Do you have any comments that you would make on that?

Dr. Bruce Roberts: Most of what we're involved in would be to do with genetics. We work closely with Aviagen and Hybrid Turkeys on projects, developing new genetics, and that goes worldwide and has a benefit to Canada.

Mr. Bob Zimmer: That's my question: do you see that potential with Canadian birds entering other markets around the world? It sounds like you do.

Targeting your answer to the innovation component, how can we innovate to target those markets?

Dr. Bruce Roberts: One of the things I don't think we've done enough of is to look at the genetics.

It's interesting. We've gone a long way. The genetics has been driven by the genetics companies, the companies that sell the genetic aspects, and their clients want more production, faster growth, that sort of thing. Now they're starting to run into problems with that, and we've started to look at other ways.

It's not just Canada or North America; it's worldwide. There are things that are as simple as whether there are genetic relationships between a layer in a conventional.... That goes into the non-conventional cages, the new types of housing. They're finding that they get really nasty in there. They fight. They pick on each other. They have to have different ways to handle those.

One of the things we're looking at through our clusters is whether there are genetic relationships there. If we can discover something like that, then we can work with our breeding to move this stuff worldwide. On that sort of thing, I think there's a lot that we can do.

Mr. Bob Zimmer: Have you taken on the subject of CETA as a group directly. Is it more that maybe in the future we'll deal with that? Is it something that's being targeted as the potential that it really is?

Dr. Bruce Roberts: CPRC deals with the science base, not the economics. Part of the issue is that we have five member organizations, and four of them are producers and one is a processor. They all have different positions on various things. There's a lot of regionality to it, too. Markets in Ontario and Quebec are completely different from what you might find in the Maritimes or western Canada. We leave that more to the regional groupings of the provincial organizations to look at market aspects.

The Chair: Thank you, Mr. Zimmer.

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

Hon. Mark Eyking: Thank you, gentlemen, for coming.

My first few questions will be for the poultry expert, and then I'm going to try to save a question for the grains guy.

I think that many of the chicks for our poultry industry come from the United States. Should we be doing more research in Canada so we could maybe have more of a breeding stock here, and breeds that may be more adaptable to our climate and our consumer preferences?

Dr. Bruce Roberts: Yes, I think so. I think that's one of the aspects of genetics that we've drifted away from. We used to do a lot more of that in bygone times. As we get different priorities, the money goes there.

However, it is gaining some interest. It's a matter of how we make them more adaptable for Canada and regions within Canada. A bird that does well in British Columbia may not do all that well in Newfoundland. These are some of the regional aspects that we are taking more interest in, and there is potential there.

Hon. Mark Eyking: It's very important that not only in Canada we have enough research, but in different regions as well, which brings me to the Atlantic research. We used to have quite a program in Atlantic Poultry Research Institute. I've heard that it's in jeopardy because of a lack of federal funding in that institution.

Can you expand on what's happening there?

● (1700)

Dr. Bruce Roberts: At the Atlantic poultry research centre there certainly were some staff changes. The timing was very bad, because it was at the time when Dalhousie University and Nova Scotia Agricultural College were amalgamating. There were hiring freezes. There was an empty poultry position which I think they weren't allowed to fill, which they've advertised now. The person who's really driven that centre over the last 25 years is retiring soon. Then we lost the AAFC researcher and two technicians.

It is the most modern research production facility in Canada. It's unique, and we do not want to lose that. It is in jeopardy.

Hon. Mark Eyking: I don't know how many years ago we had the major avian flu that especially hit the Fraser Valley region in British Columbia. We got through it. It was a really hard, hard thing to go through.

Are we doing more research on the flu, especially the flus that can go back and forth between humans and birds? Are we working with the World Health Organization? How does that fit with Agriculture and WHO and that whole mix of trying to make sure that these flus don't originate in the birds, or don't come to the birds? What are we doing as Canadians, I guess, or what is the Canadian government or your industry doing to try to prevent that from happening again?

Dr. Bruce Roberts: A lot of our concentration on the research front is around vaccines. I think there's well over $1 million in our cluster for addressing that. Avian influenza is the one that terrifies the industry more than anything else, because the way you have to react to it is so extreme. We're doing a lot there.

In terms of the connections to international organizations, we do have some, but a lot of those are through the universities. For example, we have one cluster project, just one project, with I think seven different research organizations, including Agriculture Canada, involved. Three of them are from outside Canada. They're cooperating with us.

We draw on that knowledge as much as possible.

Hon. Mark Eyking: My questions on grain kind of deal with GMOs. They are becoming more and more relevant in our grain industry, and it's good. We're getting better varieties.

Are there more GMO grains out there? Is it increasing, and if so, how fast is it increasing? As well, how much research are we putting into non-GMO varieties? Will that be important when we're dealing with the European agreement? There seems to be a sensitivity in the European Union about that.

Dr. Rex Newkirk: That's a good question. GMO is certainly a powerful tool. It's been very effective in some of our crops, namely, canola, soybeans and corn. I'd have to say that in those areas, it's well established. It's used broadly and that continues.

In the case of some of our other crops, cereals and pulses namely, there is no GMO. In Canada, as far as I know, there's no research in those areas. The primary reason for that is not that they're not a powerful tool, nor is there a feeling that they're not safe; it's the issue of consumer acceptance.

You're right. Going into Europe, one of the questions we ask informally as we meet with customers, and we do this quite routinely, is when the acceptance of GMOs will occur, and when that tool could become available. It will be a long time yet. For the people we meet with, they say that personally, they don't see an issue, but from a customer perspective, they just see all kinds of minefields on those. Certainly, canola faced a number of challenges going into Europe with having to have certain traits registered, and trying to get those approved. The seeds have been mainly processed elsewhere and the oil shipped into Europe.

In the case of wheat and pulses, I don't think you're going to see GMO in the near future as a tool in our tool box. However, in Australia and other parts of the world, they're certainly doing a fair bit of testing and seeing some improvements in yields and such things.

At this point, I don't expect to see any activity on the cereals and the pulses, and no research on that. All the research they're doing now is on non-GMO.

● (1705)

The Chair: Thank you very much for your time.

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

Mr. Pierre Lemieux (Glengarry—Prescott—Russell, CPC): Mr. Chair, I'm going to start by providing a counter-context to some of the things I'm hearing about woe in the research industry, because the government is shifting its emphasis back to industry.

I'll start with poultry. I'm reading here in the brief, “The poultry industry has reacted to changes in consumer expectations in several ways...”. I think the poultry industry is closer to the consumer in understanding what the consumer wants, and they're closer to their producers than the government is. I would think the science cluster would be advantageous to the poultry industry, because industry has the lead on the cluster.

For the longest time we've heard that they want the government to put in place a mechanism that brings together the different players, and to give industry the lead, because they're the experts. We do that, and we move some funding that way, and then they say we've taken funding away from government researchers, and we're crippling their industry, but they wanted the cluster format in the first place, and industry to have the lead. I'm wondering if you can comment on that.

Dr. Bruce Roberts: First of all, we really like the clusters. This has nothing to do with the clusters.

Mr. Pierre Lemieux: They're related, though.

Dr. Bruce Roberts: Yes, they are related, but the concern isn't with the cuts or the changes. It's with the way it was done.

Our cluster proposal was already in before we knew anything about it. Then we had very little time to adjust. It was the adjustment time. It's not the aspect that you don't have the right to do this. Government has every right to do this.

Mr. Pierre Lemieux: It's not just you. It's other industry stakeholders, from the groups we heard from before. There's a narrative that runs counter to what the industry was asking for in the first place, which was greater industry control over research to ensure that the research targeted the priorities of the industry and wasn't just shooting off in some unknown direction, or developing something that wasn't necessarily marketable and usable by farmers or by consumers.

I'm putting these questions to you, because you're sitting right here today. It's something I've been hearing from other witnesses, and no one has really challenged that. I do want to challenge that, because they are related. The clusters and government lead on research are related. It's not zero 100%, meaning it's not as if there are no government researchers now, but there's a shift in emphasis, as asked for by industry, and the funding has gone up. The first clusters under Growing Forward 1 came about in 2008. The funding has gone up. Under poultry, I believe you got about $2 million under Growing Forward 1. Now you are getting $4 million. It has gone up. I'm just saying it's all related. There is twice the funding in that poultry cluster.

I would also point out that the total cluster funding is—I'm going to say “only”, and I'm going to qualify it—$5.6 million. The question I'm going to put back to you is, do you feel there should be more resources, money, and researchers involved in poultry research? You have a supply-managed sector. In a sense it's a top-down, hierarchical-type of structure where you have tremendous influence over where you get your revenues. Yet, we've put $4 million into the cluster, and industry and perhaps provincial governments put in $1.6 million. Why wouldn't the poultry sector also put in $4 million or $6 million or $8 million or $10 million, whatever they think they need to advance their own goals?

Dr. Bruce Roberts: As the person who has to try to raise that money from our organizations, that's a wonderful question.

Mr. Pierre Lemieux: We have the same challenge. We have to raise the money from taxpayers.

Dr. Bruce Roberts: I've been in this job for just under three years now, and it took me quite a while to recognize the difference between the poultry industry and many other commodities, like dairy, for example. In the dairy industry, we're dealing with cows that produce milk. In the poultry industry we're dealing with multiple commodities. What's good for one commodity isn't necessarily good for the other ones, so there's a need for some compromises. Then we have our processors and input suppliers, whom we deal with as well. We get different pulls. We estimate about $2 million a year is available in industry money. This is from the producer side, not from the larger industry.

● (1710)

Mr. Pierre Lemieux: Okay.

Dr. Bruce Roberts: Consolidating and coordinating that has been one of our major goals. The only complaint we have about the changes over the last couple of years is that it was so fast we didn't have time to react, and we committed our resources.

The other thing about the industry is that the Chicken Farmers of Canada or Egg Farmers of Canada have multiple provincial organizations they have to answer to, so you have another pulling of things.

Mr. Pierre Lemieux: I'm wondering if you could sort out those priorities yourselves. In fact, I would argue that the industry should sort out their own priorities and not have governments sort it out for them.

Dr. Bruce Roberts: They're doing that in the cluster. We designed the cluster, and we like the clusters partially because of that.

The Chair: We're out of time. Thank you, Mr. Lemieux. The narrative took a while.

Mr. Pierre Lemieux: You're welcome, Chair.

The Chair: I want to go to Mr. Garrison, please, for five minutes.

Mr. Randall Garrison (Esquimalt—Juan de Fuca, NDP): Mr. Chair, I can't resist saying that, of course, if the government wants to get that point across, they could use some of the money they're using on their economic action plan to let people know that, instead of expecting the witnesses to come here and praise the program.

Mr. Pierre Lemieux: If we did that, you would criticize it.

Hon. Mark Eyking: Put it in the chickens instead of the NHL.

Mr. Randall Garrison: I want to ask a serious question about the relationship between what I would call basic science and research, which can be commercialized. I think both of you made reference to that at different points in your presentation. I think that's part of what we're actually getting at with Mr. Lemieux's question.

What I heard you saying is, and correct me if I'm wrong, there's some research that isn't possible to profit from. It's kind of the basic research and innovation. At some point, that becomes something that can be commercialized with further investment.

I'll start with Mr. Newkirk. Is that what you were saying earlier in your presentation?

Dr. Rex Newkirk: Yes, I think what I was trying to say is there are different stages for different parts of investment. Basic research is very important, and government and industry can invest in basic research.

One of the points that I have wanted to raise, and one of my experiences has been that oftentimes there has been a great deal of investment put into basic research at universities, particularly in other research institutes, but sometimes there's a misunderstanding of how far that research needs to go before industry can take it up.

Sometimes we do a very broad swath of many basic research applications, but we only take it a little way up the stairs. I think we would be better off to take those resources, work with industry and others, and I think the science clusters have done this. It's narrowing down on those things that are most commercially relevant, but taking them to a stage that then can be capitalized on by the companies and those that can do that.

I think that basic research is important. It just needs to be focused and taken to a level so that it can then go into the commercial hands more readily. There just needs to be an understanding of where the hand-off occurs.

Mr. Randall Garrison: On the same question.

Dr. Bruce Roberts: I think it's stated by the science and technology branch. Their emphasis is on the longer term, on what we might call basic or blue sky research. We need that. We have to have that. We like to take it once it gets beyond that point, although we do fund some basic research frequently in cooperation with the federal or provincial governments, but our owners are farmers and processors. They're interested in getting this to market as quickly as possible. That's where a lot of that comes from. I really like what we're hearing from the science and technology branch about their emphasizing the long-term stuff, longer term projects, because our projects run anywhere from two to four years, and it's to get it closer to that end user.

Mr. Randall Garrison: I'm going to ask a question that members of the committee have heard me ask others, given the conclusion by the Intergovernmental Panel on Climate Change that global warming is going to have a big impact on agriculture and food supplies.

My question is for both of you. I'll start with Mr. Roberts this time. Are your research groups engaged in any of that longer term research to deal with climate mitigation or adaptation?

Dr. Bruce Roberts: Yes, we have two projects within the cluster that look at climate change and emissions. Then we've also funded several others. Besides the cluster, we do an annual funding round, and we've done a couple on climate change too. It's becoming certainly more of an issue with some of the extreme weather patterns. We're getting a lot more interest from our members about that.

● (1715)

Mr. Randall Garrison: Mr. Newkirk.

Dr. Rex Newkirk: I think it's an important issue. It's one we have raised. We have worked with the federal government's agency that looks at changes in weather patterns. We have worked with the industry to say what's going to happen in the future. If the temperature keeps rising as it is, that probably means we either have to start looking at selecting our varieties now for that in the future because it takes seven or eight years for a variety to come to fruition, and so we're trying to give that impetus.

The other one is to look at what products we should be working on. We're already seeing a large amount of corn and soybean come into Manitoba. It's coming into Saskatchewan. Will that continue to expand as climate changes? We need to be aware of that as we're looking at the products we're developing and the markets we're developing. Will there be shifts in those things? Certainly there's a lot of talk about that. It's something that's being discussed and thought about. Certainly the round table discussions include that, as well as what we need to do to be prepared for this.

I'd have to say as well that sustainability has become a very important part of the marketing package for Canada, because of some of the practices we use in reducing some of the greenhouse gases that can be created through agricultural production, and the ability to capture; that's become a significant part of the sell, if you will. Customers are very interested in that. When they come and they see what Canada has to offer and what we're doing in this regard, they see that as attractive, and I think that's something for us to build upon.

The Chair: Thank you, Mr. Garrison.

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

Mr. Randy Hoback: Welcome, witnesses.

I have to declare I'm a CIGI alumnus so I'm a little bit biased on some of the work you have done at CIGI in the past for sure.

I definitely want to highlight some of the things you have done, because I think it's important the committee hear that before preparing its report. One of the great things you were doing was working with foreign purchasers of wheat and different commodities, and bringing them into Winnipeg and actually going through what the requirements for dough were, for example, or the mix of different grains to get the right texture for making different types of buns, breads, and pastas.

Can you elaborate a little bit on that? Are you still fairly involved with working with the end user and actually helping them make sure the product we're growing on the Prairies is actually blended and done in such a way that it meets their requirements when it hits the store shelf?

Dr. Rex Newkirk: Yes, absolutely. That's our everyday work.

I just came back from spending time with customers in three Asian countries having exactly those discussions. What is it that meets their needs? What are they requiring? There are wishes and needs, so it's really identifying what their needs are—and it's nice to know their wishes—and identifying what we can do to meet those needs. We have an active research program right now. We're looking at different varieties, and how they meet the customers' needs, the growing conditions. We are developing products with these customers looking at the blends they can use.

In the previous session one witness talked about these new classes of wheat that have opened up some opportunities. We're speaking to those customers about the properties of a CPS wheat, for example, and how that can be beneficial to them.

We do that routinely, and we hear a lot of comments back from customers, and we try to drive that out to the industry. Tomorrow, I'll be meeting with the Western Grain Elevator Association. We'll be reporting to them on what the customers are telling us and what it is they are looking for.

Mr. Randy Hoback: You hear about their wishes, the dreams they have, and what they want to see in a product. Again, we're trying to get it through different types of blending of different products. How do you take that information back to the plant breeders and say that what is needed is a wheat variety that has 14.5% protein, or has a specific starch or bran, or whatever that characteristic or trait would be? How does that information get plugged into the research level? Then how does it get into a process of developing what our customers are asking for?

Dr. Rex Newkirk: We're still refining that process, I have to admit. We certainly take it back to the Western Grain Elevator Association, and the Canadian Grain and Oilseed Exporters Association. After our new crop missions where we went out and met with all the customers this fall, we held a seminar where all the various different players, plant breeders and grain companies, came in. At the PGDC meetings in February we brought forward information of what we have learned from our customers in the last year to the various plant breeders.

We're now involved in a fair bit of the plant breeding testing as well, so the samples that are coming out of early generation or the PGDC are coming to us. We will advise the various plant breeders, “These are the things we like about these ones, and these ones here are going to be more challenging for you.” We try to bring that information back.

We're trying to simplify that process, because there are a lot of players, and we want to make sure we get that information out to them. As well, we would like to see more information coming back from the companies so they can provide advice to the system. We're trying to facilitate that discussion. That's actually one of the major topics for tomorrow with the industry association: what the best way is to communicate these results.

● (1720)

Mr. Randy Hoback: One of the things I've always found very interesting with CIGI is you've done a great job in promoting the products that we grow here in Canada.

Is anybody else following up with the customer after we've made that sale of wheat or canola? CIGI will come in at the back end and do that quality assurance, provide that service. I don't think anybody else in the world is doing that. Is that fair to say?

Dr. Rex Newkirk: Not exactly. The Americans have a lot of money in promotion. I'd have to say the Americans have spent an awful lot of time and money. They have a lot of staff around the world working with customers. For example, in my recent seminars in the Middle East, it's not uncommon for them to tell me they've just had the U.S. soybean council or the U.S. wheat associates or whatever come in.

Mr. Randy Hoback: You've been doing that.

Dr. Rex Newkirk: They're doing it in a different manner, I'd have to say. Sorry, I cut you off.

Mr. Randy Hoback: I was saying that they are starting to copy what we have been doing for the last 10 to 15 years.

Dr. Rex Newkirk: Oh, yes, absolutely. The U.S. grains program was built after CIGI, and they don't hide that at all. We do it probably the best with the least amount of resources. I think we're the most efficient in Canada. We've made very good use of resources. The government has invested in us, and we've used that well. The industry has invested in us, and we carry that on.

In the U.S. they do much more promotion. They spend a lot of time doing the big events and promotion. We tend to spend more time on the technical things and talking about the merits, so it's just a different approach, but don't underestimate our competition on that side.

Mr. Randy Hoback: Of course in Canada we have canola growers who have different associations that are doing that for themselves, working hand in hand with you, but maybe on a different aspect, I would think.

The Chair: Thank you, Mr. Hoback. Your time went well.

I'll move to Madame Raynault. I think you're sharing time with Mr. Garrison.

[*Translation*]

Ms. Francine Raynault: Mr. Chair, I'm going to share my time with my colleague.

Last summer, I visited agricultural enterprises in my riding. I visited one farm raising rotisserie chickens. There were thousands of chicks in a large building where the heat, humidity and water were controlled electronically. The farmers, a father-daughter business, were taking good care of their animals.

We often hear in committee meetings that the agriculture and agri-food industry is quite regulated. Do you think federal regulation helps you in your activities or does it have a negative impact? Could you give us an example of a regulation that affects you negatively or that you benefit from?

[*English*]

Dr. Bruce Roberts: Certainly with poultry the regulatory framework isn't as extensive as with some of the crops. We have regulations around the types of antibiotics we can use, but that's becoming less of an issue, because we're moving more and more toward using fewer and not using them just for preventive purposes. I think that's good.

The codes of practice led by the federal government that have been developed are very good, but sometimes they're a very hard sell to farmers. It's not so much with Ag Canada as it is with some of the regulatory organizations such as CFIA. They will come in with a decision that may require a significant investment, without stopping to think about the length of time, about the impact. That's rare. There's a lot of good communication between industry and all levels of government. I think probably the more negative impacts come more from the provincial government decisions than from federal decisions. The federal is more at the food end, where the provincial ones have more of the authority around the actual production systems. That's what impacts the farmers.

The environmental changes have been extreme. It's funny, because I did a lot of work in the environment years ago, in environmental economics, and the farmers complained constantly. Now they don't even remember complaining about it. That's life, isn't it? Things change.

● (1725)

Mr. Randall Garrison: Thank you very much.

If we're into confessions, here on our side, it's the chicken and turkey farmers. I grew up on a chicken and turkey farm, and so I'm going to continue asking Mr. Roberts some questions. I say that semi-seriously because the question I'm going to ask now reflects the riding that I live in. We get a lot of questions about animal welfare when it comes to the poultry industry, and you mentioned that you were doing research on animal welfare and behaviour. Could you say a little more about that for the committee?

Dr. Bruce Roberts: Every project we have in the cluster that has some sort of production aspect to it has an animal welfare aspect to it. The vice-chair of our board calls animal welfare the new farm management, and it really is. It's how you raise those animals in such a way that you have reduced their stress to the minimum.

I actually did a calculation on it, and the three largest projects in our cluster are directly animal welfare. Now, there are other aspects we bring in with it. We have an environmental one, and we tied in an animal welfare aspect to it as well.

There's a lot of funding dealing with animal welfare. One of the major issues that we're looking at now, which we thought had to a certain extent been dealt with, is euthanasia. That's one that became very important after some television work that was done. We're looking at a project right now reviewing euthanasia of turkeys and developing training programs. We have most of the information. It's like environmental research. We don't need to study how to spread manure anymore; we just have to teach people how to do it right. It's the same thing with some of the animal welfare things.

Another aspect that we have to do is dedicated research on housing. We don't know enough about transportation and how it affects birds. That's another one. Transportation is a major issue.

The Chair: Thank you very much.

I'm going to take the chair's privilege and ask a question.

We've had a number of comments over the last two or three meetings regarding scientists, the terms and the length of time in acquiring scientists and researchers. Even in the group prior to this, it was a number that I was surprised to hear. There's actually around 600 scientists that would need to be replaced every year across Canada.

One of the things that came up is that in terms of the education system, the comment was, “We can't find them.” If you can't find them, it means they aren't here. If they aren't here, then it would appear that we need to try, through our industry, through promotion, through government programming, as individuals and members within our communities, to attract individuals, maybe through the education system, to get into a very good profession with a long-term career. How do we do that? Have you done that through your organizations?

I'll go to you first, Mr. Newkirk.

Dr. Rex Newkirk: That's a good question. I'm trained as a scientist. I have a Ph.D., so I get to do some science, but I do a lot more business.

One of the challenges we have, and it's a good challenge, is that because the economy is doing so well in Canada and there are many jobs, when you finish your bachelor's degree, you can get a pretty good job that pays well. To attract Canadian students to graduate school is challenging. That's a sort of good news, bad news story. I like the good news story, that there are opportunities for our students, especially in agriculture. I think our biggest challenge is how we get people to go up the scale.

Another part of it which I think is missing—and this is my own opinion; I'm an adjunct professor at one university and am becoming one at another—is that we always separate science and business. For an economy that is doing well, and for people such as myself who are interested in how science affects business, I would like to see more business incorporated into our science training.

You know, I started a company. I had many years of training and no business training. I think we could introduce more business into it. In my case, I was fortunate that I was able to do my Ph.D. while I worked full time. I was able to get training, business training, and some experience, while I did my Ph.D.

It is a challenge for us. We've had to hire from outside of the country. Notwithstanding discussions about foreign temporary workers in the news right now, it was a very slow and painful process to bring in the expertise. We've had to prove over and over again that we couldn't find them in Canada. That's fair, but we have found that we've had to go outside of Canada to get the expertise we need. Our young people have many opportunities, and it's a challenge to attract them.

● (1730)

The Chair: Mr. Roberts, we have just a very short time. If you have a quick comment, I'd appreciate it.

Dr. Bruce Roberts: I think one of the things we need to recognize is that a lot of our Canadian scientists are studying outside of Canada too, and it's always been that way. I did my Ph.D. in Illinois and came back to Canada. Those are some of the things we need to keep in mind as well.

We have a lot of students doing science study at universities. The issue becomes, when they're finished, whether we can find a reason for them to stay here.

The Chair: Okay.

Mr. Newkirk and Mr. Roberts, that you very much for taking time to be a part of this study.

Committee members, thank you for being here and asking good questions.

The meeting is adjourned.

Published under the authority of the Speaker of the House of Commons

SPEAKER'S PERMISSION

Reproduction of the proceedings of the House of Commons and its Committees, in whole or in part and in any medium, is hereby permitted provided that the reproduction is accurate and is not presented as official. This permission does not extend to reproduction, distribution or use for commercial purpose of financial gain. Reproduction or use outside this permission or without authorization may be treated as copyright infringement in accordance with the *Copyright Act*. Authorization may be obtained on written application to the Office of the Speaker of the House of Commons.

Reproduction in accordance with this permission does not constitute publication under the authority of the House of Commons. The absolute privilege that applies to the proceedings of the House of Commons does not extend to these permitted reproductions. Where a reproduction includes briefs to a Committee of the House of Commons, authorization for reproduction may be required from the authors in accordance with the *Copyright Act*.

Nothing in this permission abrogates or derogates from the privileges, powers, immunities and rights of the House of Commons and its Committees. For greater certainty, this permission does not affect the prohibition against impeaching or questioning the proceedings of the House of Commons in courts or otherwise. The House of Commons retains the right and privilege to find users in contempt of Parliament if a reproduction or use is not in accordance with this permission.

Also available on the Parliament of Canada Web Site at the following address: http://www.parl.gc.ca

Publié en conformité de l'autorité du Président de la Chambre des communes

PERMISSION DU PRÉSIDENT

Il est permis de reproduire les délibérations de la Chambre et de ses comités, en tout ou en partie, sur n'importe quel support, pourvu que la reproduction soit exacte et qu'elle ne soit pas présentée comme version officielle. Il n'est toutefois pas permis de reproduire, de distribuer ou d'utiliser les délibérations à des fins commerciales visant la réalisation d'un profit financier. Toute reproduction ou utilisation non permise ou non formellement autorisée peut être considérée comme une violation du droit d'auteur aux termes de la *Loi sur le droit d'auteur*. Une autorisation formelle peut être obtenue sur présentation d'une demande écrite au Bureau du Président de la Chambre.

La reproduction conforme à la présente permission ne constitue pas une publication sous l'autorité de la Chambre. Le privilège absolu qui s'applique aux délibérations de la Chambre ne s'étend pas aux reproductions permises. Lorsqu'une reproduction comprend des mémoires présentés à un comité de la Chambre, il peut être nécessaire d'obtenir de leurs auteurs l'autorisation de les reproduire, conformément à la *Loi sur le droit d'auteur*.

La présente permission ne porte pas atteinte aux privilèges, pouvoirs, immunités et droits de la Chambre et de ses comités. Il est entendu que cette permission ne touche pas l'interdiction de contester ou de mettre en cause les délibérations de la Chambre devant les tribunaux ou autrement. La Chambre conserve le droit et le privilège de déclarer l'utilisateur coupable d'outrage au Parlement lorsque la reproduction ou l'utilisation n'est pas conforme à la présente permission.

Aussi disponible sur le site Web du Parlement du Canada à l'adresse suivante : http://www.parl.gc.ca