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Chair

Mr. Larry Miller

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● (1535)

[*English*]

The Vice-Chair (Mr. Frank Valeriote (Guelph, Lib.)): Welcome, everyone, to today's Standing Committee on Agriculture and Agri-Food. I'm going to start the meeting in the absence of the chair and other vice-chair, with the hope that they'll eventually get here, particularly with respect to the ability of all our witnesses who've come from outside the city to speak to us today.

I'd like to welcome the Canadian Cattlemen's Association, Travis Toews and Andrea Brocklebank; as well as the Manitoba Forage Council, Jim Lintott; and the Canadian Poultry Research Council, Jacob Middelkamp and Dr. Bruce Roberts.

Today's focus is on Growing Forward 2, with specific reference to science and innovation.

We should start, if we can, with the Canadian Cattlemen's Association.

You'll have ten minutes collectively, five minutes each, or one person speaking for ten.

Mr. Travis Toews (President, Canadian Cattlemen's Association): Thank you, Mr. Chairman and honourable members. We appreciate the invitation to speak with you today.

My name is Travis Toews. I'm the president of the Canadian Cattlemen's Association. My family and I ranch west of Grande Prairie in the Beaverlodge area of Alberta. With me is Andrea Brocklebank, our research manager with the CCA, and she will handle all the tough questions today.

In 2010, farm cash receipts from cattle and calves, combined with the multiplier effect from downstream economic activity, contributed $25 billion to Canada's GDP. The cattle industry has been through several years of turmoil, but we are now moving forward and see a strong recovery for the industry, based on strong demand and positive prices.

Canada is the world's fourth-largest beef exporter, and the world's second-largest grain-fed beef exporter. Growth in global beef demand is strong, and Canada is well-positioned to be a leading global beef supplier. A growing global population and rising incomes are driving large projected increases in global beef consumption over the next several decades. At the same time, contraction in the U.S. and global cattle herds has resulted in strong North American prices. The combination of improved demand for high-quality grain-fed beef and reduced global cattle supplies has seen Canadian cattle and beef prices strengthen to a point where Canadian producers have reduced herd downsizing, and some are beginning to expand.

Research and innovation are critical to ensure the long-term sustainability and growth of the Canadian beef industry. Canada must maintain and grow consumer demand for our beef, and be able to produce a competitively priced product in both domestic and export markets.

Research is important for market access. Canada's beef industry consistently advocates for science-based trade and market access regulations. Research provides the science necessary to demonstrate the integrity of our animal health and food safety systems, which are increasingly important in trade negotiations. Research is important to consumer confidence. Research that reduces the need for food safety recalls and improves consumer satisfaction with beef quality supports both domestic and international demands for Canadian beef.

Research is important for industry competitiveness. Our ability to compete with other protein sources, both domestically and in international beef markets, requires research to improve feed efficiency; improve feed, forage, and grassland productivity; and reduce animal health and welfare concerns. Many of the animal health, food safety, beef quality, efficiency, and environmental attributes that underpin the Canada Beef Advantage brand are results of research first conducted by Canada's beef scientists, and then adopted by industry. Continued progress requires long-term research investments to maintain our current standards and to ensure that our industry can respond and adapt to new issues and opportunities that arise. However, we are concerned that a considerable loss of research infrastructure, funding, and expertise may hamper further progress.

Federal beef research funding in Canada has declined significantly over the last 20 years. An 18% across-the-board cut in research funding in 1995 was followed by an additional 30% decline in beef research funding between 1995 and 2007; subsequently there have been cuts as well. These ongoing cuts have seriously impacted research programs, scientific expertise, and facilities. As a result, the viability of some very important research programs in areas such as beef quality, food safety, and forages are faced with death by a thousand cuts. Combined with attrition, continued funding cuts threaten the maintenance of core federal research facilities and are an impediment to attracting new expertise to critical research positions.

These ongoing cuts contradict the clear understanding that research and innovation play an important role in enhancing the competitiveness of Canada's cattle industry. Lagging growth in the competitiveness and efficiency of Canada's productivity over the last several decades has paralleled decreased spending on research and development.

In general, research provides a six-to-one return on investment. This is even higher when producer investments are considered. The growing recognition of the value of long-term research investments has led Canada's beef industry to increase its check-off allocations to research by 150% over the last several years.

● (1540)

However, increased industry funding cannot solve the current capacity and programming issues facing Canada's beef research community. Public funding has a major role to play in ensuring that long-term, high-risk discovery research continues in areas of importance to the public good. This knowledge is critical to creating future solutions and opportunities we aren't even aware of yet. This will require renewed and increased public funding to support research activities; scientists and technical support staff; and the physical infrastructure, facilities, and field and animal resources needed for the work to occur.

Over the long term, increased research investments that improve industry competitiveness and self-sustainability will reduce reliance on business risk management programs and other government funding injections.

Industry-government partnerships are integral to enhancing the competitiveness of the Canadian cattle industry. Under Growing Forward 2, we believe there is tremendous opportunity to extend, improve, and enhance the successful programs initiated under the current Growing Forward program and drive investments in innovation and research.

One of the most significant industry-government investments under Growing Forward was the development of a beef cattle industry science cluster. The cluster brings together Canada's largest industry and public beef-research funders to align dollars and priorities to achieve research outcomes that will meet industry needs. In addition to project funding, some funds are allocated to ensure that AAFC refills some critically needed research positions. Some funding is also directed towards improving technology transfer to ensure that promising research outcomes get adopted.

I'm convinced that the beef science cluster approach will result in a very coordinated, efficient research model. However, government research funding needs to be delivered on a five-year basis, at a minimum. Although previous programs such as APF and Growing Forward were designed as five-year programs, delays and/or gaps in program delivery resulted in a three-year funding cycle with two-year funding gaps that are not conducive to maintaining and delivering a strong research program. Many research programs require long-term consistent funding to bear meaningful results. A three-year perennial forage, environmental, or animal breeding study will generate only preliminary results. It also makes it difficult to attract new research talent to Canada, when longer-term funding portfolios are available elsewhere.

Going forward, it is important that government funding fully leverage industry contributions, recognizing that the beef industry has increased its investments in research. The success of the beef science cluster program will be contingent upon increased federal investment to drive innovation, with investment being reflective of both industry size and contribution to the economy. One of the key successes of the cluster to note is a clear focus on improving technology transfer efforts and research uptake within the industry. Investments are being made to ensure the more effective and timely transfer of research outcomes to the beef industry, with the exploration of successful global models, including Israel's and Australia's. Further investment in this area is a key priority for the industry.

In closing, we would like to provide three points that summarize what is needed to ensure that research continues to support and enhance the growth and competitiveness of Canada's beef and cattle industry.

First, to adequately address issues of a public-good nature in areas such as food safety and quality, environment, and animal health and welfare, research funding must be increased. Investments in research need to be increased more appropriately to reflect the importance of agriculture to the economy and the public good, ensuring its sustainability and competitiveness in the future.

Second, long-term, predictable research funding commitments from both government and industry are critical. Moving beyond the current three-year funding cycle will allow for more meaningful research outcomes.

Third, we will need to ensure a strong research community is there to achieve desired research outcomes and to train new researchers. Ongoing reductions and fragmentation of funding are not helping to attract or retain talented researchers.

● (1545)

Capacity is critical to ensuring that scientific expertise and experience are available to respond promptly, effectively, and strategically to issues and opportunities that arise.

Mr. Chairman, we want to thank you again for the opportunity to present today, and we look forward to your questions.

The Vice-Chair (Mr. Frank Valeriote): Mr. Toews, thank you so much.

Mr. Lintott, would you like to go next?

Mr. Jim Lintott (Chairman, Manitoba Forage Council): Thank you very much for inviting the Manitoba Forage Council to be here today.

My name is Jim Lintott and I farm just east of Manitoba. The Manitoba Forage Council sees itself as addressing and representing all the forage industry in our province.

What is the engine driving the change we must address and adapt to through the science and innovation that we employ on our farms?

Population growth, now set at seven billion people, and rising energy costs are two factors putting increasing demand on our land for food and water. This trend will not change for a very long time. We must adapt to this change and pressure through the use of good science and innovation, with a constant eye to the changing marketplace.

Food—its quality, attributes, and production protocol—is in the media every day, and that is creating both challenges and opportunities for our producers. Only 6.8% of Canada's total land mass is currently classified agricultural. Of that, 44% is in some type of forage production, of which two thirds is unimproved pasture land. There's tremendous potential there.

Rising grain prices are putting pressure on forage lands to be converted to cropland. That in turn will put more pressure on the lower-quality forage lands. As each acre of good forage land is plowed and converted to cropland, it will take more than just one acre of that lower-quality land to replace it. We must find innovative ways to improve that marginal forage acreage so we can support the livestock industry.

There are two ways to improve our forage acreage. The first is to increase the resource base. This can be done by initiating programs to over-seed and re-seed the estimated 6.6 million hectares of unimproved forage lands to increase productivity, carrying capacity, and natural fertility. The same approach can be used to upgrade the so-called improved lands.

This is a perfect example of applying existing knowledge to a new need. This will require the seeding of legumes and improved grass varieties to increase soil nitrogen, and the use of the new grazing techniques to build and improve those soils. This can also build soil carbon, improve water retention for wetland and flood control enhancement, and increase wildlife habitat, all the time building productivity and profitability into the livestock sector.

The resource base can also be increased through the adoption of dual-purpose land management, such as demonstrated in the Garland project. That program demonstrated the use of aspen parkland and cattle grazing in combination as a management tool. We need to move that new knowledge base to the system and add that production base to our grazing resource base.

Getting it done will require programs that demonstrate this new technology on demonstration farms that are backed by detailed cost analysis and input-output balance sheets that can engage the farming community to adapt the new innovations. We see this being facilitated through federal-provincial programs and coordinators who can work in the farming community. Getting it done will also require governments to adjust policies in a timely fashion to encourage change and adoption of innovative ideas.

The second pathway to improve forage lands is through the development of improved species and varieties of forages. In Canada we have experimented with turning the plant-breeding sector over to the private sector. For the past 30 years we have allowed the public plant-breeding industry to die through natural attrition. The effect of that has been twofold.

The first effect has been that in the canola industry we have an excellent example of a business model that allows and even demands variety development. Canola breeding companies can create varieties that lock in margins for the company. You can have a variety that is herbicide-tolerant, thus locking in margins at the bag of seed and the pail of herbicide; and with marketing traits such as Nexera canola you lock in margins for the processing and wholesaling of the actual crop. This ownership of the variety allows for substantial margins to the seed company, of which they can give a share to producers and processors along the way. This encourages investment in plant breeding. This encourages science and innovation.

● (1550)

The second effect of this attrition in our plant breeding has been to prove and point out where private industry will not, or cannot, invest in plant breeding. On this point I have personal knowledge. I'm a part owner of Northstar Seeds Ltd., and we have a plant-breeding company. It is situated in Argentina, and we develop alfalfa and clover varieties for the world markets. We can do this because there is sufficient market for these legumes to give us the volume of seed sales to make the venture profitable. The private industry has not, or will not, do the same for the forage grasses. The pounds of forage grasses sold in North America do not support this level of investment. If we look at the Canadian forage seed industry, we see very few new grass varieties and an ever-shrinking investment in their development. It has created a very weak link in the forage industry.

We need to have the federal and provincial governments make a commitment to pick up this responsibility and fill the gap. We see the potential for partnerships of federal and provincial governments, universities, and the private sector. This is an area where there can be tremendous sharing of science and innovation. That sharing can lead to important developments in the industry. We have infrastructure in place. We need to use that infrastructure to create a centre for plant-breeding excellence—a place that can contribute to the overall agricultural plant-breeding needs.

The forage industry has all the protein production capability it needs with legumes. What is lacking are high-energy, high-sugar grasses for hay and pasture lands that are adapted to the Canadian environment. I believe that the solution lies in the ryegrasses. We need to develop high-sugar ryegrass varieties for western Canada. Currently the high cost of feed grains has a negative effect on the feedlot industry. These increasing costs at the feedlot drive up the need for shorter-keep cattle, cattle that can finish in 60 days on feed. That need puts pressure back on the cow-calf producer. Feedlots will demand 950-pound-plus feeders, and that will require cow-calf producers to become cow and long-yearling producers. To do that, those cow-calf producers will need high-quality pastures and high-quality storage feeds.

The development of high-sugar ryegrass varieties can become the solution to this concern. Every pound that we put on the feeders on the pasture is a cheaper pound to produce. To remain competitive in the world markets, we need to drive down our production costs through increased grazing of high-quality forages—high protein and high sugar.

In addition to improving the marginal forage acreage, there is a need to create greater efficiency in the grazing stages of livestock production. In the poultry industry, chickens are constantly being scaled to determine if they are gaining properly. The producer can then modify his management, and see the direct results as the chickens either continue to grow and gain weight, or not. In the grazing livestock production cycle, we only scale the cattle once, after they are shipped and after it is too late to adjust management techniques for better utilization of the pastures. Today we have the technology to constantly scale calves and stockers as they come for water. This data can be automatically collected using RFID tags for identification, and transferred to computer programs that track each animal's growth. This then creates a very powerful tool for the management of our pastures and our winter-feeding programs. This would create feed efficiencies and allow for faster rates of gain.

Constant scaling is also a very good tool for genetic selection at the cow-calf level, benefits that would flow through to the feedlot and packing industry. This would create feed efficiencies and allow for faster rates of gain and, in my estimation, improve the pastures' overall health and productivity on a per hectare basis. This technology needs to be part of the new technologies that are demonstrated at the farm level. Once we show the effect of this intensive management practice, producers will buy into the technology.

● (1555)

If we are encouraging innovation and adaptation of new science at the farm level, we need to back that up with equal innovation at the business risk management level. Crop insurance needs to be responsive to the changes, and that translates into the government supplying funding to the provincially based insurance corporations to develop the new insurance products that will be needed to back up our new innovative practices.

I have included copies of the Manitoba strategic plan—it's a five-year plan we developed for the Province of Manitoba—and our forage and research priorities. I have copies of them here. I'm not allowed to hand them out, but you can get them from me. I apologize that we don't have translated versions; notice for this meeting was just a little too short. I have the English versions here, and the French ones should be made available shortly. Please pick up a copy from me as you leave. It will be great bedtime reading.

So we have those two documents.

The Manitoba Forage Council will pursue these goals with the industry and our provincial government. The Manitoba Forage Council will also be working closely with the Canadian Forage and Grassland Association in the development of national research priorities. We see the Manitoba Forage Council priorities dovetailing very closely with those national priorities.

We are requesting that the government develop a dialogue with the CFGA and look for ways for Growing Forward to assist us, provincially and nationally, to respond to these identified needs.

Again, thank you for this opportunity. We look forward to the discussion period.

The Vice-Chair (Mr. Frank Valeriote): Thank you, Mr. Lintott.

For the sake of helping our analyst, I would ask that each of you, including Mr. Toews, submit your written remarks, which you've obviously prepared, to the clerk for his use. That would be helpful.

Thank you.

Mr. Middelkamp and Mr. Roberts.

Mr. Jacob Middelkamp (Chair, Canadian Poultry Research Council): Thank you very much, Mr. Chairman and honourable members.

My name is Jacob Middelkamp. I'm a chicken producer from Alberta and I represent Canadian Poultry Research Council along with our executive director, Bruce Roberts.

On behalf of the Canadian Poultry Research Council and its member organizations, we 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 was established in November 2001 to provide funding and coordination for national research activities for its members, which include the Canadian Hatching Egg Producers, Canadian Poultry and Egg Processing Council, Chicken Farmers of Canada, Egg Farmers of Canada, and Turkey Farmers of Canada.

CPRC's mission is to address its members' needs through dynamic leadership in the creation and implementation of programs for poultry research in Canada, which may also include social concerns. Our organization began funding research in 2003 and members have since approved nearly $3 million in research funding through the CPRC. Those funds have helped support in excess of $11 million for Canadian poultry research.

In addition to funding, CPRC activities include acting as the project manager for the poultry research cluster program—funded by Agriculture and Agri-Food Canada under the Canadian agri-science cluster initiative section of the Growing Forward program—and communicating research results and issues to industry, researchers, government, and other stakeholders. We are also coordinating development of a national poultry research strategy that will be an important tool for future research direction. CPRC recently relocated from Guelph to Ottawa and established a full-time executive director position to support improved coordination and administration of the industry' s national research activities.

Statistics Canada's farm financial survey reported that poultry farmers controlled almost $15 billion of farm assets in 2009. Almost all of those assets are located in rural Canada and make up an important part of the rural economic base. Statistics Canada also reported that poultry farmers generated over $3 billion of farm cash receipts from the sales of poultry products in 2010, with over 7% of total cash receipts from the sale of farm products. Processing adds a significant amount of economic value, and much of this activity helps support our rural economy. The Farm Products Council of Canada estimated the socio-economic benefits of the poultry sector to the Canadian economy to be more than $11 billion.

Poultry production and processing must continually improve productivity and efficiency in an ongoing search for cost control measures and innovative products. 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 commercialized opportunity for our egg farmers.

Poultry farmers and processors are also challenged to continually seek to improve animal welfare and their relationship with the environment. These challenges continue at a time of increasing consumer awareness of, and interest in, the food we consume and how it is produced and processed.

Now I would like to pass this over to Bruce.

● (1600)

Dr. Bruce Roberts (Executive Director, Canadian Poultry Research Council): Thank you, Jacob.

Research and innovation is like any other value chain for any other activity that impacts stakeholders at various parts of the chain. Research activities can be viewed as a continuum with major categories including primary or conceptual research, applied research, innovation, and application.

Each stage of the research value chain builds on results from the previous one. A break or weakness in any part of the chain has a negative impact on the other parts and a significant reduction in the return on investment in the research activity.

Factors that will impact the efficiency and effectiveness of the poultry research value chain include accurate identification of issues facing the poultry industry at all points of the production system that is clearly communicated to all parts of the value chain; highly qualified people and modem physical infrastructure; management and coordination of activities to ensure that resources are used effectively; speedy transfer of research and innovation results to the next point on the chain; funding that is carefully managed to balance activities along the chain.

The last point is of critical importance. There is always pressure to concentrate funds at one or another point in the chain. Some believe that we can import primary and applied research from other countries, but this ignores the reality of Canada's geography, weather, and demographic changes. Alternatively, a concentration only on primary and applied research will block or slow the adoption of research discoveries and the resulting economic and social benefits. Funding has to be available to all components of the value chain to ensure a complete, efficient, and effective national research and innovation program that maximizes benefits to the industry, consumers, and society.

Research and innovation are vitally important to the poultry sector. Poultry research and innovation in Canada face challenges in relation to maintaining and enhancing the Canadian poultry research value chain. We have lost poultry research and extension positions at federal and provincial governments and universities. Educational programs at our universities struggle to maintain comprehensive poultry education programs. Many research facilities are old or have been closed.

The poultry industry recognizes the challenges of maintaining the assets necessary to support a comprehensive poultry research structure and is taking steps to ensure future Canadian poultry research capacity. These steps include the development of a national poultry research strategy; enhancement of CPRC to better coordinate national poultry research in cooperation with industry, government, and other partners; a renewed emphasis on consumer- and society-focused research and innovation; and commitment of funds to support the poultry research and innovation value chain.

The federal government is an important partner in the value chain through its internal research capacity, communications ability, and funding. We recommend that the Growing Forward 2 program commit sufficient funds to poultry research and innovation to maintain and enhance the present system's capacity. Programs must recognize the structure of the research value chain so that all parts, from primary research to application, are sufficiently funded. We also recommend the establishment of structures to support communication aimed at adoption of discoveries and innovations as quickly as possible; and the establishment of structures to cooperate with other interests such as health, education, and environment to address common issues.

We thank you for the opportunity to provide input to the House of Commons standing committee in its Growing Forward 2 deliberations.

● (1605)

The Vice-Chair (Mr. Frank Valeriote): Thank you, Mr. Roberts and Mr. Middelkamp.

I'd appreciate your submitting your written document and preparations to the clerk. That would be great.

We're going to start our questioning, and we're going to turn to Ms. Raynault for five minutes.

[*Translation*]

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

My question is for Mr. Toews. You stated that Canada has positioned itself well to respond to demand, both here and in foreign markets. What markets would you like to break into overseas, and how do you plan on doing this?

[*English*]

The Vice-Chair (Mr. Frank Valeriote): Did you hear the question?

Mr. Travis Toews: I heard the question. Was it directed to me?

The Vice-Chair (Mr. Frank Valeriote): Yes, it was, Mr. Toews, if you want to go ahead.

Mr. Travis Toews: Sure, I certainly heard the question.

What markets are we interested in? We certainly are interested in foreign markets; we believe there is a significant opportunity there. Clearly Asia will be an important region of the world for Canadian beef in the future. It's a region of the world where there is relatively high disposable income on a per capita basis and where there are beef eaters. We are slowly regaining access into Asia at this point in time. We're into Japan, and we hope to see expanded access there. There's Korean market access, and an initiative is going forward; we're hoping to see Canadian beef into Korea by the end of this year.

China is a country of interest in the intermediate and long term, as their middle-class demographic grows and starts to acquire a taste for higher-quality protein. And of course Europe is another region of the world that's of interest to us.

[*Translation*]

Ms. Francine Raynault: We have lost some infrastructure in the field of research. What should be done in order to reverse the trend?

● (1610)

[*English*]

Mr. Travis Toews: In our opinion, the first thing we need to identify is that to remain competitive and sustainable moving forward, research and innovation are going to be critical. How do we accomplish that? Obviously it's going to take an increase in funding.

In the cattle and beef industry sectors in recent time, as I noted, we have established a new model in which to coordinate research across the country among universities, federal and provincial governments, and industry. It's the beef science cluster approach. We think that model will deliver a very efficient form of research. It will allow us to ensure that industry priorities are met in terms of required research. It will also assist in avoiding the duplication that often happens with research when it's done in different jurisdictions and by different parties.

It takes two things: a coordinated approach, which I think we have, and adequate funding.

[*Translation*]

Ms. Francine Raynault: Given that I have some time left, I will now move to Mr. Lintott.

You said that you need assistance from Ottawa and the provinces. Is it just financial assistance that you need?

[*English*]

Mr. Jim Lintott: Assistance can be financial, and depending on where you're looking, sometimes it's policy, political will. We're not actually talking about dollars. We're already spending those dollars to have those people here. We need them to clearly understand what the hurdles are in the way of advancing a specific sector of the industry, and we need them to understand how current policies restrict or limit what we are expecting to happen, either at the farm gate or in the marketing areas.

We have a long list of things, if you look in our strategic plan. Simple things such as transportation policy can have a tremendous negative effect on what happens. How we view the movement of containers in this country, and how that is viewed in other countries, creates a very negative effect on moving niche market products within this country, both across the country as well as in and out of the country. It has a tremendous negative effect.

Policy is probably the area where you could have the biggest effect with the least number of dollars. There is still a great demand for dollars, and of course I'm going to hammer on it all day long, if you let me.

We need dollars for plant breeding. Plant breeding does not happen overnight, although the science of today almost makes it look like it's overnight. We've made tremendous strides in the abilities of science to move forward faster, but those are not cheap moves in science; those are expensive.

The Vice-Chair (Mr. Frank Valeriote): Thank you, Mr. Lintott.

Mr. Storseth, for five minutes.

Mr. Brian Storseth (Westlock—St. Paul, CPC): Thank you very much, Mr. Chair, and may I comment on how nice it is to have a fair chair?

Mr. Middelkamp, I want to thank you very much for your excellent presentation. I do have some questions for you.

An Hon. Member: [*Inaudible—Editor*].

Mr. Brian Storseth: Mr. Allen and I are on the Wheat Board committee together. He's been heckling me for twelve hours this week already.

Mr. Malcolm Allen (Welland, NDP): Twelve more to go.

Mr. Brian Storseth: As we talked, I noted you mentioned how important it was, particularly for poultry—as it is for everybody—that there are adequate funds. Obviously there's a request for more funds for innovation and science research, and I do agree with you that it's a very important part. But one of the things we've learned as we've undertaken this is that a lot of the times the funds that are available are sometimes difficult to get at, with the bureaucracy and the paperwork. Or they are not for a long enough term, as Mr. Toews mentioned.

Do you see this as being an issue with the poultry sector as well?

Mr. Jacob Middelkamp: It was Growing Forward 1. In the beginning not enough information was available, and the timespan to apply for it was quite short. The way it is being administered now is way better. Everybody knows practically where they have to be. There is lots of paperwork involved, and we are glad that we can now give the information through Growing Forward 2 to be more up to speed to ask for funding through Growing Forward 2.

● (1615)

Mr. Brian Storseth: Mr. Roberts, you talked about more funds. Do you have a dollar value? Is there a number you would like to see with regard to more funds? Do you know how much more you'd like to see?

Mr. Jacob Middlekamp: It's a trick question.

Dr. Bruce Roberts: We've estimated our assistance levels to be around 2.5% to 3% of the federal expenditures. We represent 7% of the farm gate. Research is extremely important to all aspects, all parts of the agricultural sector. If we were getting 7% of the budget, we would be able to do wonders. Part of the discussion was around coordination, because we as an industry have to do much better about coordinating how we spend our money. We're spending in excess of $2 million a year through CPRC, our national organizations, and their members—the provincial organizations—on research and innovation. That includes taking it right to the farm and adaptation. We're stepping forward and we're increasing that.

Mr. Brian Storseth: But you don't have an exact dollar number and what you would do with that dollar number.

Dr. Bruce Roberts: We know what we'd do with it. We have ideas about it. Our national research strategy will outline a lot more of that.

Mr. Brian Storseth: I do want to get to Mr. Toews for a question, so I'll ask you to be brief on this one.

Would you say the $2 million allocated under the poultry science cluster was a success?

Dr. Bruce Roberts: I would say it was very much so. Also, we have five projects with Agriculture Canada or CFIA people, and they're great to work with.

Mr. Brian Storseth: Excellent.

If you have other suggestions as to how we can make the process better, written submissions are welcome at the committee as well.

Mr. Toews, it behoves me to ask you at least a couple of questions, one of which is on the value of commercialization. We've talked to many people about how important is it that there be an end goal in place when we start our science and research and that we have that commercialization knowledge and we know what we're getting into. How important is that to you when it comes to the industry, especially for beef?

Mr. Travis Toews: The commercialization aspect, the technology transfer component of research, is critical in order for us to really benefit from the research that takes place. It has been an issue, I think, as identified by the beef science cluster—and Andrea can perhaps elaborate on this. That is a challenge the science cluster has identified, and I know the group is taking steps to ensure that tech transfer can take place more efficiently, because there has been a gap there in the past.

Mr. Brian Storseth: Do you have any comments, Ms. Brocklebank?

Ms. Andrea Brocklebank (Research Manager, Canadian Cattlemen's Association): Related to that, I would reinforce that have we tasked our researchers with doing that.

First of all, they're not necessarily the best, but our researchers are strapped right now trying to get done what they need to get done. The fragmentation, gaps in funding, and uncertainty have really led them to spend a lot of time procuring funding for research and not doing research. That situation limits our ability to attract capacity, but it also limits what they should actually be focusing on in terms of research. Two-year funding gaps have a big impact in terms of that. Increased funding is definitely important, but if you can create that consistency of funding you will have more certainty as to your research outcomes and you will be able to implement the associated technology transfer strategy.

Mr. Brian Storseth: How much time do I have, Mr. Chair?

The Vice-Chair (Mr. Frank Valeriote): You were up, actually, about 45 seconds ago. As probing and interesting as your questions are, Mr. Storseth, I have to move on.

It's my turn to ask questions, and if I might, with your permission, I will ask them from the chair.

We learned a couple of weeks ago that the federal panel on support for research and development had noted that Canadian business expenditures on research and development have fallen every year since 2006, both in real terms and as a percentage of GDP. The panel noted that at 1% of GDP, Canada's investment in research is much lower than it is in the OECD countries, where I think the average is about 1.6%. I'm not blaming government or anyone for that at all. It's business investment. We know that money is invested by the government through incentives or direct investment in public research and other programs. And we know that some of it is privately driven.

We're supposed to cut our budgets, actually, by 5% to 10%, right? And you've come asking for more money. I laud you for that, but it's not likely to happen. Let's be realistic. So what do we do? Do we try to provide incentives through tax policy? Do we try to drive the industry through SR&ED or something different from SR&ED? Do we offer, I don't know, things like flow-through shares that people might invest in to help commercialize? In answer to a question from Mr. Storseth, you noted a commercialization gap.

Can any of you respond to that concern I have? What are you going to do? We know that researchers are heading south already. What are we going to do?

● (1620)

Mr. Travis Toews: That's an excellent question. Certainly we're under no illusion that cash will be free-flowing in the next budget. One thing I'll say at the start is that we recognize that the next budget is likely to be trimmed, as opposed to expanded. We also recognize the importance of sound national fiscal management. That is important to our producers, because it creates the business climate and the environment that is competitive globally. So we applaud the government's efforts in terms of deficit reduction.

I think we're coming here today with a priority, knowing that under Growing Forward there was a certain total budget. We're coming today with what we believe is a real priority within Growing Forward. We know that, clearly, there's business risk management and there are a number of other initiatives under Growing Forward. We believe that research and innovation, at the juncture we're at in our industry, needs to become a greater priority than it has been in the past. Our suggestion is that budgets be considered. And knowing that there are trade-offs out there, we believe that it's important to place a higher emphasis on research and innovation.

The Vice-Chair (Mr. Frank Valeriote): Okay.

Mr. Lintott and Mr. Roberts, would both of you please comment?

Mr. Jim Lintott: I agree with what you said, Travis. The key, I think, is to have more dialogue at the farm gate at the research level to find out what is really needed now. And make the commitment to eliminate this whole issue of the gapping of funding. That is—

The Vice-Chair (Mr. Frank Valeriote): Should there be dialogue between the department and farmers? Is that the dialogue you're talking about?

Mr. Jim Lintott: It would be between the research people and the farm representatives, such as the people at this table now, who can say that these are the priorities we've identified, and if you're only going to spend *x* number of dollars, spend them here and put the funding in place so that it can have an effect. Sometimes you will find research that is looking for short-term funding—three years or less—and sometimes you need ten years.

The Vice-Chair (Mr. Frank Valeriote): Thank you.

I'd like to give Mr. Roberts just a few seconds to respond.

Dr. Bruce Roberts: Thank you.

We did submit a brief.

At this point, we're concerned more with coordination and efficiency. Part of what's happening is that with the gaps and the increased administrative situation and everybody learning these new programs and the cluster.... We like the cluster. That's a new thing.

We think that with the dollars that are there, we can be, at least in the poultry sector, a lot more efficient. That's what we're doing as an industry. We're trying to make ourselves more efficient. CPRC is a major part of that, and it's strongly supported by our members. If we can do that for the whole research thing, we can start putting more dollars into it.

The Vice-Chair (Mr. Frank Valeriote): Just briefly, the dialogue you spoke of, Mr. Lintott, between yourselves and government—is that occurring? Is there a forum in which that's occurring?

Mr. Jim Lintott: Well, this is a perfect example of what needs to happen. Then you—

The Vice-Chair (Mr. Frank Valeriote): Is it occurring, though?

Mr. Jim Lintott: Not enough; it needs to go right through to the point where we actually sit down and say that this sector is prepared to accept that this is where we're going with these dollars.

We've taken out some of the ideas we've had and we've said okay, we'll shelve those; these are the first priorities and these need to be funded properly. We need to know that this is where we're going. We all need to be on the same page, agreeing. We don't always understand why there's been such a drag in terms of dollars flowing or in agreement on what needs to be done.

● (1625)

The Vice-Chair (Mr. Frank Valeriote): Thank you.

Mr. Lemieux.

Mr. Pierre Lemieux (Glengarry—Prescott—Russell, CPC): Thanks, Chair.

Actually, I want to follow up on this. It's great that you started down that line.

I think one of the strengths of the research cluster is that the industry itself is setting its own priorities. I think this is what we've heard from witnesses, that this is definitely a strength. It brings together researchers from the research sector but also from universities and from the industry itself. They set their own priorities, and we're there to provide funding to support their undertakings. We also have researchers who work within the government, of course, but there is the strength of the cluster.

Just following up on the discussion about funding, as Travis was saying.... And I don't know what the next budget will look like, at this point, but I think it's fair to say that money will be in short supply all the way around. If there is a request for more funding for research, I think equally helpful would be a recommendation where you would see the money coming from within Growing Forward.

So if you are seeing something where you would see that transfer taking place, that would be helpful. I think the situation would be difficult where just research would go up and nothing else was affected. That would be an ideal solution, but I'm not sure it will be a realistic solution.

One of the things I'm interested in, particularly from the cluster point of view, is where administrative changes can be made to the cluster to allow you to work more efficiently and more effectively with the money you're receiving from us but also from the industry. Most clusters are getting 25% funding from the sector. With beef it was 15% because of the difficult years you've had to endure.

That's certainly information I'm interested in. It's not a dollar thing but an efficiency and effectiveness thing. I'm wondering if you might have some recommendations. Where could we make changes that would actually help you in administering this funding more effectively to better address your research needs?

I put this to all witnesses.

Mr. Jim Lintott: On that point, the Manitoba Forage Council has been instrumental in bringing together the researchers in our province, both federal and provincial. We have a process where we're trying to draw consensus on what needs to be done and what we can do most effectively in the short and long terms.

What we're missing at this point is any commitment from the people who actually control those dollars that we're relying on to be a part of that group. We have that process started. It's been ongoing for two to three years. Now we need to see someone coming to the table who actually has control on those research dollars who can be a part of that discussion process so that we know that the time and energy being spent are in fact taking us in the direction we need to go in.

Mr. Travis Toews: I'm going to defer to Andrea, our research manager, to respond to this.

Ms. Andrea Brocklebank: First of all, in terms of coordination of research outcomes, the impetus for the cluster and the national beef research strategy came out of the round table. The round table is really focused on looking forward and developing strategies around research, market access, and all of these things. That's been integral in terms of the plan. The group around that table is also integral, moving forward, in terms of research outcomes.

With respect to how we improve the use of limited dollars, the biggest thing we see—and administratively, this was a learning process for everybody—is that there is a significant divide in the funds between vote 1 and vote 10 dollars.

At this point, as a result of that divide—i.e., what goes to Agriculture Canada researchers and what goes to universities—it's an extreme management issue, because no dollars can be transferred between those two even if it makes sense. Also, it has to be managed separately and currently out of different departments under the science research branch. Basically, although consistency has been provided, from an industry perspective it does create challenges that we're trying to revise and reform and work on. In essence, you're reporting on two different areas, and that type of thing.

Where this creates the biggest challenge is that we finally have forage researchers across this country working together under the beef cluster, with other researchers. We put them together and said "Here is the outcome we want; develop the plan", and that was very positive. But when they can't meet due to restrictions under Treasury Board guidelines, that is a concern.

We need to overcome some of those administrative hurdles to help facilitate those types of things.

● (1630)

Mr. Pierre Lemieux: Did you say when they can't meet? What would be the impediment to meeting?

Ms. Andrea Brocklebank: Possible impediments might be travel budgets, or limitations, especially for Agriculture Canada researchers, particularly around the fact that if Agriculture Canada researchers come to a meeting, we can't cover the cost of their meals because we can't use vote 10 dollars to do that. It just creates those awkward little administrative things. I'm respecting Treasury Board guidelines, but I think it is a nuisance.

The other part that I think is important is that the research plans under the clusters had to be very prescriptive, so we had to write them at the beginning. Well, as you go along, you need refinement and room for flexibility. New researchers come in and outcomes tell you what you need to do as you go along, especially under a five-year research plan. Accountability is fundamentally important, but some flexibility is also very important.

Mr. Pierre Lemieux: We've heard that, actually, where in year one it's very hard to predict a situation that might present itself in year three or year four.

The Vice-Chair (Mr. Frank Valeriote): Sorry, that's the end of your time. You're way past now. I'd love to give you more time, but I can't.

Mr. Pierre Lemieux: Thank you, Chair.

The Vice-Chair (Mr. Frank Valeriote): You're welcome.

Mr. Rousseau.

[*Translation*]

Mr. Jean Rousseau (Compton—Stanstead, NDP): Thank you, Mr. Valeriote.

My question is for each one of you. I would like the representative of each of the sectors to provide an opinion.

It is often said that research in pure science, in agriculture and elsewhere, is carried out in a vacuum. We witness in the various university research chairs the development of research programs and plans that are not applicable in the field. Producers thus have difficulty accessing the results of this research work.

I would like to know if the Growing Forward program, with its agri-science clusters, has facilitated knowledge transfer. Has there been research work applicable in the field and capable of moving our agriculture forward?

We all know that productivity is lagging here, in Canada. If we want to be more competitive internationally, we must focus particularly on research that is applicable in the field, whether it relates to technologies or pure science.

For each of your sectors, should there be programs to facilitate knowledge transfer? How might we make this knowledge more applicable in the field, for producers?

[*English*]

Mr. Jim Lintott: As I said in my presentation, we're looking very closely at the need and the value of having whole-farm demonstration farms established, where there's very intensive input/output analysis done. So the farm is a privately owned farm, and it provides a huge chunk of the capital input costs that are required, but what we are funding is a measurement of those research ideas being applied to that functional farm. That is a very powerful way for the farming community to see and adopt new ideas.

If you can go down the road and see your neighbour working with new ideas and the success he's having, or the failure he's having—knowing what not to do also has value—that moves through the farming community very quickly, especially if he buys a new half-ton truck.

Mr. Jacob Middelkamp: Thank you for the excellent question.

At the CPRC, the research projects that are done for the poultry industry...the researchers, when they end a project, have to have a report ready, in layman's terms, for the producers, what they can use in the barns and in the field. That's a request for us, especially so that a producer can understand what research is done and what they can apply on their farms.

Mr. Jean Rousseau: Merci.

Mr. Travis Toews: I'm going to defer to Andrea on this one.

Ms. Andrea Brocklebank: Under the beef science cluster we did invest substantial funds looking at tech transfer. We looked at models like Australia's, Israel's, and several others. What we found is that past extension models, which are primarily provincial, were useful, but our industry has changed too, and we need to reach beef producers in some cases for things like forage, but we also need to reach suppliers and processors, depending on what the research is and where it should be directed, and drug companies, when technologies are getting to the point they can be in.... We're looking at alternative ways to do that and reach the right groups with all of the research outcomes, because we do span a broad spectrum.

The second part of that is awareness. The more awareness of the value of research, the more investment we can likely procure from check-off, which industry...that's an ultimate goal of ours. If you have awareness and understanding of the value, you create greater investment opportunity.

The last part, though, is that under the first Growing Forward program we had understood there was going to be another program—and I apologize for not knowing the correct name—that was a sister program to the science clusters and would focus on innovation transfer. It was supposed to be released shortly. The concern is that we're almost done with the first Growing Forward—I mean we're into consultations. So for this program, when it's released, I fully expect funds.... A plan will have to be submitted. It takes time to build that, and then funds will have to be expended by March 31, 2013. That's part of the issue in terms of effectiveness of funding that we need to look at, because that innovation program is very promising if it's going to coordinate with the science clusters and that opportunity. But those plans take time to develop and then implement.

● (1635)

[*Translation*]

Mr. Jean Rousseau: Do I have any time left?

[*English*]

The Vice-Chair (Mr. Frank Valeriote): No, I'd say you're out of time now. Sorry.

Mr. Payne.

Mr. LaVar Payne (Medicine Hat, CPC): Thank you for the opportunity, Mr. Chair. My questions and comments will be through you to the witnesses.

Thank you for coming.

I want to follow a little bit along the lines of my colleague Mr. Lemieux, in terms of the clusters and the questions around the priorities and those sorts of things.

Mr. Toews, one of the things I was wondering about was the check-off you talked about. I guess one of the things I'd like to know is how much that check-off is and whether all of that is going into research. Is it part of the clusters, or how does that whole piece work?

Mr. Travis Toews: That's a very good question. In the cattle industry we do collect a check-off. It's the national check-off of $1 for every head marketed, every time it's sold. On average, in an animal's lifetime, an animal will relate to $2.70 approximately in terms of total check-off collected. Of that $2.70, the majority goes to our national and international market development programming, but a portion of it goes to our beef cattle research. Approximately, at this point, 15% is going to the Beef Cattle Research Council. The council is made up of a combination of producers, researchers, and experts who establish research priorities and then work through the science cluster approach at ensuring that research is done. And as Andrea has noted, it is also now really working on the attempt to have a meaningful tech transfer.

Mr. LaVar Payne: I think you've all talked about long-term funding and research. This question is to each one of you. If you had some of this long-term funding, what would be your top two priorities, and what would you see as the outcomes from those priorities?

I'm not sure who is going to answer. Is it going to be Travis or Andrea?

Mr. Travis Toews: I will defer to Andrea.

Ms. Andrea Brocklebank: One of our top two priorities is increasing the demand for beef, with a focus on food safety and quality. Food safety capacity is of the utmost importance, because it's not only about the research; it's about having expertise when we have an issue. I will emphasize that.

Our second major priority is production efficiency to ensure that we're competitive with our international counterparts. We have to be competitive, otherwise our industry prosperity won't be there. We're focused on forage productivity, feed productivity, and animal health and welfare. All three of those are very interlinked. To invest in one at the loss of another will not help our industry.

● (1640)

Mr. Jim Lintott: I think we were fairly clear in our presentation that there are two areas we're most interested in: grazing efficiency through advanced technology; and plant breeding, specifically of the grasses and not the legumes, because we think that's taken care of already by the seed industry in Canada. For sure, there's not enough research happening on the grasses, and we've outlined that.

Mr. LaVar Payne: You talked about high sugar in rye. Was that what you were talking about in particular?

Mr. Jim Lintott: Yes. The work we've done in speaking to the industry and speaking at the farm-gate level on some of the species that marginally work in western Canada indicates very strongly that's the path to go down. There's just nobody here now taking that little bit of knowledge, pushing it through, and coming up with the products we need.

Dr. Bruce Roberts: Food safety at this point is most important. For another presentation I gathered some information, and almost half of the projects we've funded since CPRC started have some sort of food safety component. It goes to the credibility of our food system and our production system. There's not a livestock-based organization in this country that isn't vitally aware of that and working hard on it.

Somewhat associated with that is reduction in the use of medications. That goes along with food safety, but there are also major potential cost savings to farmers. Those things are not inexpensive. Poultry welfare is also a big one.

Mr. LaVar Payne: Do I have any time left?

The Vice-Chair (Mr. Frank Valeriote): Your time is up.

Mr. LaVar Payne: Can he give a short answer?

The Vice-Chair (Mr. Frank Valeriote): Sorry, go ahead.

Mr. Jacob Middelkamp: We are working hard on research into antimicrobial resistance for human health.

The Vice-Chair (Mr. Frank Valeriote): Mr. Allen.

Mr. Malcolm Allen: Thank you, Mr. Chair and everyone.

That was an interesting presentation, Mr. Lintott, in the sense that those who are farmers will think about forage all the time, but those of us who are not won't necessarily. One takes it back to the elementary principle of city slickers driving down the road seeing a farm animal actually grazing, and nobody thinking about what they're actually doing besides just sort of wandering around, nibbling when they feel like it. They don't understand that if I have a better nutrient level coming out of the ground, my cost of production, the quality and health of the animal itself, and ultimately the safety of the food might be enhanced.

It's a rather simplistic message from someone who doesn't farm, but nonetheless we quite often seem to get lost in science and innovation when we start thinking about gene splicing and recombinant RNA.

If I'm hearing you correctly, Mr. Lintott, you're saying there isn't a private sector operator out there who really sees value in doing it. In other words, there's no direct means to enhance their bottom line. It's something we need to take on as policy makers. Am I hearing that correctly?

Mr. Jim Lintott: Yes, that's exactly what's happened. In fact, we had a researcher from Barenbrug out of Holland. It's the largest grass seed breeding company in the world. They focus mostly on turf grasses, but they are by far the world's leader in forage grasses. When they came to North America about 10 or 15 years ago with both seed production and research of varieties, they didn't come to Canada; they went to the central U.S., where they saw the market potential. They have a plant breeding program that is targeting the warmer climate of the U.S. If you think of everything below the snow belt, that is where they are thinking about.

What we know from our own experience is if you look at Manitoba, eastern Manitoba is in a funny zone. We can do things that you can't do in the rest of western Canada. I can grow varieties of alfalfa and grasses that you won't grow in Brandon, which is only a two-hour drive away.

We know from the experience in our community that these types of forages have tremendous potential. What we have to do now is apply our science and innovation to overcome what mother nature hasn't given us. So we need to go to the research community, to the plant breeding community, and encourage them to come to us with their tremendous level of knowledge and to partner with us to solve that problem.

If you could take that 30% of our land base that's in undeveloped pasture land and boost it by 50% of its carrying capacity, think of what that does for the livestock industry, which is 25% of our agriculture. Get a grip on where you're spending your dollar and where it ends up at your tax base. That's a tax base; you'll get those dollars back. If you can take the marginal farmer in western Canada and turn him into a non-marginal farmer who you can tax to death, like you can a dairy farmer, then let's do that. Let's take those marginal lands and make them into a profit centre.

That's what you need to look at. It's a profit centre that you're trying to create out of land that is currently not.

● (1645)

Mr. Malcolm Allen: Thank you for that.

It seems all so simple, doesn't it—but it's not simple to do; don't get me wrong. The thought process to it is it's an elementary principle. That's how we used to actually raise animals the first time, before we got into how we decided to do it over time, thinking there was more efficiency the other way. Maybe there's more efficiency in actually making some things that are marginal more efficient.

Ms. Broklebank, you talked earlier about the gaps in funding and the fact that you can't pay somebody $10 for a lunch, so it becomes difficult to bring folks in.

I used to be a municipal councillor at one point in my life, and the better the person who wrote the proposal, the better luck you had about getting the money. And they weren't actually the people who actually ended up doing the work the proposal was around; they were simply proposal writers. It almost seems that as you get bigger you need somebody to actually do that who actually just does that and manages things for you. I don't want to build a bureaucracy for you. Don't get me wrong. It's either that or we need to give you flexibility so that you can actually get some of the things done without being waylaid doing the things we're asking you to do—not discounting accountability, because you've agreed that you must do that.

We're asking you to do other things, other than doing the things that enhance the ability of the industry you represent to actually get ahead. That's what we're asking.

I know I'm out of time, so I'll ask you to respond to that if you would.

Ms. Andrea Brocklebank: When I spoke to the research proposals, I'm talking about the researchers themselves, who have the technical expertise, because ultimately they have to develop these research proposals. We don't do that. We go to them and say this is what we need and ask them to tell us how to do that.

Hiring isn't a solution, because it's those researchers. But we're looking at being able to say if you provide the desired research outcome we'll give you five years of funding and we'll give you enough so you're not going to four other research funders who have different report formats, all of that. That's what we're looking for, because that reduces their needs, and they also are able to hire the staff. They can do all that and they don't have the limitations.

On the limitations in terms of administrative hurdles, we can handle them, and we can hire the administrative bureaucracy to do that, but industry is really lean on that side, and I'll say that we don't have that. When it comes down to it, there's a bit of a principle there where we're trying to adapt to Agriculture Canada rules sometimes—actually I will state that it is Treasury Board guidelines—and that's difficult. On these restrictions, we can make sure we hire enough accountants to do it, but at the end of the day that is not helping improve our research efficiency. That is the point.

The Vice-Chair (Mr. Frank Valeriote): Thank you.

Mr. Trost, for five minutes.

Mr. Brad Trost (Saskatoon—Humboldt, CPC): Thank you, Mr. Chair.

Just to get a little bit of clarification on what Mr. Lintott said when he was talking about the Dutch grass seed company not coming up to Canada.

If I understood you correctly, you are effectively saying that because our market is not big enough, we tend not to get the research targeted at our particular crops. If that's true, how big a research area do we need, and where do we start to go with the specializations?

You noted you're from what we refer to as the “banana belt of Manitoba”, which is going to be a bit different from the Peace district up in Alberta-B.C. Some crops will grow in that entire region, other things will be much more specialized.

How specialized do we go with our programming for targeting and nuancing particular crop varieties? Do we go all of western Canada? All of Ontario? All of Atlantic Canada? How do we break down the subspecialties in there?

● (1650)

Mr. Jim Lintott: The first part of your question is why they didn't come here. They didn't come here because I think they visualized that they could get the biggest, fastest bang for their investment dollar by focusing on that southern U.S. market.

They are testing some of their cultivars as far north as Minnesota. I believe what it takes is for Canada, whether it be other private industry or governments—provincial and federal—or a group of them, to go to them and say that they have identified this as something they want to happen in our climatic zone. You might invite them to try to develop varieties for the parkland belt. This is the one that I would target first. If you're successful with that, you might turn around and ask them to target the drier, more arid parts of the Prairies.

Mr. Brad Trost: Okay. So there are ways of prioritizing, and you'd turn it over to our agriculture scientists. And I'm sure everyone in the industry would have a way of campaigning for their particular area.

I'm also very curious about all the groups here. Have you looked at different ways of arranging the funding so that there would be—how shall we say it?—market-driven mechanisms for deciding who or what would get the funding? For example, there might be some way of prioritizing funding for projects where there is more private sector funding.

We always talk about three-P projects in infrastructure—public-private partnerships. Have you looked at models that would spread the funding out in that respect, where you would partner with business or with industry associations like yourself, with matching funds, etc.?

Whatever groups would care to respond in my two and a half minutes.

Mr. Travis Toews: I'm going to let Andrea respond. If I can take just 20 seconds, I would reinforce Mr. Lintott's point on the importance of forage research and the vast potential it would hold for Canadian agriculture.

Right now in Canada, we have very low cow numbers. In the U. S., they're going down at a much quicker pace yet. As we've evaluated the key issues that are playing into herd size, I believe in Canada we have an opportunity to really take advantage of a disproportionate share of the growth over the next 10 years in the cattle industry. Part and parcel of that is ensuring that we are as productive and competitive as possible, and forage research is critical to that piece.

I'll let Andrea answer the detailed question.

Ms. Andrea Brocklebank: We have. I mean, that's probably the next step in our strategy.

Part of our efforts right now have just been trying to get the provinces to coordinate provincial funding, government funding. To be honest, on the beef research side alone there are 30 research funders, provincially, federally, and even across the federal government. That's one of our biggest challenges. We focused on that because greater coordination of our public investments is a good first step to ensure that we get that. But then, of course, private sector investment attraction helps leverage those funds.

Dr. Bruce Roberts: One of the directions we're going—and this came out of a major research conference that the CPRC coordinated in 2010—is we're moving to outcome-based research, in the sense that we want to achieve something first and then we will go to the researchers. Historically, the researchers come to us with their idea, in a lot of cases, and we look and say, "Well, how does that relate to what we want to do?" It's not us saying, “This is the outcome we want”, and then going to them and saying, “Okay, make proposals on this.”

That's what happens in business. Business doesn't go out and ask consultants if they've got any great ideas. They go out and say, “Here's the result we want, go out and study this.” And I'm an ex-consultant, so I can say that.

That's the direction we're going.

The Vice-Chair (Mr. Frank Valeriote): Thank you, Mr. Roberts.

Mr. Trost, your time is up.

We'll go to Mr. Atamanenko.

● (1655)

Mr. Alex Atamanenko (British Columbia Southern Interior, NDP): Thanks all of you for being here.

My first question is for Mr. Lintott.

We talk about research, and we know that often a lot of it is driven by the private sector. We have seen in the past, often, research that has backfired on farmers. The last time we spoke or that you were at the committee we talked about triffid flax and the research that had happened. It cost farmers and exporters a lot of money. At that time, we were discussing my bill on market analysis.

You also mentioned that Monsanto was pushing a Roundup Ready alfalfa. The Manitoba Forage Council wanted this to stop because of the effects it would have and because of the fact that the introduction of unwanted GMOs is affecting not only the direct sale of crop and seed products but the sale of value-added products.

We don't have any bill. We didn't pass the moratorium on G alfalfa. Is there a way that groups such as yours and farmers can influence, for example, Monsanto, in this case, to channel its research from pushing Roundup Ready alfalfa to other areas, such as filling the gap in forage grasses that you were talking about?

We know that alfalfa has been approved for release in the United States. Do you know what has been happening on the ground in Manitoba, for example?

Mr. Jim Lintott: The company is always going to be driven by its potential to earn a profit for its shareholders. Monsanto has proven to be very good at that, at any expense. They generate some tremendous benefits, and they generate some tremendous harm in agriculture.

On a worldwide basis, the problem you have in agricultural research is that it's very hard for someone to own the outcome. This is why canola research, the plant breeding of canola, is so huge compared to all other sectors of plant breeding in western Canada. It is because they can own it, as I described earlier. In the beef industry, it's impossible to own it. We're cognizant of people who want to register breeds of cattle, just as you would register a variety of seed, and we can't do that in Canada, because they believe they have a perceived value. You can do that in the United States.

If you don't provide a mechanism whereby a corporation can invest a dollar and see a way of protecting that dollar, it's not going to work.

The main reason the canola industry is in fact spending 80% of the research dollars, which I think is over $80 million, on variety research and development is because it's for hybrids. If it's a hybrid, you can own it. If I grow that variety on my farm, the seed I harvest isn't going to grow a crop next year. It will grow a crop, yes, but it will only produce 50% of its potential, because half of the seeds are going to produce plants that are sterile. They will grow a plant, but the plant will not produce seed. There's a built-in scientific, biological mechanism that allows a canola breeding company to be successful. You can't do that with a pound of beef and you can't do that with a bushel of wheat. The canola and the corn industries are very unique, because they're hybrids.

Look at the soybean industry. The soybean industry has had a wonderful time—Monsanto, in particular—in South America, where it's almost all Roundup Ready soybeans. But nobody's paying the TUAs. They tried to force the government of Brazil to tax the TUA as the soybeans were being exported from the country. That failed. That's a perfect example of where a company invested a lot of money and was very successful in producing a product that was taken up by agriculture almost 100%. It's almost all Roundup Ready soybeans. But they can't get the TUA dollars out of it, so there's no incentive for that company to go there again and revisit that whole thing.

You can only do that where there's a mechanism that prevents someone from stealing your product. That's why we have patent law. If you are making a Dyson vacuum cleaner, you can patent your Dyson vacuum cleaner until your patent runs out. Of course, that's what's happened with glyphosate. Glyphosate now has lost its patent. You can buy glyphosate for $3 a litre. It used to be $40 a litre.

That's the reality of the business world. You have to understand what allows a company to take huge volumes of dollars and drive them into something they're not sure is going to happen.

● (1700)

Mr. Alex Atamanenko: So what's happening—

The Vice-Chair (Mr. Frank Valeriote): Sorry, Alex. Your time is up.

Mr. Lobb, go ahead for five minutes.

Mr. Ben Lobb (Huron—Bruce, CPC): My first question is for Mr. Toews and Ms. Brocklebank.

From what I heard today so far—and correct me if I'm wrong—overall the programs that were within the first phase of Growing Forward, or the science and innovation side, were good. One area for improvement might be the timeframe, which could be a little more flexible. As well, the application and the reporting process could be streamlined.

Is that fair to say? Is there another sentence or a paragraph you'd like to add?

Mr. Travis Toews: First, I would agree, from the standpoint of moving to the science cluster approach. I think that was very positive. We talk about using resources more efficiently and ensuring that research is coordinated. That was a very good step in that direction.

I think, as Andrea has noted, there were some growing pains in such things as the way the programming is administered and the lack of flexibility in how funding is allocated for research done at AAFC and universities versus for research the Beef Cattle Research Council might be able to direct and steer.

So there needs to be continued work to streamline that process. There needs to be more longer-term predictable funding. And I would suggest that beef cattle and forage research is severely underfunded in this country when we look at the economic contribution the industry makes. Our national check-off agency conducted a third-party study, and the conclusion was that basically check-off funding from the cattle industry that was earmarked for research was providing a 46 to one return on investment, which really points to the fact that investment in that area is underfunded right now in Canada.

I'll ask Andrea to add a comment.

Ms. Andrea Brocklebank: If I could make a request, it would be for a ten-year program—but we'll go with five—and it would be launched immediately on April 1, 2013, with applications being accepted at that point such that we could initiate the process immediately and allow funding to continue to flow to the programs we're doing.

We don't need to reinvent the wheel in terms of the administrative processes, and we sometimes see that. The program, the elements, and the outline of it are good. Let's just continue it and enhance it. That's our goal. So we need to allow for flexibility based on what we've learned. We need, obviously, increased funding. And looking at the whole suite of Growing Forward programs, allowing for that continuity is the big thing.

Mr. Ben Lobb: Mr. Toews, regarding your comment that cattle and forage research is underfunded and that there's not enough investment in that research, where would you see funding going? What different projects would you see that going to? Is it a matter of applying more often to the programs that are out there, or is there something else that needs to be put in place to fill that requirement? Obviously, as Mr. Lintott mentioned, there are some lands that have traditionally been used for pasture or for hay that are now being burnt off and used for crops. So there is an argument to be made for enhancing the capacity within a pasture field. What would you see that funding going towards to get the desired results for the industry?

Mr. Travis Toews: I think your question initially or partially was about where we see the funding coming from. Certainly in the industry, we've seen our provincial members place a higher emphasis on research, particularly since the results of the study I referred to were released. That showed a very high return on investment for research dollars. So as an industry, we're stepping up, and I expect that will continue. Clearly, there is a role for government funding in terms of the "public good" aspect of some of this research. I think, as has been noted, there is opportunity as well to tag team with the private sector as much as possible, to work with the private sector to help drive the pieces we need.

Clearly, forage research, as Mr. Lintott mentioned, is key, as I look down the road to the opportunity for the Canadian cattle and beef industry in the next 10 years. There are also other priorities, as Andrea noted earlier, in terms of food safety, carcass cutout valuations, and animal health and welfare issues.

● (1705)

The Vice-Chair (Mr. Frank Valeriote): Your time is up, Mr. Lobb. Thank you.

Before we go to Mr. Zimmer, I'll let the committee know that we've gone through the first and second rounds. I suppose we could start at the top again, but give that some thought, so at the conclusion of Mr. Zimmer's questions we can decide where we go from there.

Mr. Zimmer, five minutes.

Mr. Bob Zimmer (Prince George—Peace River, CPC): Thank you. I would like to make a note that it's nice to have Travis here. He's my Peace River neighbour. I'm from the B.C. Peace, and he's across the way, on the Alberta Peace side.

We've heard a lot of the good stories about Canadian beef being consumed locally, domestically. Costco and McDonald's are huge purchasers of Canadian beef. These are great stories.

We've also heard your comments about science and innovation being a top priority. We've gone ahead, and you're telling us what you want to see, but for the sake of the public, and I guess some newer members, what have been some really good science and innovation examples in the beef industry?

I'll ask Jacob as well. What are some really good stories that have come out of that science and innovation.

Mr. Travis Toews: I'm going to refer to Andrea. She knows them in a detailed way. Certainly there are a number of stories. There's animal health production products and practices, and transportation is a big one.

Ms. Andrea Brocklebank: We could be here for the rest of the evening.

Mr. Bob Zimmer: Give us a good two minutes.

Ms. Andrea Brocklebank: I could list the most recent of the cluster, first of all, on animal transfer. The largest single request to the Minister of Agriculture, in terms of letters, is people seeing animals on trucks. That's sometimes the only time they see them. We had no benchmarks in industry to say what we were doing and if it was good or bad, so we went out to look at all trucks and we reported.

What we found in eastern/western Canada is that 99.9% of the time, those animals coming off the trucks were healthy, safe, and good. That's very important research, to inform our consumer and keep that level of trust, and also in terms of how we develop regulation, to ensure it doesn't cause our industry to go out of competition by overburden. So that's an example.

With regard to feed efficiency, we've increased carcass rates, from...I think it's 600 pounds to 800 pounds over the last 20 years. That's beneficial in terms of cost of production. We need to feed those animals less. It's also beneficial in terms of our environmental footprint and things like water use. We've been able to do that, but that's all based on research relative to forages, feed, feeding techniques, all of that type of stuff.

The last one I would say is antimicrobial resistance. We had no measures on whether it was an issue for our beef industry. We invested in research and we were able to demonstrate at the Standing Committee on Health that the beef industry does not have a problem with that at this point. We've done feed lot tests consistently and we have no problem.

Those are very important in terms of providing that level of trust, but also ensuring that we're regulating based on science.

Mr. Bob Zimmer: Thank you.

Jacob, please.

Mr. Jacob Middelkamp: Thank you very much.

We have quite a few, and I could go on for an hour too, but you probably you don't want it.

CPRC, as an industry, has a welfare cluster set up at the University of Guelph that's going ahead. We have done studies on transportation for chicken, especially broilers in the winter time. There's the special omega 3 that I mentioned in my presentation already, and production practices, where we do what's going on in the barns: air quality, animal welfare, food safety. There are lots of things going on.

Mr. Bob Zimmer: Jacob, to be more specific, food safety is a big area. Do you have a specific instance of science and innovation, again, for the public's sake? There's a lot of broad terminology that we're using here, but do you have some good concrete examples of that?

Mr. Jacob Middelkamp: With regard to food safety, there's lots of research going on, and more money was put in during 2010 on reducing antimicrobial resistance. That's for human health. That has been going on for a couple of years already. We are trying to reduce our medications that are a risk for human health, and there's lots of research going on for that at this moment.

● (1710)

Mr. Bob Zimmer: Jim, I'll ask you to—

Mr. Jim Lintott: I just want to commend the government on recently stepping up to the plate and putting a few dollars where they're really needed. I don't have the correct term for the gate that's at Falcon Lake on Highway 1....

A voice: West Hawk Lake.

Mr. Jim Lintott: Sorry, it's the West Hawk Lake gate.

When BSE hit Canada, it took Canada as a whole. The world took us as a whole country that had BSE. We had just a few animals in a very localized situation, but the whole country got painted. If you were a farmer in Nova Scotia, you had the same problem I had or the guy in Calgary had.

What was needed and what has in fact happened is that there's a gate now at West Hawk Lake whereby we can divide the country into two sectors, east and west of that location. There are only two ways to get past it, CP Rail/CN Rail and the Trans-Canada Highway. We can monitor the movement of all livestock product, east and west, at that point.

The government has stepped up to the plate and provided us with a station at West Hawk Lake that will now allow us to divide this country into two separate entities. That has tremendous value for all livestock sectors, whether it's poultry, sheep, beef, or you name it. We all now have that huge benefit.

So half of us will be safe in the future. That is not a big expense, but it has a huge impact. That's a perfect example of the right thing being finally done.

Mr. Bob Zimmer: Do I have some more time?

The Vice-Chair (Mr. Frank Valeriote): No, there is no more time. You're actually at six minutes. I've given you some extra time, because we have a lot of time left, it seems.

There seems to be consent that we won't start the rounds again. But before we adjourn, I would invite anyone who might have a question....

Mr. Zimmer, you may have another question, then. Go ahead.

Mr. Bob Zimmer: I'll go back again to Travis specifically. You talked about the potential of Korea coming on stream within the year. I wanted to relate this back to science and innovation, too, in terms of the significance or the importance of having a sound science and innovation policy to the Koreans and other foreign markets. Can you explain that to us?

Mr. Travis Toews: Yes, I would be glad to.

Clearly there's a very close connection between research, science innovation, and our market access opportunities. In the case of Korea, there are two things at play. We are a "controlled risk" country in terms of BSE status at the OIE. That controlled risk status, as opposed to "undetermined", has been very influential in the market access gains we've made across the world, including our work in Korea today.

Canadian officials worked very hard at the OIE in terms of bringing sound science to establish the new ratings around controlled risk, negligible risk, and undetermined risk. Canada was instrumental in achieving the desired results at the OIE, which allowed us then to be classified within that category and has allowed us to trade legally under WTO SPS rules.

In terms of Korea, the second piece is that of course.... As you know, there was a WTO case taken by the Government of Canada against Korea—and we're appreciative of that, by the way. The panel heard all the arguments, both written and oral. About three or four days before the report was to be made public to the parties, Korea agreed to move forward with its rule-making process. Part and parcel of the case, from Canada's perspective, involved a whole lot of scientific work, some of it pulled out of recent research. That was critical in order to put our case together.

We believed we were going to be very successful in that case. The Koreans believed we were going to be very successful in that case.

The Vice-Chair (Mr. Frank Valeriote): I have a question, and then we'll go to Ms. Raynault.

When I think of commercialization, I think of great ideas and then this big gap between these wonderful ideas and the fact that we can't get them out into the market. Of course, people typically go to IT and other technologies and they don't realize there's a lot of innovation in the agricultural industry.

I'm curious if that same gap—they call it the "valley of death"—is as prominent in the agricultural industry, this lack of capital, lack of venture capital, and all of that kind of thing. Is it as prominent in the agricultural industry as it is in other industries?

● (1715)

Mr. Travis Toews: I can't answer that in an educated manner. I do know that it is a big challenge.

In terms of research, the research that's done that shows promise... the step there to full-on commercialization is a big leap.

Maybe Andrea can talk about specific examples, but as you know, that's been a hurdle.

Ms. Andrea Brocklebank: When it comes to producer extension, I'll call it, and changing how you produce forages, or adding fertilizer—those types of things—it's a significant risk to producers if they don't understand it. One of the things where we see the gap and we're working on it is in providing the economics behind it. Does this make sense to you as a producer, and why should you consider this? These things are complex, and we need to help facilitate those decisions beyond what the research outcome is.

The second part of that is that when it comes to commercialization, we need to have a regulatory environment that also encourages it. Canada is a small country, so in terms of getting large corporations to invest, whether it's forages or others, we have to be probably even more facilitative to some extent to ensure that this comes. We've seen that on things like drug approvals, where regulatory approvals previously—and they're improving—lagged substantially compared to the products in the U.S., which were approved years before they were in Canada. That creates a cost advantage for U.S. producers, first of all. It's very discouraging in terms of investment, and we see that with the Seeds Act, which I think has been undergoing a 10-year review.

So commercialization is important, but one of the gaps we have, which as a country we have to be really nimble on...we need to have a safe food system, but we need to also be regulatory competitive, and then focused on risk management.

The Vice-Chair (Mr. Frank Valeriote): Mr. Roberts.

Dr. Bruce Roberts: I think there are challenges in certain areas of the production organization. For example, if you have something that's attractive to a large processor, it's going to get done. But if you have something that's more of a niche product, it's much more difficult to find those funds to take it to market. A lot of the issues around functional foods...that's not a big market yet. It has potential, but not yet, so how do we make it a big market? From what we've seen, that's one of the biggest challenges. If it's something they can jump on and sell to everybody right away, it's going to get done. If it's something where there's a lead time to get to that critical mass of profitability, then there's a real gap there.

The Vice-Chair (Mr. Frank Valeriote): Okay.

Ms. Raynault.

[*Translation*]

Ms. Francine Raynault: Thank you.

My question is for Mr. Lintott.

Must we be concerned that climate change will have an impact on the amount of arable land available for forage production? You must certainly have done research on this.

[*English*]

Mr. Jim Lintott: The effect of climate change is mostly spoken of in terms of temperature, but when it comes to the forage industry, the effect of climate change will have effects on traditional rainfall patterns. How we deal with those changes is really interesting.

The Palliser Triangle of western Canada was considered to be of no agronomic value when it was first surveyed. We've proven that to be sometimes true, but not always true. A lot of that has been through innovative farming practices. There are a lot of good reasons to believe that we have the science and the brain power needed to adapt technologies from environments further south of us to our range land and forage lands, to keep them productive and maybe even enhance their productivity if there's an economic return on it.

One of the most important things I want to say today is that we have a marketplace in agriculture right now where almost everything we produce on the farm is going to turn a dollar—a profitable dollar—for that farmer. Every commodity now is at or near record high dollar values. Yes, input costs have gone up, but this is the time to bring forward innovative thinking and new ideas, because the farm now has potential to invest some of its new-found profits back into moving those ideas onto the farm and seeing those results. So this is a very important time not to break stride. We must move forward rapidly. This might only be a 10- or 15-year cycle, but we know that cycle is going to stay there for a long time. It is driven by high energy costs and a very strong population growth that now has money for food. We need to move now. We cannot break stride.

● (1720)

The Vice-Chair (Mr. Frank Valeriote): Are there any other questions?

Mr. Rousseau.

Mr. Jean Rousseau: I have one comment on that.

[*Translation*]

Mr. Lintott, you have already nearly answered my question, but I would like to hear what the representatives of the two other organizations have to say in this regard.

What is the danger if we simply maintain the status quo with regard to financial investment in science and innovation? What is the greatest danger threatening us internationally, with regard to productivity and commercialization? What is the main danger if no new monies are invested in science and innovation?

[*English*]

Ms. Andrea Brocklebank: First of all, research and innovation also derive capacity and expertise from it. On the issues Travis spoke to around BSE, the expertise at the table was as critical as anything to explain and work with the WTO. So there is that side. If we don't attract expertise into those fields, we won't have the expertise when we need it. That is one of the outcomes of the current dynamic.

We're not attracting those people into these areas. When you have an issue you need it answered now, not five years from now when you have the research. We also have to be proactive in our research, and we've been lagging in that substantially. It's fine to allocate funding to forage, but if you don't have forage breeders to do the work, which is the case right now, it's pretty hard to get that.

Those are the types of dynamics we're dealing with now. We need that reinvigorated and longer-term commitment to attract the capacity and get the outcomes we're going to need 10 years from now—not three years ago.

The Vice-Chair (Mr. Frank Valeriote): Mr. Roberts.

Dr. Bruce Roberts: I had a conversation with a very knowledgeable and experienced researcher a while back. I posed that question to him: what happens if we stop doing research in Canada in the poultry industry?

He said we're probably okay for eight or 10 years. We can steal from other places, innovate, do some fancy stuff, but after that we'll hit the wall, especially with the changes that are going on all the time. We have to do our own research, because there are unique characteristics to our country that will catch up to us.

As Mr. Lintott said, this is the time; we need to be moving.

The Vice-Chair (Mr. Frank Valeriote): I imagine that climate adaptation is going to be major.

I'm assuming there are no more questions.

On behalf of all our committee members, I want to thank all the witnesses for coming and taking time out of your schedules. Your remarks and answers are going to contribute significantly to the discussion around the table when we're coming up with recommendations in a report we'll be making to the minister on the science and innovation section of Growing Forward 2.

Thank you so much.

The meeting is adjourned.

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