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CANADA

GROWING FORWARD 2

**(INCLUDES A SUMMARY OF THE STUDY OF THE
BIOTECHNOLOGY INDUSTRY)**

**Report of the Standing Committee on
Agriculture and Agri-Food**

**Larry Miller, M.P.
Chair**

MAY 2012

41st PARLIAMENT, FIRST SESSION



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has the honour to present its

THIRD REPORT

Pursuant to its mandate under Standing Order 108(2), the Committee has studied the Growing Forward 2 policy framework and has agreed to report the following:

TABLE OF CONTENTS

<i>GROWING FORWARD 2</i> (INCLUDES A SUMMARY OF THE STUDY OF THE BIOTECHNOLOGY INDUSTRY)	1
INTRODUCTION	1
PRIORITIES OF <i>GROWING FORWARD 2</i>	1
SCIENCE AND INNOVATION	5
A. Effective research in Canada	5
1. Foster partnerships	5
2. Improve commercialization and transfer	6
3. Support research capacity	8
B. <i>Growing Forward</i> programs	9
1. Canadian Agri-Science Clusters	9
2. Other programs	10
3. Program administration	11
MARKETING AND TRADE	12
A. Export markets	12
1. Agri-food trade policy	12
2. <i>Growing Forward</i> initiatives	14
B. Domestic market	18
1. Market status	18
2. Initiatives	18
CONSUMER DEMANDS AND PRIORITIES OF SOCIETY	19
A. Health	19
B. Food prices	21
C. Origin of foods and production methods	22
1. Origin of foods	22
2. Food production methods	23
3. Meeting demands	24
COMPETITIVE ENTERPRISES	25
A. Harmonization of regulations	25
B. Skills and business strategies	27

C. Rail transportation	29
BUSINESS RISK MANAGEMENT	31
A. Supply management	32
B. The programs	32
1. AgriStability	35
2. AgriInvest	36
3. AgriInsurance	37
4. AgriRecovery	38
5. Other programs: Price insurance programs	38
C. The Advance Payments Program	39
CONCLUSION	40
LIST OF RECOMMENDATIONS	41
APPENDIX A: COMMITTEE HEARINGS ON THE BIOTECHNOLOGY INDUSTRY DURING THE 40TH PARLIAMENT, THIRD SESSION	45
THEMES ADDRESSED DURING THE HEARINGS	45
SUMMARY OF ISSUES — BIOTECHNOLOGY	46
A. Definition and Evolution	46
B. Examples of Technologies and Products	47
C. Role and Importance of Biotechnologies in Farm Production	47
SUMMARY OF ISSUES — ADOPTION, PERCEPTION AND CONSEQUENCES	48
A. Adoption	48
B. Environmental and Health Benefits and Risks	48
C. Agronomic and Economic Benefits and Risks	49
D. Regulation	50
E. Coexistence	52
F. The Need for Dialogue	53
SUMMARY OF ISSUES — RESEARCH AND DEVELOPMENT	54
A. Funding	54
B. Research and Regulations	55
APPENDIX B: LIST OF WITNESSES 41-1 (<i>Growing Forward 2</i>)	57
APPENDIX C: LIST OF BRIEFS 41-1 (<i>Growing Forward 2</i>)	65
APPENDIX D: LIST OF WITNESSES 40-3 (Biotechnology Industry)	67
APPENDIX E: LIST OF BRIEFS 40-3 (Biotechnology Industry)	71

REQUEST FOR GOVERNMENT RESPONSE	73
DISSENTING OPINION: NEW DEMOCRATIC PARTY OF CANADA	75
DISSENTING OPINION: LIBERAL PARTY OF CANADA.....	85

GROWING FORWARD 2 **(INCLUDES A SUMMARY OF THE STUDY OF THE BIOTECHNOLOGY INDUSTRY)**

INTRODUCTION

In July 2008, the federal, provincial and territorial (FPT) governments announced the signing of a five-year agreement on agriculture called *Growing Forward*, a strategic framework encompassing the policies and programs put in place to support the Canadian agriculture and agri-food sector. *Growing Forward* replaced Canada's original agriculture policy, the Agricultural Policy Framework (APF).

Growing Forward concludes on March 31, 2013 and its successor, *Growing Forward 2*, will take effect the following day. Work on the renewal of *Growing Forward* has already started. In July 2011, the FPT ministers signed the Saint Andrews Statement at their annual meeting. The statement provides instructions to officials on the development of *Growing Forward 2* and lays out the essential elements that ministers will look for in the next agricultural policy framework.

It was only natural, therefore, that the Standing Committee on Agriculture and Agri-Food (hereafter, the Committee) would take an interest in the renewal of *Growing Forward* and encourage discussion on the possible content of Canada's new agricultural policy. The Committee held 24 public hearings between October 2011 and February 2012. It also consulted industry representatives, universities and interest groups, as well as staff at Agriculture and Agri-Food Canada (AAFC).

The Committee divided the study into themes based on the policy directions set out in *Growing Forward* namely science and innovation; business risk management; trade and market development; development of competitive enterprises; and a sector that meets consumers' demands. The first part of the report discusses the priorities of the strategic framework. The subsequent parts cover the themes of the study and the various issues raised by the witnesses.

PRIORITIES OF *GROWING FORWARD 2*

Growing Forward has three main strategic outcomes: a competitive and innovative sector; a sector that contributes to society's priorities; and, a sector that is proactive in managing risks. In order to achieve these outcomes, the federal government delivers a series of programs through *Growing Forward* that can be divided into two groups: programs related to business risk management (BRM), which protect farm income from different types of loss, and non-BRM programs (thereafter referred to as strategic initiatives). The cost of most of these programs is shared 60/40 by the federal and provincial/territorial governments. Some strategic initiatives are covered entirely by the federal government.

Table 1 presents information on federal spending based on the strategic outcomes of *Growing Forward* for fiscal years 2009-2010 to 2012-2013. During that period, the government will contribute more than \$1.3 billion to strategic initiatives and more than \$5 billion to BRM programs.

Table 1: Financial information on *Growing Forward* spending, fiscal years 2009-2010 to 2012-2013, transfers and administrative costs (millions of dollars)

Policy Directions		Shared-cost Initiatives (federal share)	Federal Initiatives
Competitive and innovative sector	Accelerate the pace of innovation and facilitate the adoption of new technologies (science and innovation)	103.9	142.3
	Enable competitive enterprises and sectors (competitive enterprises)	148.7	112.4
	Transform Canada's strengths into domestic and global success (marketing and trade)	14.1	148.8
Sector that contributes to society's priorities (consumer demands)	Enhance the safety and security of Canada's food system	71.1	-
	Promote environmentally responsible agriculture	221.8	154
Sector that is proactive in managing risks	Minimize the occurrence and extent of risk incidents (Strategic Initiatives)	119.3	37.8
Other programs (cooperatives, etc.)		-	101.7
Total, Strategic Initiatives		678.9	697.0
Total, BRM programs		5,271.5	3

Source: Agriculture and Agri-Food Canada

Notes: The data for 2009-2010 and 2010-2011 are based on actual expenditures (public accounts), for 2011-2012 on forecasts, and for 2012-2013 on the Main Estimates.

The provincial, territorial and federal ministers¹ signed the Saint Andrews Statement at their annual meeting in July 2011. The statement is a roadmap for the development of *Growing Forward 2*. It identifies two policy objectives — competitiveness in domestic and international markets; and adaptability and sustainability for the sector. More specific goals, such as “being cost competitive;” “meeting consumer requirements for attributes;” “taking advantage of new market opportunities;” and “gaining and maintaining market access” are also identified.

Witnesses acknowledged that in the current economic and fiscal climate, there should be no expectation that *Growing Forward 2* will have a significantly bigger budget, subject to statutory obligations under the BRM programs. Some, however, believe that now is the time for a discussion on the way funds are distributed among the various initiatives, more specifically between BRM and strategic initiatives. For many, the framework’s budget, the bulk of which currently goes to income support through BRM programs, should also focus on supporting the sector competitiveness through innovation and market access. What is important is that agriculture should be sustained by market revenue, not government aid.

I think we need to ask ourselves if we want to put all of our money, or most of our money, into BRM programs. I think we should shift some of it into investing more in innovation, into improving productivity at all levels, and into research and development. [...] We need to invest in new market development and also in food industrial processing.²

Growing Forward 2 has to be a business strategy that focuses on the issues that keep our industry competitive in the international marketplace.³

In discussion surrounding the priorities of *Growing Forward 2*, the issue of a national food strategy was raised several times. A number of initiatives to develop a food strategy are currently under way. Witnesses mentioned three being carried out by the Canadian Agri-Food Policy Institute, the Canadian Federation of Agriculture and the Conference Board of Canada. According to the witnesses involved in these initiatives, common themes include the ability of Canadian agriculture to compete internationally, the link between food and health, and the concept of sustainability. However, some witnesses question the undue emphasis on Canadian agriculture exports and would like to see a national food strategy that focuses on the development of local agri-food systems, that is, production and processing based on proximity to consumers. This approach is illustrated by the People’s Food Policy developed by Food Secure Canada.⁴

1 With the exception of Ontario.

2 Professor David Sparling, Richard Ivey School of Business, University of Western Ontario, *Evidence*, Meeting No. 15, 1st Session, 41st Parliament, Ottawa, November 29, 2011, 1555.

3 Mr. Gordon Bacon, Chief Executive Officer, Pulse Canada, *Evidence*, Meeting No. 23, 1st Session, 41st Parliament, Ottawa, February 8, 2012, 1605.

4 Ms. Anna Paskal, Senior Policy Advisor, Food Secure Canada, *Evidence*, Meeting No. 27, 1st Session, 41st Parliament, Ottawa, February 29, 2012, 1550.

Canada can be a global leader in seizing this moment of change and meeting the needs of consumers while also building a stronger society, greater health for the population, and a stronger economy. This approach would be based on the number one priority that came out of the people's food policy, a process that involved thousands of Canadians from coast to coast to coast. Its number one priority is this: Canadians want a sustainable local food system approach.

Others believe that Canada needs to take advantage of the links that exist between agriculture and other sectors of the economy so that the agriculture and agri-food sector can create more opportunities.

I'm going to suggest not only that we should help Canadian ag producers directly but also that we should create new rural and urban jobs by combining agriculture with other sectors of the economy that could employ many more people, a strategy that I will call "ag plus". Examples could be ag plus natural gas, ag plus mining, ag plus manufacturing, etc.⁵

Establishing a food strategy would spark a broader discussion with the public of the role agriculture plays in the Canadian economy and Canadian society and would facilitate the development of public policy. Witnesses made the point that a food strategy must provide an overall vision of what the sector should be. They also stated that existing national food strategies include targets that are simple and specific but very high-level, such as increased exports, a certain percentage of organic output, and a certain proportion of national products on the domestic market. These targets make it possible for governments to develop appropriate policies for meeting them.

A number of initiatives are currently under way, but the Committee believes there can be only one strategy and agrees with the witnesses who suggested that the government's role is to facilitate the development of a strategy by bringing the stakeholders together. The government could also spearhead a discussion on the link between the strategy and the *Growing Forward 2* framework agreement. Witnesses said that *Growing Forward 2* could be the operational arm of a food strategy. It is not certain, however, whether food strategy initiatives can be completed early enough to influence *Growing Forward 2*, although some elements of a possible strategy, such as innovation and new markets, were clearly identified by witnesses as being among the priorities of the strategic framework.

Recommendation 1

The Committee recommends that *Growing Forward 2* recognize that the prosperity of the agriculture and agri-food sector depends on the sector's ability to take advantage of international and domestic market

5 Dr. Manish N. Raizada, Associate Professor, International Relations Officer, Department of Plant Agriculture, University of Guelph, *Evidence*, Meeting No. 22, 1st Session, 41st Parliament, Ottawa, February 6, 2012, 1535.

trends; and that the strategic framework focus on programs that improve competitiveness, such as innovation and trade.

SCIENCE AND INNOVATION

The entire agriculture and agri-food sector agrees that research, science and innovation are essential to meeting the global challenges of food security and climate change. They are also essential to meeting growing consumer demand for healthy, affordable products and making farms more profitable by reducing production costs and fostering access to markets. It is also recognized that every dollar invested in research brings multiple returns in operations.

In general, research provides a six-to-one return on investment. This is even higher when producer investments are considered.⁶

It is therefore not surprising that witnesses voiced support for the federal government's research initiatives. *Growing Forward* programs, and the research centres operated by Agriculture and Agri-Food Canada and the National Research Council Canada (NRC) have made the federal government one of the lead players in agricultural and agri-food research in Canada.

The science and innovation support programs currently operating under *Growing Forward* are only part of the government assistance provided for agricultural and agri-food research. During the meetings, witnesses spoke about a number of issues that are addressed by the strategic framework, as well as some that are not. This section presents those issues in general terms and suggests broad policy directions that could be incorporated into programs. The following section takes a closer look at programs that fall under *Growing Forward*.

A. Effective research in Canada

1. Foster partnerships

Agricultural and agri-food research in Canada is conducted by many stakeholders, including producers, universities, governments, input suppliers and processors. Consequently, witnesses all underscored the importance of linking these players for obvious reasons of efficiency: the rapid pace of change in markets and agricultural production demands a coordinated approach. Every industry in the agriculture and agri-food sector has its own issues that require investment in research, such as disease, the need to improve nutritional quality and the industry's environmental record. The Committee's discussions showed that these research priorities have to be identified by the industry itself and that the industry then has to go seek support from the research

6 Mr. Travis Toews, President, Canadian Cattlemen's Association, *Evidence*, Meeting No. 10, 1st Session, 41st Parliament, Ottawa, November 3, 2011, 1535.

community and governments. Industry knows best where research and innovation investments will be most effective and therefore should take the lead in identifying where funds are directed.

Collaborative initiatives are already being taken, and witnesses made reference to many partnerships that have been created regionally or in specific sectors for the purpose of fostering research, such as the Manitoba Forage Council Initiative, the Vineland Research and Innovation Centre and the industry consortium that funds research on canola diseases. Praised by many witnesses, the Agri-food clusters, which are discussed in the section on *Growing Forward* programs, have also provided a great deal of impetus for the formation of partnerships within the sector. However, witnesses mentioned problems that prevent some organizations from working together.

Scientists say that it is sometimes easier to form partnerships with a private-sector company than with a laboratory that is part of their own organization. Insurance or administrative considerations can make it impossible to share machinery and other resources or to access government research facilities. In other cases, AAFC and NRC laboratories do not qualify for research grants. One witness stated that it is hard to strike agreements between public bodies to pool and use intellectual property for joint projects. Consequently,

Recommendation 2

The Committee recommends that Agriculture and Agri-Food Canada conduct an analysis of its practices and administrative policies in order to determine whether any has the potential to impede collaboration among the various research bodies, and that it propose ways of removing those impediments.

2. Improve commercialization and transfer

As one witness explained, research can be considered a continuum that ranges from basic or conceptual research to applied research, innovation and application. Each step in the research process is based on the results of the previous step. If one link in the chain becomes weak or breaks, the other links are adversely affected, causing the return on investment in research to plummet.

It was clear during the hearings that commercialization and technology transfer are viewed as the weak link in the research continuum in Canada. Efforts have been made on that front, and the witnesses stressed the fact that a research strategy must include a commercialization or technology transfer component right from the start. Many industries have put in place structures that enable these elements to be considered, but the fact remains that some industries are farther ahead than others.

The dairy industry, for example, has created the Canadian Dairy Research Portal, a Website that offers information on all dairy researchers, all research facilities and all research projects carried out since 1996. The cattle industry has drawn on models used in

Australia, and Israel to develop technology transfer initiatives involving suppliers, processors, pharmaceutical companies and outreach services, most of them provincial, which makes it possible to use a variety of approaches and provide target groups with all the research findings. The canola and pulse industries are also recognized as being leaders in forming partnerships with all players in the value chain in order to put forward innovations that correspond very closely to demand. In contrast, there are very few outreach support programs for organic agriculture. Some provinces, Quebec and British Columbia among them, have hired outreach specialists, and the Natural Sciences and Engineering Research Council (NSERC) supported the creation of an organic agriculture outreach officer position in Atlantic Canada; however, examples such as these are few and far between.

Witnesses also emphasized the need to include consumers in research and innovation strategies, for example by involving fields like the social sciences in research projects. Some witnesses believe the industry is in tune with the market and therefore already includes consumers in the process of setting research and innovation priorities. However, other witnesses stated that there are some tensions between what urban dwellers expect in terms of the ability of Canadian agriculture to supply them with food and the reality of Canadian farmers, who have to compete on price and quality on a global level. The strain is evident in the debate over genetically modified organisms. There is unanimous agreement that a better understanding between consumers and the agriculture and agri-food sector must be developed in order to reduce misconceptions. Several witnesses suggested that agriculture does not have an image problem, but an issue of trust that it has to stay on top of all the time.

The lack of venture capital for marketing innovations is another limiting factor in the innovation chain in Canada. A new cultivar or pesticide costs between \$100 million and \$250 million, and it can take as long as 10 years to get it to market. Caution is therefore the order of the day when investments have to be made. One witness pointed out that most new ventures have a triple B credit rating at best, but banks do not deal with businesses that have a rating lower than double B. A mechanism must be put in place to help these businesses finance the first stage of set-up so that they can raise their credit rating and deal with banks. Bioenterprise, in particular, is trying to establish a venture capital fund for agriculture. According to another witness, angel investor's networks do exist, but there is little communication among them. The government could become a broker for these investors by establishing a mechanism for creating partnerships between governments, the industry and angel investors.

One potential tool in which some witnesses expressed interest is flow-through shares, which could benefit the life sciences sector as much as they do the oil and gas sector. Other witnesses suggested that the government provide commercialization grants for researchers, who find industry partners to get a product to market. Government-backed loans are another option. The Committee was also told that American organic chemical companies have no trouble getting loans guaranteed by the federal government or accessing public funds.

A final means of reducing risk and improving the marketing phase is regulation of new products. According to industry representatives, regulations have to establish scientific principles and make it possible to bring new products, technologies and innovations to market quickly and following a standard approach.

Recommendation 3

The Committee recommends that *Growing Forward 2* include support for the commercialization and adaptation of innovation, similar to the current Agricultural Innovation Program, or other fiscally responsible incentives.

3. Support research capacity

Research and innovation change very quickly, and fear of not being able to attract the necessary expertise in new areas of research is a major concern for the sector. The industry sometimes cannot undertake projects in key areas because no one in universities or government has yet developed the required expertise. In addition, the loss of expertise in more conventional areas like plant diseases and entomology raises questions about Canada's future ability to properly support research and innovation in certain fields.

The witnesses made it clear that private, university and government research institutions can complement one another in order to provide the necessary research capacity. All of the witnesses agreed that the private sector is good at conducting research at stages very close to marketing, but some highlighted the fact that AAFC plays an important role in long-term basic research projects, because neither the private sector nor universities can do the job as effectively.

For some crops, only government research is able to track the entire innovation chain, either because there is no product to market in the end (a farming practice, for instance) or because there is little economic incentive for the private sector. For example, the volumes of forage seed sold in Canada do not motivate the private sector to invest in the plant breeding of forage crops as opposed to crops like canola and corn. Industry representatives believe the federal and provincial governments must undertake to assume that responsibility and fill the void. Witnesses representing the horticultural industry added that federal research stations are important for research on diseases and the creation of new varieties adapted to Canadian growing conditions. They called on AAFC to fill positions left empty as researchers retire.

Some witnesses suggested that Canada can take advantage of the research being done in other parts of the world and capture and apply that research in order to create value. For example, the Vineland Research and Innovation Centre has a technology officer on staff whose job is to identify technological tools from around the globe that would be improved if developed on a regional or local level. The officer brings those tools to the attention of Vineland and other organizations. This is a way of taking advantage of technological tools that may have been studied elsewhere and refining or adapting them.

Other witnesses, however, cautioned that Canada is unique in many ways and cannot abandon certain areas of research completely without taking a major risk.

The witnesses proposed a number of solutions for strengthening private- and public-sector research capacity, such as increasing AAFC's involvement in training researchers and technicians, creating incentives for universities to hire people who can provide the industry with expertise, and improving information on career opportunities in agricultural research. For many witnesses, however, the problem is rooted in a lack of continuity and fragmentation of research funding. They observed that government funding has tended to shorten timelines for research projects and favour projects that can be completed relatively quickly.

However, all innovations do not take the same time to see the light of day. For example, a short-term project could entail registering a specific herbicide for a new crop, and a few years might be enough to show that the product is safe and effective. On the other hand, developing a new herbicide or a new plant variety requires more than 10 years of research. Genetics and pathogen banks that have to be maintained are examples that show it is hard to limit programs to five years. Some witnesses proposed that the government maintain a combination of funding and time options for research programs.

Stable funding is key to attracting researchers to Canada and keeping them here. A number of witnesses cautioned that scaling back the federal government's basic scientific research and preliminary applied research, shortening planning horizons and concentrating projects near the downstream end of the research continuum could result in Canada losing important strategic stakeholders.

B. *Growing Forward* programs

1. Canadian Agri-Science Clusters

The Canadian Agri-Science Clusters Initiative allocates funding to 10 science clusters organized along commodity lines as follows: beef cattle, dairy, swine/pork, poultry, canola/flax, pulse, wheat breeding, edible horticulture, ornamental horticulture and organic agriculture. The clusters are managed by stakeholders in the agriculture and agri-food sector. They identify research projects and receive financial contributions to carry out those projects with universities and other research and development organizations. Industry contributions range from 15% to 30% of project costs.

Aside from a few problems that are common when a new program is being established — the program was shortened, and some of the criteria were changed at the last minute — all of the witnesses agreed that the initiative is an effective research model and must be renewed. It enables the industry to set its own priorities and coordinate research at the national level, mainly by preventing duplication of projects. It also provides the means to consolidate national scientific and technical resources, which are often scattered throughout the country, and facilitate partnerships. The approach, which involves the entire value chain, ensures effective dissemination of results. Generally, the initiative

addresses some of the issues identified in the previous section of this report, such as the need to link the players in a product's value chain.

Some witnesses stated that they would like to see an increase in total funding for the initiative, and most said they are happy with the funding ratio, which is around 25% industry/75% federal government. They were also adamant that the program should run a minimum of five years and be put in place immediately on April 1, 2013 so that research projects get started as soon as possible. The current program, originally intended to run for five years, has been able to operate for only three years because of delays in implementation. One witness also suggested improving interaction between the various clusters so that they do not become isolated groups of projects.

However, witnesses said that greater flexibility is the most significant program improvement that could be made. Flexibility is crucial because of the uncertainty that surrounds research, particularly for multi-year projects. The current rules allow funds to be moved from one project to another, but not from one period to another. According to the witnesses, it is hard to set timelines for research, particularly research on living organisms. Allowing at least some funds to be transferred from one fiscal year to another would be a way to address that uncertainty. It is not unusual for a researcher to change course dramatically once the initial results come in, and the Clusters Initiative should be able to take that into account.

Recommendation 4

The Committee recommends that the Agri-Science Clusters Initiative be renewed and that the rules be amended so that the direction of a given project can be changed and funds can be reallocated from one period to another.

2. Other programs

The Developing Innovative Agri-Products Initiative is the second-biggest science and innovation incentive program in the *Growing Forward* framework. It provides financial support for industry-led science and technology projects that bridge the gap between ideas and discoveries and products in the marketplace. Funding can be used to target strategies for developing new market opportunities or to implement applied science projects, technology development projects or pilot projects in order to transform ideas into new products. The Initiative played a role in getting to market new varieties of apple created at the AAFC research station in Summerland, British Columbia, by funding tests in other apple-growing provinces to determine the production potential of the new varieties in other regions. The initiative also provided support for the University of Guelph's dry bean breeding program, which is considered a vital tool in helping bring new products to market.

Other programs that are not part of *Growing Forward*, such as the Agricultural Flexibility Fund, are also used extensively by researchers. The programs are alternate sources of funding for one-time or longer-term projects that may be complex and/or involve more than one commodity. According to one witness, programs that run for

five years can end up requiring a great deal of resources, making some researchers “orphans” of the system. This suggests that *Growing Forward 2* should include both short- and long-term funding programs in addition to the current programs. These programs would make it possible to develop research projects for emerging problems that would not be restricted by the five-year timeline.

Recommendation 5

The Committee recommends that the Developing Innovative Agri-Products Initiative be renewed and that a program like the Agricultural Flexibility Fund be included in *Growing Forward 2* as an alternate and flexible source of funding to facilitate short- and long-term research on emerging issues that may involve one or more commodities.

3. Program administration

The witnesses stated that they would like to see administrative and accountability improvements in all research support programs. They recognize the importance of accountability but observed that administrative procedures are relatively cumbersome and can be very time consuming. Some of the rules can even stand in the way of optimal program operation.

According to some of the witnesses, preparing a project and having it reviewed by a peer committee can take an entire year. If the grant is for two years, there is a window of only six months or so to report on the use of the funds, and that report is on top of the progress reports that have to be submitted, in many cases quarterly. Research fellows with multiple grants need someone to handle administrative matters. Otherwise, they would spend their time filling out applications instead of doing the work they were hired to do.

The organizations that manage the clusters stated that it took some time to get used to the Treasury Board rules which, like types of funding, are not necessarily in line with the practices used by other research institutions. The result was that many projects were delayed, forcing universities to use technicians rather than students to carry out the projects, which had an impact on students’ training.

Other witnesses said it is unfortunate that some expenses are eligible for university researchers but not for federal government researchers. This gap between what goes to AAFC researchers and what goes to universities creates a management issue, because funds cannot be transferred from one column to the other, even where it would be logical to do so. The grants have to be managed separately, which creates problems that the organizations managing the funds have to solve. For example, one witness stated that even though clusters funds can be used to get researchers from all over the country working with other researchers, they cannot meet in person because of the caps on travel and related costs imposed by the Treasury Board guidelines.

One way suggested by witnesses to reduce the administrative burden would be to carry out audits or other checks instead of asking for proof at regular intervals.

Recommendation 6

The Committee recommends that Agriculture and Agri-Food Canada simplify the administrative and accountability procedures of its research and innovation support programs by implementing a system of appropriate audits and ensuring that the rules are applied consistently to all research institutions.

MARKETING AND TRADE

A. Export markets

Canada is the world's fourth-biggest exporter of agricultural and food products: the value of annual shipments is in the order of \$40 billion. These exports represent half of Canada's entire agri-food output, but the proportion hides the fact that some crops are grown primarily for export. For example, 60% of the swine and pork, 85% of the canola and 80% of the pulse we produce is exported. Needless to say, without foreign markets, the structure and size of primary production and the processing sector in Canada would be seriously affected.

1. Agri-food trade policy

The aim of Canada's agri-food trade policy is to grow export markets through the World Trade Organization (WTO) negotiations on agriculture, and regional and bilateral negotiations such as the Canada-European Union Comprehensive Economic and Trade Agreement, while at the same time ensuring the protection of the supply management system. The *Growing Forward* framework does not cover Canada's agri-food trade policy. It does complement it, however, and almost all of the witnesses pointed out the need to pursue an active policy of opening up export markets.

Canada's preferred method of trade liberalization has always been a multilateral approach through WTO negotiations. Multilateralism protects the interests of medium-size countries like Canada, keeps the bigger partners' ambitions in check, and offers a broader range of options in terms of markets. WTO negotiations also provide a means to address export subsidies and domestic support programs that skew the balance of trade. The witnesses acknowledged that the current trade talks are at an impasse, but hope that the government will forge ahead and continue to work with the other WTO members in an effort to breathe new life into the negotiation process. In the meantime, the witnesses made it perfectly clear that Canada must continue to focus on bilateral trade agreements to solve trade problems in the agriculture and agri-food sector.

Canada's action plan on trade is relatively ambitious, because the government is now considering the possibility of trade agreements with wealthy or expanding markets like the European Union, India, South Korea, Japan and countries in the

Trans-Pacific Partnership. Together these agreements could boost agricultural exports significantly, but many representatives of commodity groups believe that Canada's absence from the negotiation table could spell disaster for their sectors.

For example, when Canada signed a bilateral agreement with Colombia, markets were immediately opened to Canadian pulse producers, who had previously had trouble breaking through because the United States had a preferred tariff. Bilateral agreements are therefore becoming extremely important as a means of avoiding or eliminating tariff advantages that American and other competing producers might have over Canadian producers. Canada is far along in the process with the European Union, but it has lost ground to competitors for free trade agreements with other countries, such as Morocco, South Korea and some members of the Trans-Pacific Partnership, and now has to play catch-up.

The interesting thing about the TPP, because it's regional, is that some of the founding members are hoping it will be the genesis for something much bigger. This is why Canada has to be there. I'll tell you right now, if you include Japan and Mexico, 65% of all of our agricultural exports go to TPP countries. If we are not in that deal, then within their little group they're going to start filling the space we're now filling with our exports. We will have a real problem if we're shut out of a trade deal that includes 65% of our exports.⁷

Some witnesses pointed out that agreements have to be ambitious so that the agriculture and agri-food sector will be successful. For others, it must be realized that it would be challenging to open markets completely, because some issues are still very sensitive; examples in Europe include genetically modified organisms and hormone-treated beef. The effect can therefore be limited. Moreover, the proliferation of regional trade agreements can make the trade environment considerably more complex and create a spaghetti bowl of regulations.

Beyond trade agreement issues, the witnesses have observed increasing use of technical barriers, such as sanitary and phytosanitary measures, to limit or ban imports. AAFC's Market Access Secretariat, created in 2009, solved many access problems by offering a single window for the Canadian industry. The secretariat and the industry work as partners to set priorities and take advantage of the best technical expertise possible. The witnesses noted that much of the work is done through daily communication between government employees and industry people on both sides of the border.

The secretariat has a willingness to assist any industry or association in getting market access or in dealing with market access problems. That being said, we probably have 300 or 400 market access issues at the current time. Some are larger than others. We work with industry to prioritize which ones we should put our resources towards.

7 Ms. Kathleen Sullivan, Executive Director, Canadian Agri-Food Trade Alliance, *Evidence*, Meeting No. 24, 1st Session, 41st Parliament, Ottawa, February 13, 2012, 1710.

I think the priority setting has been quite successful. The door is open to all firms and associations.⁸

The secretariat has reopened markets or prevented markets from being closed for sanitary reasons. For example, it negotiated export procedures to meet new Chinese standards on the presence of blackleg disease in its canola imports. It also helped negotiate equivalence agreements with the European Union, Japan, the United States and other trading partners so that organic products from Canada would be recognized in those markets. The consensus in the industry is that the Market Access Secretariat must get sufficient resources to carry out its work.

Recommendation 7

The Committee recommends that Agriculture and Agri-Food Canada increase the Market Access Secretariat's budget in order to increase the secretariat's capability to solve market access problems encountered by the Canadian agriculture and agri-food sector.

The witnesses also stated that the secretariat's job would be easier if sanitary and phytosanitary standards were recognized internationally. For that reason, Canada must remain actively involved in establishing international rules and standards in such forums as the World Animal Health Organisation for Animal Health and the Codex Alimentarius Commission. Some suggested that Canada continue negotiations with other countries to develop a policy on low-level presence to prevent trade disruptions due to small levels of unapproved genetically modified traits.

2. *Growing Forward* initiatives

Growing Forward complements Canada's agri-food trade policy by endeavouring to strengthen the sector's ability to capture Canadian and international market shares. Among the primary initiatives are the Value Chain Round Tables, in which producers, processors, retailers, federal departments and provincial governments work to find opportunities and devise collaboration strategies. *Growing Forward* also supports a series of market development programs that help the sector identify and take advantage of opportunities that offer a competitive edge in terms of costs and attributes. These programs include the AgriMarketing Program (almost \$90 million), the Canada Brand Program (almost \$20 million), the Market Information Program (almost \$9 million) and the Canadian Trade Commissioner Service (approximately \$24.5 million).

For many, these programs represent investments that benefit the Canadian economy directly. Some, however, find it hard to gauge the effectiveness of the programs

8 Mr. Steve Tierney, Assistant Deputy Minister, Market and Industry Services, Department of Agriculture and Agri-Food, *Evidence*, Meeting No. 24, 1st Session, 41st Parliament, Ottawa, February 13, 2012, 1540.

because it is difficult to determine what would be exported if those measures were not in place.

In our case, we spend \$4 million a year and our members are telling us that it comes back at \$300 million. I'm quite sure that for the \$4 million you get it back in the federal coffers pretty quickly.⁹

Market information is probably the government initiative that draws the least attention, but for some witnesses, it is crucial. The mandate of AAFC's Agri-Food Trade Service (ATS) is to analyze domestic and international demand, consumer trends and outlooks. The ATS conducts market analyses and provides trade statistics and other information on trade events and programs. Some witnesses, however, have indicated that much of that information is also available from other organizations, such as the United States Department of Agriculture's Foreign Agricultural Service.¹⁰

The Government of Canada created the Canada Brand strategy in order to promote Canadian products. The objective of the brand is to help the Canadian agri-food sector stand out from competitors in national and international markets. Many witnesses stated that Canada's image as a supplier of quality products is a valuable sales asset that sets Canadian products apart from those of competitors. Once a country becomes known as an exporter of quality goods, all products are likely taken up a level.

Our members who sell their products internationally often comment that one of the top selling assets they have over competitors is the maple leaf itself. The Canadian brand is one that is linked with quality. The Canadian brand that "quality is in our nature" could not be more fitting, in our opinion. It's a brand that our members are proud to represent at home and abroad.¹¹

Officials from AAFC reported that the Canada Brand program currently has more than 400 members and the number continues to grow. It must be realized, however, that a business can change its strategy for a product brand, but a country is more limited in what it can change about the way it is perceived. Quality problems in any sector can quickly tarnish the country's reputation.

I think we've sort of hung our wagon to the star of a Canada brand. I think we have to be a little bit careful about that. I think you need the flexibility to be able to respond to individual market situations. With a Canada brand, you are dealing with everything that's out there and you're expecting a very blunt instrument to deal with every contingency. [...] I think I'd probably increase the funding that goes to the individual industries. You continue the types of partnerships you've had. Possibly you continue on with the

9 Mr. Jacques Pomerleau, President, Canada Pork International, *Evidence*, Meeting No. 21, 1st Session, 41st Parliament, Ottawa, February 1, 2012, 1700.

10 This USDA information is written in the context of fostering the development of US agriculture exports and resolving market access issues that US producers may encounter, and, as such, may be of limited use to Canadian producers.

11 Ms. Stefanie Nagelschmitz, Member, Canadian Agri-Marketing Association, *Evidence*, Meeting No. 21, 1st Session, 41st Parliament, Ottawa, February 1, 2012, 1550.

Canada brand, but at the same time I think you need to study it a little bit. You face the risk that if something goes seriously wrong, where once you had a Canada brand that was positive, suddenly it's a Canada brand that is negative.¹²

To support the sector more directly, a program called AgriMarketing was created as part of *Growing Forward*. AgriMarketing has two components. The “generic” component primarily helps industry associations to carry out training on foreign markets and fact-finding and trade missions, and to ensure that Canada is represented at many international agri-food trade shows, such as the international food show better known as SIAL. Some associations also conduct generic promotional campaigns and make in-store presentations in key countries as a way of reaching consumers. The program has covered almost half the cost of activities carried out by the Canadian International Grains Institute (CIGI).

Basically we work with primarily the processors, people who are buying our crops, and help them understand what benefit they can achieve from using a Canadian product versus alternatives, or using alternative Canadian products for that matter. We have a flour mill, a pasta plant, a noodle line, a bakery, and an Asian noodle line, and all these things where we're working with the processors so the processors can then make the products that consumers want. Right now we do training for some companies that are buying Canadian wheat; they're turning it into flour and then their subsidiary company is turning it into noodles, and they're having some issues with quality. Their customers are not happy. Our technicians are able to work with them and say, this is what you need to do to achieve the kind of flour you need, and then within the noodle manufacturing process say, here are the steps you need to take to make sure that people are happy, and by using this product, this will get you to that end game. We do that in a number of ways. Another example of an area we work in for the consumer is looking for opportunities to get Canadian ingredients into their diet.¹³

According to AAFC officials, the demand for the program far exceeds the available resources. Some associations hope the program could be transformed into a multi-year export support fund. Instead of having to submit applications for each activity, industry associations would be given a set amount for five years or the duration of *Growing Forward 2* that would enable them to work over a longer term. Proponents of an export support fund argue that an international market cannot be developed in six months or a year; but that it takes years. The new fund could be modeled after the \$17-million, four-year International Pork Marketing Fund, which is managed by Canada Pork International (CPI). The fund was created in 2009 to help the industry rebound from a slump caused in part by weak pork prices and the closure of some markets. According to the CPI representative, the stable funding has made it possible to develop and implement strategies for accessing priority markets. The exporters stated that the support provided

12 Dr. James Rude, Professor, Department of Resource Economics and Environmental Sociology, University of Alberta, *Evidence*, Meeting No. 22, 1st Session, 41st Parliament, Ottawa, February 6, 2012, 1710.

13 Dr. Rex Newkirk, Director, Research and Business Development, Canadian International Grains Institute, *Evidence*, Meeting No. 26, 1st Session, 41st Parliament, Ottawa, February 27, 2012, 1645.

through CPI activities funded by the federal government increased export sales between 5% and 30%.

Recommendation 8

The Committee recommends that Agriculture and Agri-Food Canada consider the feasibility of transforming the generic component of the AgriMarketing Program into a multi-year export support program modeled after the International Pork Marketing Fund.

The second component of the AgriMarketing Program covers part of the expenses incurred by small- and medium-sized enterprises for market expansion and marketing. Most of these activities are related to trade shows, advertising and export marketing, and in some cases to technical training on tariffs, customs procedures, labelling, etc. Analysis of application files appears to be a weak point in the program, as one witness observed:

People submit files and they are sent to Ottawa. It's very difficult to find out what happens from that moment on. It's a black hole. We don't know who makes the decisions or how things work.¹⁴

It apparently takes quite a long time for decisions to be made, and the funding criteria are unknown. Witnesses have suggested decentralizing the file analysis to regional AAFC offices, and setting up a government/industry working group as solutions to prevent misunderstandings and improve file analysis.

Recommendation 9

The Committee recommends that Agriculture and Agri-Food Canada and the industry jointly explore a more effective procedure for analyzing files submitted under the AgriMarketing Program for small and medium-sized businesses.

The Canadian Trade Commissioner Service is the last element of the market development programs. There are currently 33 trade commissioners assigned to 13 priority markets, where they provide front-line assistance to Canadian businesses and individuals operating in those markets. They work closely with businesses in order to introduce them to contacts and point them toward market opportunities. In other consulates, the Department of Foreign Affairs and International Trade (DFAIT) employs trade commissioners who meet with an AAFC official regularly on a regional level.

14 Mr. André Coutu, Chief Executive Officer, Agri-Food Export Group Quebec-Canada, *Evidence*, Meeting No. 21, 1st Session, 41st Parliament, Ottawa, February 1, 2012, 1605.

Industry witnesses underscored the importance of these services, which they use frequently. Collaboration varies from market to market. For example, in markets where an industry is well established, trade delegates can provide information on the government's new policies and plans. In other, less familiar markets, commissioners help identify distributors or market players. This service is particularly important when a free trade agreement is signed. Commissioners analyze markets in order to identify opportunities, review statistics on imports and exports, and gather information in order to determine what the Canadian industry can offer. For example, commissioners establish whether a market is one in which Canadian businesses would have to compete through pricing or whether they could set themselves apart by offering a product that is Canadian or has a certain feature and perhaps charging a slightly higher price. Trade commissioners also assist businesses in validating markets and promoting their products.

B. Domestic market

1. Market status

Canada is a country that depends on agricultural trade, but the opening up of export markets is not one sided, because the Canadian market must in return be opened up to foreign products. Moreover, Canada is a preferred destination for exporters because of its economic situation and the high dollar. Canadian farmers therefore have to compete with trading partners that often have lower production costs. The result is an increase in imports to Canada: for example, the market share of Canadian wines decreased from 49% in 1987 to 32% in 2011. Even export-oriented sectors are affected: pork imports have increased to the point where 25% of the pork consumed in Canada now comes from other countries.

For some products, the Canadian market remains the primary opportunity and business is done mostly in Canada. The domestic market, which absorbs half of Canada's agri-food output, is changing rapidly and poses challenges for the sector. Witnesses made reference to the concentration in the retail sector, where 80% of the market is controlled by four companies — this may lead to an imbalance in bargaining power and may create difficulties to obtain shelves space; consolidation of the processing sector; and the lower productivity in that sector compared with its American competitor. Others spoke about the difficulty identifying the origin of products or differentiating the attributes of the Canadian product from those of the imported product.

2. Initiatives

The marketing and trade initiatives included in *Growing Forward* are not traditionally oriented toward the domestic market. The industry turns more to provincial initiatives like Foodland Ontario and Aliments du Québec to promote local products. That does not mean *Growing Forward 2* has no role to play in helping the sector regain market shares on a national level. The strategic framework can be an opportunity to manage the growing competition in the domestic market, and the departmental representatives recognized the possibility of extending *Growing Forward* programs to the domestic market by carefully defining the provincial and federal governments' mandates. For example, Canadian

businesses can already use the Canada brand on their products sold in Canada. According to the department, this program has made it possible to show that the participants could increase their sales and profitability by affixing the Canada brand to their products.

The federal government can play a role in helping the industry provide information and differentiate its products from imported foods. Some witnesses said they would like the AgriMarketing Program to be broadened to include national marketing initiatives that would enable producer groups to promote consumer awareness and encourage consumers to buy local products. Discussions within the Value Chain Round Tables are an ideal place to establish marketing strategies. For example, the pork industry is trying to base its strategy for the Canadian market on product differentiation. It is going to try to offer Canadian businesses a platform enabling them to define the attributes of Canadian pork. Businesses will then be able to differentiate themselves on their own, both locally and internationally.

Recommendation 10

The Committee recommends that *Growing Forward 2* include a support program for the development and implementation of national marketing strategies developed, for example, by the Value Chain Round Tables.

With respect to labelling, the pork industry representatives lament the fact that it is not as easy to determine the origin of meat as it is the origin of imported fruits and vegetables. Country-of-origin labelling is a sensitive issue because the industry wants to give the information to consumers but does not want to make the mistake of adopting mandatory country-of-origin labelling (COOL), which has been put in place in the United States and deemed by the WTO to be in violation of international trade rules. Others hope that the criteria that must be met in order to use “Product of Canada” on labels will be revised, because in their opinion, they do not lend themselves to processed products. There is, however, consensus on the fact that *Growing Forward 2* may stimulate the domestic market by making Canadian consumers aware of the reasons why they should buy Canadian.

CONSUMER DEMANDS AND PRIORITIES OF SOCIETY

A. Health

Canadian consumers have essentially the same demands as consumers in other parts of the world. What they seek primarily is food that is safe, nutritious, healthy and tasty. Many studies highlight the importance of these factors that shape consumers’ decisions. The link between agriculture, food and health is what has driven the development of the natural products and functional food sectors in Canada i.e., foods that possess health-related attributes.

The global functional food market is growing at a rate that is outpacing the traditional processed food market. This has become a multi-billion-dollar industry, and estimates within Canada suggest that the Canadian functional food industry has the potential to grow to \$50 billion U.S.¹⁵

Needless to say, consumers expect products to be safe, and safety is not something that can be marketed. Studies have shown that Canadians are confident that the food sold in Canada is safe.

In particular, over 50% of surveyed Canadians reported that they were completely confident or very confident in the safety of Canada's food. A further 35% said they were somewhat confident. I am of the opinion that such confidence stems from an expectation held by the broad citizenry that food safety control systems managed by both the public and the private sector are effective. As an example of this, I'd like to remind the committee of the speed with which industry and various federal and provincial departments acted when BSE-infected cattle were discovered in Canada in May of 2003.¹⁶

This does not mean that there is no need for vigilance. The Consumers' Association of Canada has said that consumers want the standards applied to food consumed and produced in Canada to be applied to food that is imported as well. It must be made clear that the safety requirements for imported products and Canadian products are the same, but inspection methods are different. Products imported to Canada are inspected by authorities in the exporting country, just as the Canadian Food Inspection Agency (CFIA) inspects food being exported from Canada. CFIA conducts audits to ensure that the inspection system in exporting countries is equivalent to Canada's system. CFIA can then inspect imported products once they arrive in Canada and determine whether, for example, any shipping requirements were not met and whether the products comply with standards regarding the presence of certain chemical products.

The Committee was told, however, that CFIA inspects on average 2% of agricultural products shipped to Canada and that some of those inspections are not directly related to food safety; they are conducted, for example, to ensure that diseases which can damage Canadian agricultural resources do not enter the country. It bears noting that the frequency of inspection for each type of product is determined by a risk assessment. What this means is that imported products that are considered to be a risk are inspected more often than products that pose a lower risk. The government has provided funds to hire more than 700 new inspectors since 2006, but the Agriculture Union, which represents CFIA employees, wonders whether there are enough resources to meet the frequency that risk assessment shows is necessary.

15 Ms. Carla Ventin, Vice-President, Federal Government Affairs, Food and Consumer Products of Canada, *Evidence*, Meeting No. 25, 1st Session, 41st Parliament, Ottawa, February 15, 2012, 1605.

16 Mr. John Cranfield, Member, Management Team, Consumer and Market Demand Network, *Evidence*, Meeting No. 25, 1st Session, 41st Parliament, Ottawa, February 15, 2012, 1540.

The industry does its part when it comes to food safety. With support from *Growing Forward*, farmers have put in place on their farms food safety systems that are often required by retailers or processors. Retailers have also developed their own safety standards, many of which exceed CFIA standards, but the lack of consistency among them translates into extra costs for processors: a manufacturer that supplies two or three customers has to adapt its production line to each customer, whether or not that increases sales. The Committee is of the opinion that the players in the chain have to talk to one another and endeavour to make these private standards the same across the board.

In terms of nutritional information, labels showing the nutritional value of processed foods have been mandatory since 2005, and beginning in August 2012, consumers will also see information on allergens. The industry is also working with the government on awareness initiatives like the Nutrition Facts Education Campaign, a multimedia awareness campaign based on a partnership of 34 member businesses and Health Canada; the aim is to give Canadians the tools they need to make smart food choices. A follow-up to that campaign is under way.

Innovation in food safety is another way of meeting consumers' health expectations. Bioniche Life Sciences Inc. has developed a cattle vaccine that reduces the excretion of *E. coli* O157 and should prevent disease in humans. A national vaccination campaign would help boost Canadians' confidence in food safety and considerably reduce the annual cost of primary and secondary health care related to bacteria.

B. Food prices

Food prices rank closely behind nutrition and health among the factors that influence consumers' decisions. Canadians spend 10% to 12% of their disposable income on food, and it is known that the proportion of income spent on food is much smaller in Canada than in other parts of the world.

The supply management system remains an irritant for some witnesses, mainly because it keeps prices high relative to prices in the United States.

Price also comes into what consumers want. That was the second biggest issue. We all know there's something wrong when you can buy a gallon of milk in the United States for half the price of what you can buy it for in Canada. You can buy chicken for half the price. This is particularly exacerbated when the dollar reaches parity, which it has. We've been fighting that one for five years, but the reality is that you can still buy these products for half the price across the border. We'd like to see something done on that issue.¹⁷

Dairy Farmers of Canada pointed out that over the past decade, prices in Canada have been as much as 40% lower than prices in the United States. Furthermore, supply management maintains price stability, which helps the entire supply chain deal with the

17 Mr. Bruce Cran, President, Consumers' Association of Canada, *Evidence*, Meeting No. 26, 1st Session, 41st Parliament, Ottawa, February 27, 2012, 1605.

volatility of world markets. Whereas other governments have to provide subsidies (\$5 billion in the United States), a direct transfer from taxpayers to farmers to counter that volatility, the supply management system costs the public virtually nothing, and Canadian consumers pay only once for the true value of their products.

The Canadian Restaurant and Foodservices Association (CRFA) identified some of the effects of supply management on its members' operations. For example, under the current tariff rules, producers of frozen pizzas in Canada are able to buy their Canadian mozzarella at a deep discount so that they can compete with frozen American pizzas that enter Canada duty free. Restaurants do not get that discount, yet they are competing against those frozen pizzas. The CRFA added that it is hard to find chicken with the attributes restaurant owners are looking for. Further, the quota allocation system prevents provinces with strong population growth from raising more chickens to meet the demand.

The Committee is of the opinion that the problems identified here can be solved within the supply management system without calling the entire system into question. The Committee therefore urges the industry to engage in discussion and come up with quota formulas that would make it possible to respond more easily to user demand and accommodate areas in which the population is growing at a faster rate.

C. Origin of foods and production methods

1. Origin of foods

Where food comes from was a frequent topic of discussion during the Committee's meetings. For the most part, the witnesses agreed that consumers tend to prefer Canadian products.

The Canada brand group out of Agriculture Canada have done some study. They did a beautiful virtual store study. [...] It indicates clearly that Canadians prefer Canadian product as long as it's priced competitively with other products from around the world, and that horizon is at about the 10% level, so we have a problem with "Product of Canada" in this country, and I'll talk about that in a few more minutes.¹⁸

More specifically, many witnesses said that there is growing demand for local products, as illustrated by the slow food movement and the 100-mile diet. While there is no single definition of "local" (country, province, 100 miles, etc.), local is an attribute that some consumers want to see. Opinion is divided as to whether the shift toward local food will remain a niche market or indicates a more substantial change in demand.

For some witnesses, the difficulty supplying local products stems from the lack of appropriate processing infrastructures and distribution channels for getting products to consumers. Nationally, the high exchange rates have made the Canadian processing

18 Mr. Ted Johnston, President and Chief Executive Officer, Alberta Food Processors Association, *Evidence*, Meeting No. 27, 1st Session, 41st Parliament, Ottawa, February 29, 2012, 1530.

industry less competitive. According to some of the studies cited before the Committee, our processing industry is on average 40% less productive than its counterpart in the United States. Regional processing capability has gradually disappeared. The industry representatives made reference to the difficulty obtaining capital to improve productivity, automate and modernize facilities, and deal with competition. Problems accessing capital are sometimes related to the risk associated with certain markets that are less stable. Supporting the processing sector by creating opportunities for investment in small- and medium-sized processing facilities or assisting with the modernization of existing facilities is seen as a way of helping local farmers access markets in which the demand for their products is growing rapidly.

With respect to marketing, some witnesses stated that existing distribution channels may not be the best way of getting regional products into major national grocery store chains. However, producers working together on a regional level can succeed in approaching large-scale distributors. Regional food hubs¹⁹ are another way of linking producers and large customers, such as public institutions. The Committee was also made aware of FoodShare, a Toronto group that gets fruits and vegetables from local producers and resells them at an affordable price to some 100 schools in the city. Farmers' markets are another outlet for farmers.

In British Columbia the number of farmers' markets has risen annually, and now the BCAFMS represents over 100 such markets. Along with restaurants, wholesale and direct farm market sales, farmers' markets are one of several marketing channels used by small and medium-scale farmers. Farmers selling directly to consumers are able to realize retail prices at farmers' markets that can often be double what they would receive selling wholesale.²⁰

The increase in the number of farmers' markets and the creation of regional food hubs attest to the sector's determination to supply the local food market. The witnesses' comments on these initiatives also show that a portion of the agriculture and agri-food sector would like to see government policies give more recognition to agriculture that focuses on meeting the demand closer to home.

2. Food production methods

Consumers are increasingly interested in the way food is produced. More and more, they are looking for foods produced using methods that are more respectful of the environment and animals, such as organic products.

19 The United States Department of Agriculture defines a food hub as a business or organization that actively coordinates the aggregation, distribution and marketing of locally produced food products, most from small and midsize producers.

20 Mr. Jon Bell, President, BC Association of Farmers' Markets, *Evidence*, Meeting No. 9, 1st Session, 41st Parliament, Ottawa, November 1, 2011, 1540.

The Canadian organic sector is growing rapidly, and the domestic market is now worth an estimated \$2.6 billion per year, an increase of 160% in four years' time.²¹

[S]ales of cage eggs fell by almost 4%, whereas cage-free and certified organic sales increased by 7% and 14% respectively. Importantly, the signage did not have a negative impact on total egg sales, which increased by 1.2%.²²

The industry is adapting to these new trends, as the witnesses illustrated many times: the processing industry is working to promote and enhance achievements in the area of environmental sustainability; *Growing Forward* has funded a number of farm-based initiatives to implement environmental plans; many retailers have their own organic lines of products; and major restaurant chains, food suppliers and supermarkets have taken measures to improve animal well-being by using and selling more free-range pork and more eggs from free-range operations.

There are challenges to meet these demands. The bulk of the demand for organic products in Canada is being met by imports. The cost of moving to organic agriculture is often cited as an impediment to the development of that sector, because during the transition years, producers cannot sell their products as organic and do not get a higher price. In other cases, the transition to more environmentally friendly practices or practices that are more respectful of animals' well-being does not always mean a higher market price, and the question remains: who in the production chain must bear the cost.

3. Meeting demands

Consumer demand varies, and for that reason, the market is increasingly fragmented. One witness illustrated that point by talking about a shift in the market from a commodities world to a products world directed at an infinite number of consumer groups. Every household has its own tastes and preferences, which makes it harder for the food industry to meet the growing demand.

The witnesses suggested a number of ways of supporting the Canadian agriculture and agri-food sector's efforts to adapt. Some proposed a loan system for modernizing processing companies, for example by increasing the budget of the AgriProcessing Initiative to a level more or less on par with the ecoAgriculture Biofuels Capital Initiative. Others proposed a program that would support the creation of regional food hubs or permanent markets and the creation of funds to cover the transition to organic farming or breeding methods that are more respectful of animals.

The Saint Andrews Statement clearly states that "meeting customer requirements for attributes" is one of the framework's objectives. *Growing Forward 2* should include

21 Mr. Matthew Holmes, Executive Director, Canada Organic Trade Association, *Evidence*, Meeting No. 7, 1st Session, 41st Parliament, Ottawa, October 25, 2011, 1635.

22 Ms. Sayara Thurston, Campaigner, Humane Society International/Canada, *Evidence*, Meeting No. 26, 1st Session, 41st Parliament, Ottawa, February 27, 2012, 1530.

specific tools in order to support the sector in meeting that objective. The Agricultural Flexibility Fund and the Canadian Agricultural Adaptation Program are initiatives already in place that make it easier for the sector to adapt and help it seize opportunities and meet emerging demand. These two programs allow the sector to set its priorities by putting forward its own initiatives. For example, the AgriProcessing Initiative, which is designed to modernize processing facilities, is funded by the Agricultural Flexibility Fund. Both of those programs end in March 2014, one year after *Growing Forward* is renewed.

Recommendation 11

The Committee recommends that programs be incorporated into *Growing Forward 2* that would help the Canadian agriculture and agri-food sector adapt to and meet consumer demands.

COMPETITIVE ENTERPRISES

Officials from Agriculture and Agri-Food Canada defined a competitive sector as one that is adaptable and sustainable because it has a bigger market share both nationally and internationally. To ensure that Canada's agriculture sector is able to compete in national and international markets, a number of measures have been put in place under *Growing Forward*. These measures were designed to strengthen farmers' skills and business strategies and tackle problems that undermine their competitiveness, such as regulatory barriers. As the agriculture sector is geared primarily toward export markets, it also needs a reliable rail freight service that enables it to bolster its competitive position.

A. Harmonization of regulations

International regulations threaten Canada's competitive position in world markets. The witnesses commented that Canadian exports are heavily regulated, unlike goods imported into Canada. They find this situation unfair. In addition, these regulations complicate trade and affect Canada's ability to compete.

One of the things you have to remember is that a lot of countries around the world have regulations similar to ours about chemical and pesticide use, but they don't enforce them. Here we do. If you're growing produce in any Canadian province, you've got the *Pest Control Products Act* to deal with, administered by PMRA, and you've got the provincial applicators and provincial pesticide legislation to deal with as well. And they're all enforced, maybe not to the extent everyone would like, but they are enforced, and there's an expectation among both producers and consumers in Canada that this happens.²³

The agriculture sector has to comply not only with the many Canadian regulations, but also with international standards if it wants to access foreign markets. Because of the differences in international regulations — for example, the caps on

23 Mr. Bob Kingston, National President, Agriculture Union, *Evidence*, Meeting No. 25, 1st Session, 41st Parliament, Ottawa, February 15, 2012, 1650.

pesticide residue vary from country to country — the witnesses suggested that a worldwide approach to the approval of pesticides be adopted.

Regarding the food sector, some witnesses questioned the validity and effectiveness of Canadian regulations on grounds that they have not been updated in decades. The witnesses urged the federal government to quickly modernize food regulations. They stated that the approval of new food products in Canada is 5 to 10 years behind other industrialized countries, such as the United States, the European Union, Australia and New Zealand. The approval process for new veterinary drugs and pesticides is similarly behind. The long wait sharply reduces the competitiveness of the agriculture and agri-food industry as a whole. Several witnesses expressed the view that harmonization of regulatory processes between foreign governments and the Government of Canada would give the Canadian agriculture sector a bigger competitive edge both nationally and internationally.

Many farms find it very hard to stay competitive because of all the strict regulations they have to meet. Some witnesses indicated that a cautious approach that looks at the competitiveness of the agriculture sector must be taken in implementing new regulations.

Regulations are one aspect of our industry that are necessary to ensure the safety and marketability of our product, but they need to be implemented with great care and consideration. In the past we have seen how creating and implementing regulations that are more onerous than those in other countries and jurisdictions limit our competitiveness. To compete in both domestic and world markets, we must be careful not to put ourselves in a position through regulations that limit our competitiveness. It is easier to create a regulation than to change or eliminate it, and therefore science and common sense must dictate any implementation.²⁴

Some witnesses stated that small slaughterhouses have ceased to be efficient and competitive because they were not meeting the standards. Others contend that it is more the regulatory burden that hurts small slaughterhouses. Small slaughterhouses have to manage provincial and federal regulations at the same time, which is often not appropriate given the small scale of their operations. According to those witnesses, not all of the regulatory measures that have been put in place for big plants need to be applied in small slaughterhouses.

[R]egulatory burdens imposed in a one-size-fits-all manner often discriminate against smaller processors. Regulations must be appropriate to the scale of the operation. An example of regulatory excess resulting in the disappearance of processing capacity is the local abattoir situation across Canada. An example of the successful encouragement of small-scale processing is the artisan cheese industry in Quebec. Government should learn from these examples.²⁵

24 Mr. Kevin Boon, General Manager, British Columbia Cattlemen's Association, *Evidence*, Meeting No. 6, 1st Session, 41st Parliament, Ottawa, October 20, 2011, 1640.

25 Mr. Ted Zettel, General Manager, Organic Meadow Co-operative, *Evidence*, Meeting No. 12, 1st Session, 41st Parliament, Ottawa, November 17, 2011, 1545.

The CFIA is trying to improve that aspect of regulation, specifically through the development of results-based regulations on food safety. The new regulations would state expected outcomes, such as the absence of pathogenic bacteria in meat, rather than the means that must be put in place to reach those outcomes. This would allow an enterprise to tailor its practices to its size and resources without compromising the objective of the regulations.

We have been working in the meat sector, for example, looking at shifting the currently very prescriptive model, which serves as a barrier for some small enterprises, towards a more outcome-based model that might be better tailored, therefore, to the unique characteristics of a small enterprise, in order to promote their capacity to enter into, for example, interprovincial trade as a first step, and, if they wish, on to international trade as well through federal registration.²⁶

Recommendation 12

The Committee recommends that the government seek to achieve food safety regulation equivalency with trading partners, develop processes to increase regulatory compatibility, and recognize scientific evidence from other countries where appropriate and meeting Canadian standards.

B. Skills and business strategies

Canadian agriculture is facing a decline in the number of farms and an aging farming population. On average, farmers are in their late fifties. Recruiting young and beginning farmers is a real challenge for the sector. Several witnesses stated that the high capital cost of farming and difficulty accessing farm financing are major obstacles to the creation of a new generation of farmers.

For example, the new aspiring farmers, whether they're new Canadians or not, as you rightly note, often don't have access to financial resources. Even if they've got a good business plan, it's hard for them to qualify for government programs and it's hard for them to qualify for business loans. Also, often these relationships that are forged between exiting farmers and entering farmers are quite informal. The aspiring farmer doesn't have what would be considered the required level of farm assets to qualify for government programs. This sort of issue represents a peculiar regulatory loophole that a potentially large number of people are actually falling into. A re-evaluation of what a farm asset is and some sort of pump-priming money to help establish new farms and build up the capital while they embark on new enterprises represents a serious bottleneck.²⁷

26 Mr. Paul Mayers, Associate Vice-President, Programs, Canadian Food Inspection Agency, *Evidence*, Meeting No. 24, 1st Session, 41st Parliament, Ottawa, February 13, 2012, 1605.

27 Dr. Evan Fraser, Associate Professor, University of Guelph, *Evidence*, Meeting No. 25, 1st Session, 41st Parliament, Ottawa, February 15, 2012, 1705.

Governments and agricultural organizations have put in place a number of programs to help attract young and beginning farmers. Financial institutions have developed transition loans and other products that help farmers pass their farms down to the next generation, and financial products designed for new farmers.²⁸ In addition, the *Canadian Agricultural Loans Act* enables young and beginning farmers to raise capital to invest in their farms. A number of tax benefits are available to new farmers, such as a \$750,000 capital gains exemption in cases where a farm is handed down to the next generation. The supply management sector, meanwhile, facilitates the establishment of new farmers by giving them a quota loan for a specified period. The witnesses stated that despite these initiatives, attracting new and beginning farmers remains a problem.

According to some witnesses, organic farming is drawing many new farmers. Most new organic farmers start out small, because a small farm is affordable and does not require a huge investment. However, the exorbitant price of land in some regions is a major obstacle to the establishment of beginning farmers. Beginning farmers often develop a solid business plan to help them get their farms off the ground, but some witnesses said that the number of farmers with a business plan is very small.

The witnesses from the Fédération des groupes conseils agricoles du Québec and the Canadian Federation of Independent Business observed that fewer than 20% of farmers have a business plan and official succession plan. Among producers who do have a business plan, 71% used it to obtain a loan from a financial institution. This is a concern for some witnesses, who feel there may be an impact on the long-term competitiveness of the agricultural sector. The witnesses lamented not only the small number of farmers who have a business plan, but also the small number of producers who seek help from consultants. Many of those who do contact a consultant are in serious financial difficulty. Quebec farms that are in deep trouble have access to subsidized farm management services under the Farm Operation Adaptation Support Strategy, which promotes a multidisciplinary approach intended to increase farm profitability.

Another management consulting support program is the Farm Business Development Support Program, which is associated with *Growing Forward*. The aim of the program is to help farmers meet the challenge of sustainable, competitive agriculture. The program offers an array of activities, including business development support, assistance with the implementation of best management practices and development of expertise.

There was strong agreement among the witnesses regarding the importance of training in developing farm managers' skills. According to witnesses, training helps make the agriculture sector more competitive. A number of training and learning initiatives have been taken to strengthen farmers' skills and strategies. The Organic Farming Institute has

28 For example, Farm Credit Canada announced a new Young Farmer Loan on April 12, 2012. This new loan offers qualified producers who are under 40 years of age loans of up to \$500,000 to purchase or improve farmland and buildings.

developed organic farming courses and an on-farm mentoring program that fosters the transfer of knowledge. Many small non-governmental organizations (Farmstart, for example) help farmers acquire agronomy and marketing skills so that they can start their own business. However, some witnesses made the point that continuous training is not always available to farmers because it is hard for farmers to take time away from the farm. Some organizations have tailored their services to meet the specific needs of farmers. They offer online tools that enable farmers to participate in seminars or take courses when it is convenient for them.

We partner with an online university, and we actually offer our members a number of online business courses that they can take on business management, succession planning, farm safety — those various business issues. Basically, a lot of business issues apply to our farm members, and they certainly can take advantage of our member programs that we have in online training. Most of our members are very technology savvy so they can take advantage of those things. We also offer a network of business resource counsellors across the country who help our members through some of these things and provide them the succession guide and some advice on moving forward. Certainly we don't provide accounting advice or anything, but we provide the tools to get them started on some of these difficult discussions, as you've mentioned.²⁹

Recommendation 13

The Committee recommends that *Growing Forward 2* include specific support programs for new entrants in agriculture, for continuous training and learning and for organizations that promote and deliver farm management consulting services.

C. Rail transportation

The rail freight system is crucial to the competitiveness of Canadian agriculture, which focuses on exports. Given that it ships most of its output by train, the grain industry has to have a reliable, efficient rail service to ensure its competitive position. However, several witnesses observed that freight trains do not offer farmers any guarantee that their products will reach their destination on time, unlike passenger trains, which stick to a schedule. This delay seriously undermines the competitiveness of the Canadian grain industry.

[O]ur buyers expect a product to show up [on their doorstep at a certain time. Then we're given that timeframe and we try to meet it. The whole chain of action comes into play, and the railway is part of that chain of action. So we order the cars. We order the shipment. They tell us when they can get it there and then we try to meet that and coordinate the ships with that. The problem is when the railways throw a hiccup into the system. Either they don't show up on time or don't pick up the cars on time. There's no recourse to the railways, but there's a recourse to everybody else in the system, and then

29 Ms. Virginia Labbie, Senior Policy Analyst, Canadian Federation of Independent Business, *Evidence*, Meeting No. 14, 1st Session, 41st Parliament, Ottawa, November 24, 2011, 1650.

the cost gets borne all the way back to the farmer. We've never had an opportunity to dictate to the railways. It's always been the railways dictating their schedule to us.³⁰

Trains are not the only source of woe for grain farmers; ships can create problems, too. Containers are sometimes refused when they reach the terminal because shipping companies overbook by 40%. Further, foreign-bound grain sitting in Canadian ports has to be inspected by the Canadian Grain Commission, whereas grain shipped directly to American buyers does not have to be inspected. The witnesses are of the opinion that this inspection process puts the grain industry in an unfavourable competitive position. If farmers do not honour their commitment to deliver the product by a certain date, customers may turn to competitors. Finally, delivery delays result in penalties that lower the price farmers get for their grain.

A study by foreign buyers reports that Canadian soybeans intended for human consumption cost more than American soybeans. At first glance, the price difference seems attributable to the exchange rate. However, closer analysis shows that the primary cause is the cost of shipping by rail.

The informal study of the containerized ocean freight rates comparing Toronto, Chicago, and Columbus, Ohio, reveal that Canadian firms are paying as much as \$530 over published freight rates from Chicago or Columbus, and they go to the same destination globally. In discussion with various freight forwarders and oceans carriers, there are sometimes very clear indications that the differential between U.S. freight rates based on Chicago/Columbus versus Toronto is the result of rail rates. The situation has a serious impact on our competitiveness overseas.³¹

Some witnesses recommended that the Committee look at container freight rates in eastern Canada that could have an adverse impact on farmers' income and cause grain companies, processors and shippers to lose revenue. Some witnesses think that Canada has a good rail system, but it is simply not being used effectively. However, several witnesses suggested that the inefficiency of shipping by rail is the reason why Canada's agricultural sector is less competitive. They believe the rail system needs to be made more efficient so that the Canadian agricultural sector is competitive and has access to world markets. Others suggested that existing cars should be replaced.

The most effective way to enhance the competitive position of Canada's grain farmers is to replace the existing Canadian grain car fleet, as it is past its useful life — obsolete and inefficient, from a variety of standpoints. The design is outdated. It provides a lower carrying capacity. There are inefficiencies in the loading and unloading. The dimensional

30 Mr. Mike Bast, Director, Western Canadian Wheat Growers Association, *Evidence*, Meeting No. 21, 1st Session, 41st Parliament, Ottawa, February 1, 2012,1650.

31 Mr. Martin Harry, Chair, Canadian Soybean Exporters Association, *Evidence*, Meeting No. 23, 1st Session, 41st Parliament, Ottawa, February 8, 2012,1600.

envelope is outdated. As a result of the age of the cars, there's a high cost of maintenance and repairs because of obsolete parts.³²

New cars are lighter and have a much greater carrying capacity than old cars, which makes them more efficient and reduces the carbon footprint. The Canadian agricultural sector needs to be able to rely on modern, more efficient cars. However, that efficiency must extend to the entire rail system so that farmers can honour their commitment to deliver their products to their customers at a specific time.

The final report on the rail freight service review was released in January 2011. The report, commissioned by the Minister of Transport, looked at service issues and problems related to the rail-based logistics system in Canada and made recommendations for improving the efficiency, effectiveness and reliability of service within the system. Many of the issues raised by the witnesses during the Committee's study are addressed in that report.

Recommendation 14

The Committee recommends that the government report to the Committee on the actions it has taken subsequent to the report on the rail freight services review.

Recommendation 15

The Committee recommends that the government investigate the current condition of the existing fleet of Canadian grain rail cars, and begin to plan for updating the current fleet with a more modern rail car that will increase the efficiency and productivity of the government's rail car fleet while decreasing the overall environmental footprint.

BUSINESS RISK MANAGEMENT

Risk management is one of the most important aspects for any business, especially in the agricultural sector where the risks are enormous and can affect the profitability and viability of farms. To reduce the loss of income due to unpredictable events such as natural hazards, diseases, market fluctuations, etc., the Canadian government offers various risk management tools to farmers. These tools include supply management and BRM programs. Available to farmers since 2007, BRM programs are an important component of Canada's agricultural policy and include four main programs: AgriStability, AgriInvest, AgriInsurance and AgriRecovery. The Advance Payments Program (APP) complements the BRM programs.

32 Mr. Michael Hugh Nicholson, Executive Vice-President, National Steel Car Limited, *Evidence*, Meeting No. 16, 1st Session, 41st Parliament, Ottawa, December 1, 2011, 1530.

A. Supply management

Growing Forward recognizes the supply management system for regulated products (milk, poultry, eggs) as a BRM program although no funding is offered.

Currently, the supply management system does not cost the community or the state much of anything. There are some small supply management programs, but they are minor and do not represent any significant amount.³³

Among the BRM programs, farmers under supply management are covered only by AgriStability in the event of major disaster, that is, when their production margin drops by more than 30%. Supply management producers are compensated to the same degree as non-regulated products. However, few supply management producers participate in the AgriStability program.

Since its introduction in the 1970s, supply management has provided income stability for dairy, poultry and egg producers. The mechanism of supply management is built on three pillars: production planning, producer pricing and import controls. Although supply management has appeared in the news because of trade negotiations, several witnesses believe that the Canadian government will continue to strongly support supply management.

Chicken Farmers of Canada appreciates the strong support of the Government of Canada and the opposition parties for supply management. Our farmers have confidence in the government's ability to preserve our system of supply management in trade negotiations such as the Canada–EU trade agreement and the upcoming trans-Pacific partnership.

Canada has already successfully negotiated nine trade agreements to open up markets, and each one of these has preserved supply management.³⁴

Recommendation 16

The Committee recommends that the government continue to support the supply management system by defending it in trade negotiations.

B. The programs

Under *Growing Forward*, the federal government has worked with provinces to design a series of cost-shared BRM programs between the FTP governments. Since inception of the 2007 program year, the government has provided over \$8.5 billion through the BRM suite. Annual federal expenditures for AgriStability have been between

33 Mr. Nil Béland, Member, Board of Directors, Éleveurs de volailles du Québec, *Evidence*, Meeting 17, 1st Session, 41st Parliament, Ottawa, December 6, 2011, 1630.

34 Mr. David Fuller, Chair, Chicken Farmers of Canada, *Evidence*, Meeting 18, 1st Session, 41st Parliament, Ottawa, December 8, 2011, 1555.

\$400 million and \$600 million, and Agriculture and Agri-Food Canada grants on average \$160 to \$200 million to AgriInvest per year. Moreover, the government injects funding of \$450 to \$550 million annually into AgriInsurance. As to AgriRecovery, the government has budgeted \$125 million this year, but paid out approximately \$450 million last year. The amount allocated under AgriRecovery varies from year to year because it is an event-driven program. Table 2 reflects current numbers provided by AAFC officials.

Table 2 – Annual Federal, Provincial and Territorial Contributions to Business Risk Management Programs as of February 29, 2012 (millions of dollars)

Program	2007	2008	2009	2010	2011	Total
AgriStability	704.8	750.7	909.4	454.3	54.9	2874.1
AgriInvest	286.8	299.3	304.4	231.7	N/A	1122.2
AgriInsurance	582.5	813.4	818.4	764.4	754.9	3733.6
AgriRecovery	8.1	66.3	7.1	416.3	356.4	854.2
TOTAL						\$8,584.1

Source: Agriculture and Agri-Food Canada

Note: Processing not complete for the 2012 and 2011 program years under the AgriInvest and AgriStability programs. Also the federal government provided over \$563 million as a one-time payment to kick-start AgriInvest accounts.

Many witnesses stressed the importance of BRM programs as an essential tool in protecting against declines in farm income. Moreover, the Canadian Bankers Association strongly encourages farmers to participate in BRM programs in order to manage their risks because they provide a safety net for both the producer and the banker. A banker evaluates the farm taking into account certain criteria, including the BRM programs subscribed to by the farmer, the financial health of the company, the sector's future prospects and the economic outlook in general. Several witnesses argued that the BRM programs must be renewed. However, some improvements should be made to existing programs to more effectively support the agricultural sector.

In summary, I feel that the existing programs have worked fairly well in attempting to manage business risk in our sector. Efforts to improve the delivery of all BRM programs must continue, with particular emphasis on more regional administration and improved processing times. Maintaining reasonable reference margins in AgriStability and insurance production levels in AgriInsurance is imperative if we are to adequately manage our risk.³⁵

35 Mr. Joe Brennan, Chair, Potatoes New Brunswick, *Evidence*, Meeting 17, 1st Session, 41st Parliament, Ottawa, December 6, 2011, 1545.

Although BRM programs are welcomed by many farmers, the fact remains that they have limitations. Several witnesses criticized the red tape of some programs as well as the slow compensation. Moreover, it is often difficult to estimate payment amounts. Several witnesses suggested that the calculation of the reference margin, negative margins and program caps penalize farmers.

Under AgriStability, farmers receive payments that are based on the reference margin, or Olympic average, which is calculated by taking the last five years of the farmer's margin from the program year, removing the highest and lowest margins, and averaging the remaining three years. When the production margin falls below a certain threshold, the government provides financial assistance to farmers. However, some witnesses believe that the current reference margin does not fully reflect the actual performance of the operation. They suggest calculating a reference margin over a longer period to take account of the production cycle, for example. Moreover, the negative margin limits the participation of struggling producers unless their margin is positive for two of the three years used to calculate the reference margin. In this situation, farmers can receive compensation of up to 60% of their negative margin. Some people think the government should increase the negative margin coverage to 70% to better protect farmers. In addition, farmers who suffer losses over several consecutive years should be able to receive compensation if the government changed the rules by eliminating the negative margin and assigning a margin of zero in the margin calculation. This would provide enhanced assistance to farmers who have no other options. However, in a time of budget cuts, the witnesses agree that the government would be hard-pressed to inject additional funds into the BRM programs.

As to program caps, large operations argue that BRM program caps discriminate against them because they restrict their participation.

It's a philosophy of ours that regardless of size you should have the same access to government programming. The caps in AgriStability, AgriInvest, and our APP program limit access. So if you're a certain size, you're penalized, because you're too big for the programs. Our philosophy has always been that farmers should be treated equally regardless of their location or their size.³⁶

The Committee believes that, in general, BRM programs must be transparent and predictable in order to be bankable, simple, fast and equally available to all Canadian farmers. Moreover, they should not mask market signals³⁷ or create regional disparities.

36 Ms. Catherine Scovil, Associate Executive Director, Canadian Pork Council, *Evidence*, Meeting No. 18, 1st Session, 41st Parliament, Ottawa, December 8, 2011, 1640.

37 The Risk Management Program (RMP) is an example of a program that masks market signals and offers no incentives to increase efficiency or expand markets. The recent Drummond Report in Ontario describes RMP as a stabilization incentive, rather than an industry transformation program, calling it "an example of a business support program in which incentives are not aligned with productivity growth and market principles."

Recommendation 17

The Committee recommends that the business risk management suite of programs of *Growing Forward 2* respect the principles of transparency, simplicity, timely payments, market neutrality and nationwide equality, and better reflect the needs of farmers.

1. AgriStability

AgriStability is a farm income program that covers margin declines of more than 15% relative to the reference margin. It is delivered by the provinces and the territories with the exception of Manitoba, New Brunswick, Nova Scotia, Newfoundland and Labrador, and Yukon, where the program is run by the federal government.

The witnesses agree that AgriStability does not work for all types of production. Indeed, livestock producers, such as pig and cattle farms, are better served by this program than crop producers, who have more difficulty accessing it. Moreover, diversified farms rarely benefit from payments under this program, as evidenced by an Ontario farmer.

With Ontario's diversified farmers, fewer dollars are coming to Ontario than to other regions through programs such as AgriStability, AgriInvest, and AgriRecovery. My farm, for example, did not receive any AgriStability money even though my beef feedlot suffered the same losses as feedlot-only farms did, but my other enterprises kept me above my threshold. This put me at an economic disadvantage compared to other farmers in my province.³⁸

Several witnesses also criticized the complexity and administrative burden of AgriStability. Farmers often use experts to fill out application forms, entailing additional costs. Criticism was also levelled at the program's lack of predictability and transparency. Department officials also recognize the complexity and lack of transparency.

It's a very common complaint about programs. AgriStability in particular is I'm sure what they're referring to. It's complex, it's not transparent, and it's not as timely as it should be.³⁹

The complexity of the program often leads to delays of up to two years before producers receive payment, which makes it difficult for farmers to take business decisions with normal business cycles. This slow compensation calls into question the efficiency of AgriStability. Despite some improvements in the program, the efficiency problem persists.

38 Mr. Arden Schneckenburger, Farmer, *Evidence*, Meeting 19, 1st Session, 41st Parliament, Ottawa, December 13, 2011, 1550.

39 Mr. Greg Meredith, Assistant Deputy Minister, Strategic Policy Branch, Department of Agriculture and Agri-Food, *Evidence*, Meeting 11, 1st Session, 41st Parliament, Ottawa, November 15, 2011, 1610.

While the provincial administration has improved delivery over the federal administration, there are still problems of communication with those portions of the program that remain administered by the federal government, for example, access to income data. Why is there not a practical solution offered by the federal government, like a check box on the income tax form authorizing the income tax department to expedite the delivery of my information to the provincial AgriStability administration? When I need help due to an unexpected downturn, it hurts more that the administration is not working well.⁴⁰

Despite the shortcomings of AgriStability, several witnesses agree that the program has helped support producers' incomes. To ensure effective assistance to the agricultural sector without masking market signals, witnesses believe that greater transparency is still necessary in the calculation of payments that correspond to producers' realities.

Recommendation 18

The Committee recommends that AgriStability be reviewed with the provinces and territories following the principles enunciated in recommendation 16.

2. AgrilInvest

AgrilInvest is a savings account for producers to manage small income declines when their production margin falls by less than 15%. Producers can deposit up to 1.5% of their net sales of eligible products that are subject to a cap of \$1.5 million. In return, farmers receive a matching government contribution up to a maximum of \$22,500.

Many producers, particularly crop producers, consider that AgrilInvest is very advantageous. Indeed, it is economical to administer and easy to understand. In addition, the program gives farmers easy access to funds. It is predictable and bankable. Some witnesses were of the opinion that it is unnecessary to have several programs because AgrilInvest is enough to provide major benefits.

I would summarize by saying that as a grains and oilseeds producer, the two best complementary BRM programs for our farm business currently are the AgrilInvest and AgrilInsurance programs. AgrilInsurance allows us to make sure that any risk in production is mitigated. AgrilInvest allows us to build a security fund so we can save through good income years and have immediate access through times of cyclical downturns. To me, this allows us to be responsible in micro-managing our own farm financial business needs. I often use this tag line: AgrilInvest and forget the rest.⁴¹

Some witnesses proposed increasing the maximum deposit from 1.5% to 3% of eligible net sales. Other witnesses want to ensure equal access to the program for all

40 Mr. Nirmal Dhaliwal, Director, Okanagan Tree Fruit Cooperative, *Evidence*, Meeting 19, 1st Session, 41st Parliament, Ottawa, December 13, 2011, 1535.

41 Mr. Jim Gowland, Farmer, *Evidence*, Meeting 19, 1st Session, 41st Parliament, Ottawa, December 13, 2011, 1545.

businesses without discriminating based on size, and review the concept of eligible net sales. However, in a time of budget cuts, the government would be hard-pressed to inject additional funds.

While some witnesses commend AgrilInvest, others find it of little benefit because of its cap. Others, like the Canadian Cattlemen's Association, think that AgrilInvest discriminates against large operations with high production output but low profit margins.⁴² This program has therefore proven to be of little use for the feedlot operators. In addition, producers whose net sales are negative are not eligible. Some witnesses suggest the program be eliminated altogether.

I'm saying get rid of AgrilInvest and redirect those funds toward other programs within agriculture, whether it be market access, innovation, or research. Right now it's like peanut butter spread really thin. You're trying to get the largest number of producers as opposed to the largest number of production. Redirect the funds, is what I'm suggesting.⁴³

3. AgrilInsurance

AgrilInsurance is formerly known as Production and Crop Insurance. This insurance program covers crop losses, although there is also coverage for loss resulting from the death of certain farm animals. The program is delivered by the provinces by a Crown corporation or a branch of the provincial agriculture department. The federal government pays 36% of the premium, the province 24% and the farmer 40%.

This program is very popular with field crop producers because it is transparent and bankable. Indeed, farmers have timely access to payments that are paid in full. Although the program is offered in all provinces, witnesses complained about the different levels of protection from region to region. Moreover, this disparity results in a participation rate that varies by province.

In B.C., we have had several drought years in the last 10 years. In addition, many areas of B.C. face severe wildlife damage to their crops, which can drastically reduce their crop yield. The probable crop yield offered to a producer on his or her crops through AgrilInsurance is based on a producer's 10-year average production. With drought and wildlife damage, a producer's average production is seriously affected. In B.C., this program is not very well subscribed to, with only 15% of the producers who are raising crops accessing it. A lot of our producers are saying it's just not worth it any more, that their production yields on AgrilInsurance have been reduced so much.⁴⁴

42 Mr. Travis Toews, President, Canadian Cattlemen's Association, *Evidence*, Meeting No. 20, 1st Session, 41st Parliament, Ottawa, December 15, 2011, 1630.

43 Ms. Terri Holowath, Partner, Assurance and Accounting, Catalyst, *Evidence*, Meeting No. 18, 1st Session, 41st Parliament, Ottawa, December 8, 2011, 1720.

44 Ms. Connie Patterson, Regional Administrator, BC Breeder and Feeder Association, *Evidence*, Meeting No. 17, 1st Session, 41st Parliament, Ottawa, December 6, 2011, 1600.

Several witnesses suggested the need to maintain and improve AgriInsurance by providing adequate protection with reasonable premiums. In addition, the program should extend to the livestock sector, including beef and pork. Unlike witnesses who support a fair program for the whole country, some witnesses call for regional flexibility by having a program that is tailored to regional specificities and differences.

4. AgriRecovery

The AgriRecovery framework supports farmers in the event of disaster. Under this program, affected producers receive assistance that is not covered by other government programs.

AgriRecovery is the least predictable of all the BRM programs. Because the programs under the framework are event-driven, funding fluctuates from year to year. The estimated budget for AgriRecovery is \$125 million. Last year, this amount was around \$450 million. In addition to being the least predictable program it is also the least bankable. Affected farmers have to wait to find out what is covered and the level of support. Among the most criticized aspects of AgriRecovery, witnesses complained that it does not seem to be consistently delivered across the provinces or for different products in similar situations. That is why the witnesses called for a clear definition of what constitutes a “disaster.”

SARM's major concern with the current AgriRecovery program is how a disaster is defined. The definition of a disaster must be clarified and parameters outlined so that producers know what kinds of disasters will be covered. The current program provided disaster assistance for floods in 2010 and 2011, but southwest Saskatchewan experienced drought for four consecutive years around 2006 and received no assistance from the federal government. AgriRecovery should clearly convey to producers the definition of a disaster and outline the parameters defining what will and what will not be covered.⁴⁵

Recommendation 19

The Committee recommends that AgriRecovery's disaster relief framework include a clear and meaningful definition of “disaster” with specific criteria so that relief can be delivered consistently across the country.

5. Other programs: Price insurance programs

In addition to the existing BRM programs, some witnesses spoke of price-based insurance programs. Ontario, for example, recently implemented the Risk Management

45 Mr. Ray Orb, Vice-President, Saskatchewan Association of Rural Municipalities, *Evidence*, Meeting No. 17, 1st Session, 41st Parliament, Ottawa, December 6, 2011, 1550.

Program (RMP). Yet some witnesses were concerned that the RMP masks market signals and distorts prices because the program would be based on production costs. However, it is too early to pass judgment on its operation as it is just in its infancy. In Alberta, the cattle industry has adopted a similar program, but based on the futures market. However, the participation rate is still low, as noted by the Canadian Cattleman's Association.

Alberta has moved forward in the last couple of years with the development and implementation of price-insurance-based programming for cattle producers, from cow-calf through to finished cattle. Through this program, if producers identify that risk of market downturn is something they would like to protect themselves against, they would have a tool to conveniently lay that risk off. As you know, there are methods available in the marketplace today to protect against some of the price risk. However, the complexity of these methods, along with, in some cases, the lack of complete correlation with the Canadian market, has resulted in very low participation by producers, and participation by smaller and mid-sized operations is extremely rare.⁴⁶

The Cattle Price Insurance Program established in Alberta is a model that ensures a minimum price to producers. This price is set according to an index calculated from market, or futures, prices on the Chicago Mercantile Exchange. Witnesses emphasized that such programs do not distort market signals since the index depends only on the market, not production costs. There is a great deal of interest in the price insurance model, which may prove to be an extremely beneficial risk management tool for producers.

Recommendation 20

The Committee recommends that Agriculture and Agri-Food Canada study the possibility of establishing price insurance programs across the country.

C. The Advance Payments Program

The APP is not part of *Growing Forward* per se, but it is a key financial tool for farmers. Funded exclusively by the federal government under the *Agricultural Marketing Programs Act*, the APP is a loan guarantee program that gives producers easier access to cash advances. The maximum cash advance available to each producer is \$400,000; the first \$100,000 is interest-free. Producer organizations are responsible for delivering the program on behalf of Agriculture and Agri-Food Canada.

Many crop and livestock producers find the APP to be a very useful financial tool to provide liquidity. The program allows farmers to market their products in a timely manner. Although the government has shown flexibility by extending the repayment period at various times for struggling sectors, farmers fear that the next repayment schedule will

46 Mr. Travis Toews, President, Canadian Cattleman's Association, Evidence, Meeting No. 20, 1st Session, 41st Parliament, Ottawa, December 15, 2011, 1545.

affect their credit worthiness. Cattle producers had until March 31, 2012 to repay their cash advances and hog producers have until March 31, 2013.

The Advance Payments Program and emergency advances have worked well for the hog sector. However, producers are anxious about the pending repayment schedules, and we are closely monitoring the situation as the deadline for producer plans to be submitted arrives.⁴⁷

Many farmers want the payment date extended. Also, several producers pointed out that the APP could be improved if the advance and the interest-free portion were increased.

Recommendation 21

The Committee recommends that Agriculture and Agri-Food Canada review the Advance Payments Program to consider the possibility of providing more flexible repayment options.

CONCLUSION

The renewal of *Growing Forward* comes at a time of relative prosperity for the Canadian agriculture and agri-food sector. High prices contrast with those of the early 2000s, and demand in international markets is increasing. This does not mean, however, that there are not obstacles to overcome — achieving global food security, climate change, the emergence of low-cost producing countries like Brazil, the attraction of the Canadian market to other exporting countries, and always increasing consumer demand make the task more difficult for Canadian producers.

The Committee's study shows the need for FTP governments to direct *Growing Forward 2* toward a business strategy that would allow Canadian agriculture to differentiate. By focusing on risk management programs that do not mask market signals, *Growing Forward 2* will enable the industry to better plan and seize opportunities when they arise. By focusing on innovation, promoting market access, allowing industry to meet consumer expectations, whether international or domestic, *Growing Forward 2* has the potential to have a real impact on the industry and strengthen its competitiveness. The Committee believes that its recommendations will make it possible to achieve this potential and make the agriculture and agri-food industry a leader in the Canadian economy.

47 Mr. Jean-Guy Vincent, Vice-President, Board of Directors, Canadian Pork Council, *Evidence*, Meeting No. 18, 1st Session, 41st Parliament, Ottawa, December 8, 2011, 1540.

LIST OF RECOMMENDATIONS

Recommendation 1	4
The Committee recommends that <i>Growing Forward 2</i> recognize that the prosperity of the agriculture and agri-food sector depends on the sector’s ability to take advantage of international and domestic market trends; and that the strategic framework focus on programs that improve competitiveness, such as innovation and trade.	
Recommendation 2	6
The Committee recommends that Agriculture and Agri-Food Canada conduct an analysis of its practices and administrative policies in order to determine whether any has the potential to impede collaboration among the various research bodies, and that it propose ways of removing those impediments.	
Recommendation 3	8
The Committee recommends that <i>Growing Forward 2</i> include support for the commercialization and adaptation of innovation, similar to the current Agricultural Innovation Program, or other fiscally responsible incentives.	
Recommendation 4	10
The Committee recommends that the Agri-Science Clusters Initiative be renewed and that the rules be amended so that the direction of a given project can be changed and funds can be reallocated from one period to another.	
Recommendation 5	11
The Committee recommends that the Developing Innovative Agri-Products Initiative be renewed and that a program like the Agricultural Flexibility Fund be included in <i>Growing Forward 2</i> as an alternate and flexible source of funding to facilitate short- and long-term research on emerging issues that may involve one or more commodities.	
Recommendation 6	12
The Committee recommends that Agriculture and Agri-Food Canada simplify the administrative and accountability procedures of its research and innovation support programs by implementing a system of appropriate audits and ensuring that the rules are applied consistently to all research institutions.	
Recommendation 7	14
The Committee recommends that Agriculture and Agri-Food Canada increase the Market Access Secretariat’s budget in order to increase the secretariat’s capability to solve market access problems encountered by the Canadian agriculture and agri-food sector.	

Recommendation 8	17
The Committee recommends that Agriculture and Agri-Food Canada consider the feasibility of transforming the generic component of the AgriMarketing Program into a multi-year export support program modeled after the International Pork Marketing Fund.	
Recommendation 9	17
The Committee recommends that Agriculture and Agri-Food Canada and the industry jointly explore a more effective procedure for analyzing files submitted under the AgriMarketing Program for small and medium-sized businesses.	
Recommendation 10	19
The Committee recommends that <i>Growing Forward 2</i> include a support program for the development and implementation of national marketing strategies developed, for example, by the Value Chain Round Tables.	
Recommendation 11	25
The Committee recommends that programs be incorporated into <i>Growing Forward 2</i> that would help the Canadian agriculture and agri-food sector adapt to and meet consumer demands.	
Recommendation 12	27
The Committee recommends that the government seek to achieve food safety regulation equivalency with trading partners, develop processes to increase regulatory compatibility, and recognize scientific evidence from other countries where appropriate and meeting Canadian standards.	
Recommendation 13	29
The Committee recommends that <i>Growing Forward 2</i> include specific support programs for new entrants in agriculture, for continuous training and learning and for organizations that promote and deliver farm management consulting services.	
Recommendation 14	31
The Committee recommends that the government report to the Committee on the actions it has taken subsequent to the report on the rail freight services review.	
Recommendation 15	31
The Committee recommends that the government investigate the current condition of the existing fleet of Canadian grain rail cars, and begin to plan for updating the current fleet with a more modern rail car that will increase the efficiency and productivity of the government's rail car fleet while decreasing the overall environmental footprint.	
Recommendation 16	32
The Committee recommends that the government continue to support the supply management system by defending it in trade negotiations.	

Recommendation 17	35
The Committee recommends that the business risk management suite of programs of <i>Growing Forward 2</i> respect the principles of transparency, simplicity, timely payments, market neutrality and nationwide equality, and better reflect the needs of farmers.	
Recommendation 18	36
The Committee recommends that AgriStability be reviewed with the provinces and territories following the principles enunciated in recommendation 16.	
Recommendation 19	38
The Committee recommends that AgriRecovery’s disaster relief framework include a clear and meaningful definition of “disaster” with specific criteria so that relief can be delivered consistently across the country.	
Recommendation 20	39
The Committee recommends that Agriculture and Agri-Food Canada study the possibility of establishing price insurance programs across the country.	
Recommendation 21	40
The Committee recommends that Agriculture and Agri-Food Canada review the Advance Payments Program to consider the possibility of providing more flexible repayment options.	

APPENDIX A: COMMITTEE HEARINGS ON THE BIOTECHNOLOGY INDUSTRY DURING THE 40th PARLIAMENT, THIRD SESSION

After debating Bill C-474, *An Act respecting the Seeds Regulations* (analysis of potential harm), the Standing Committee on Agriculture and Agri-Food (the Committee) decided to examine the status of the agriculture and agri-food biotechnology industry in Canada. The members hoped to gather information on the various stakeholders in the sector, the opportunities biotechnology creates for the Canadian agriculture and agri-food industry, and problems stakeholders encounter in developing biotechnologies. The Committee also hoped to determine what public policy is needed for the sector to be productive, competitive and innovative and to benefit the Canadian agriculture and agri-food sector.

The Committee held 10 public hearings between December 2010 and March 2011 in Ottawa and Guelph, Ontario; and Saskatoon, Saskatchewan. It heard researchers, corporations, agricultural organizations and groups representing members of the public interested in the impact of the development of biotechnologies. The Committee also visited public and private research institutions across the country.

This document is a summary of the issues discussed by the witnesses during the public hearings. Following a brief overview of the themes that were addressed during the public hearings, the summary presents ideas that were put before the Committee for each major theme.

THEMES ADDRESSED DURING THE HEARINGS

The witnesses began by sharing their vision of what biotechnologies are. Biotechnologies are more than transgenic crops and genetically modified organisms (GMOs). Many other biotechnological processes are used to improve plants and animals and also in agri-food and industrial processing. The dialogue with the members of the Committee covered the evolution of biotechnology, the benefits of biotechnologies in terms of agricultural innovation and the importance to the future of agriculture and agri-food around the world.

Much of the discussions focused on genetically modified crops because they have monopolized public debate on biotechnologies in recent years. The witnesses stated the advantages and disadvantages of GMOs for the environment, health and the Canadian economy. They talked about the importance of appropriate regulation and expressed their views on the direction regulations should take in Canada. Among the other issues raised were the coexistence of genetically modified crops and “conventional” or organic varieties and the need to initiate or renew dialogue between supporters and opponents of this technology.

Research and development issues were also discussed. The witnesses described their vision of research funding. They also identified the impact of regulations on research and development, in particular regulations on intellectual property and the approval of new products.

SUMMARY OF ISSUES — BIOTECHNOLOGY

A. Definition and Evolution

Biotechnology is broadly defined as scientific applications that involve the use of living organisms, or parts of living organisms, including individual genes, to provide new methods of production and make new products. It includes genetic engineering (GE), in which an organism's genetic material is intentionally altered in a way that does not occur naturally, such as by the insertion of foreign genes, as well as a range of non-GE molecular techniques.

The witnesses differentiated conventional biotechnology (such as the use of yeast for fermentation) from modern biotechnology. Modern biotechnology comprises relatively recent methods that have made great strides in the past decade; examples include genomics, biofortification and molecular marking. The best-known modern technology is genetic engineering, which helps in the production of genetically modified organisms or GMOs.

There are clearly two views of the evolution of modern biotechnology. Some think that recent methods are an extension of older methods, while others think that the advent of genetic engineering brought about a more radical change:

- Some witnesses consider genetic engineering to be a fundamentally different process from other technologies because it can be used to introduce a foreign gene into an organism.
- Other witnesses believe that plant selection has always been based on the introduction of new characteristics, often with the help of methods that are far removed from nature like mutagenesis: they indicated that thousands of genes have been incorporated into crops from species with which they have no affinity in their natural state without the use of genetic engineering.

Although Canadian legislation uses a broad definition of biotechnology, some witnesses limited their comments on biotechnology to genetic engineering alone because in their opinion, biotechnology cannot be considered homogeneous. The witnesses underscored the confusion that may exist in the minds of the public between biotechnology and genetic engineering. Because biotechnology is more than GMOs, the reservations about biotechnology that were expressed pertained only about GMOs.

B. Examples of Technologies and Products

The witnesses described numerous methods used in modern biotechnology, such as genomics, proteomics, molecular marking, tissue culture, pyramidal gene arrangement, targeted induced local lesions in genomes (TILLING), targeted mutagenesis, genetic engineering and bio-informatics. These methods are applied at different stages of new product research and development.

For example, genomics is the study of the totality of the hereditary information of an organism, or the “genome,” which includes genes, also non-coding regions of DNA or RNA that may serve other functions and have effects on how genes are expressed. Tissue culture consists in growing identical plants from the cells of a single plant and accelerates the development of a new variety. Genetic engineering, meanwhile, consists in introducing a foreign gene into an organism’s genome.

New products can be developed using one or more of these methods. The witnesses talked about a number of products that are currently on the market or at the research stage:

- new crop varieties that have such properties as tolerance of drought or other stressors (cold and salt), disease resistance or the ability to use the nitrogen in soil more efficiently;
- food and food supplements, such as products fortified with Omega-3 fatty acid;
- drugs and vaccines; many existing drugs (insulin, for example) are genetically engineered;
- animals modified to meet production requirements; examples include a pig genetically engineered to excrete less phosphorus (Enviro-pig) and a salmon engineered to grow faster.

C. Role and Importance of Biotechnologies in Farm Production

Technological change has been at the core of growth in agricultural productivity for 150 years. Innovation is needed in order to increase farm productivity around the world and meet such challenges as a growing population, the need for water and climate change. Innovation is also essential in keeping the Canadian agriculture and agri-food industry competitive with countries that invest heavily in research and development.

Biotechnology can be credited with a large proportion of the innovations that have been made in Canadian agriculture. Many industries attribute their current success to innovation in general and biotechnology in particular: much of the development of soya, canola and pulses took place in Canada with the advent of new varieties.

However, whether the increase in yield over the past 10 years can be attributed to genetic engineering or other factors not developed by genetic engineering that may come

into play is open to debate. For example, the pulse industry has developed many varieties using modern biotechnology, but not genetic engineering.

For many, biotechnology has an important role to play in improving agricultural productivity and creating new products. However, some think that we should try to invest as much effort and resources in agronomic research and organic farming methods.

Some believe that genetic engineering is not the answer to increased agricultural productivity and is not even necessary, because the same results can be obtained using other methods. Others, meanwhile, believe that genetic engineering is one of many tools and that it has its benefits but is not a miracle solution.

SUMMARY OF ISSUES — ADOPTION, PERCEPTION AND CONSEQUENCES

Much of the discussion during the hearings was devoted to GMOs and genetic engineering. The biotechnology debate focused primarily on consumer acceptance of GMOs and its repercussions down the road. There was conflicting evidence on many issues; that evidence is reported here without any indication of relative weight (many witnesses in favour of one argument, for example).

A. Adoption

GMOs have been widely used by Canadian farmers since the mid-1990s. For example, more than 80% of farmers on the Prairies use genetically modified varieties.

Canada ranks fifth in the world in areas seeded with GMOs. The other countries that have adopted this technology are the United States, China, South Africa, Argentina and Brazil. Inversely, some countries, such as the European Union countries and Japan, are still wary of these products.

B. Environmental and Health Benefits and Risks

GMOs have been in use since the mid-1990s, and there have been no proven cases of damage to health or the environment. A study of more than 500 independent research groups carried out by the European Commission showed that GMOs are as safe for health and the environment as other foods currently on the market. The Canadian Biotechnology Advisory Committee has also concluded that there are no scientific data indicating that genetically modified plants and foods create more health and environmental problems.

The risks are hypothetical and difficult to prove. It is therefore important to be vigilant and monitor human health and the environment after the products hit the market.

Health:

- Genetic engineering is a new frontier with long-term consequences that are still unknown. Studies have shown possible health effects, which is an indication that more research is needed. This refers to a very small

number of studies not published in refereed journals, raised by a small number of witnesses. Further, several subsequent witnesses dismissed these studies as having little scientific credibility, the finding of which were contrary to a much larger body of work.

- Regulatory bodies are aware of the new studies and are evaluating them. Standardized research protocols are needed so that the results of studies can be replicated and confirmed beyond the shadow of a doubt.
- In terms of health risks, the key is to study which gene was introduced and what it produces, because the concept that natural products are better is false (there are many toxic natural substances), and it is also not true that GMOs are safer than other foods.
- People talk about the risk associated with GMOs but know little about the risks associated with many other substances found in food.

Environment:

- The biggest risk stems from the fact that a gene can easily pass from one variety to another or from one species to another. Once a gene has passed into a wild population, it can further spread and would be difficult if not impossible to contain.
- Some indigenous varieties of corn in Mexico have been found to be contaminated, and that could be a problem for the preservation of biodiversity in that country.
- Genetically engineered salmon could compete with wild species.
- GMOs are not environmental disasters. Some varieties have made it possible to adopt more environmentally friendly methods, such as minimum till cropping systems, and the decrease of the use of pesticides. Studies have shown, however, that the amount of pesticide applied to some crops has increased.

C. Agronomic and Economic Benefits and Risks

Farmers would not choose GMOs if there were nothing to gain. From an agronomic point of view, existing GMOs have been used to improve weed control and increase the use of zero tillage systems. Studies have shown that farmers have earned hundreds of millions of dollars from genetically modified canola since the product was introduced. It has increased the net income of the farmers who use it, primarily because the cost of some inputs (fuel, etc.) is lower.

The introduction of GMOs is not without risk, however: weeds that are resistant to some herbicides can emerge, for example, or private companies may increase their

control of the seed supply, especially if they have the best stock of elite seeds. There could be an increase in dependency on inputs from outside the farm (licensed technology, patented seeds, etc.) and a rise in monoculture.

For some, controlling the seed industry is no different than controlling any other industry, such as banking, fertilizer and farm machinery. Farmers always have the option of not buying genetically modified varieties.

Market reaction is another risk, since access to genetically modified products on some international markets is a problem. Because some markets are wary, contamination of unmodified varieties can lead to market closures and heavy economic losses. The economy has already suffered as a result of the appearance of genes where they were not expected to be (Starlink corn, transgenic flax, etc.).

The dispersal of genes to organic farms is a major challenge for organic farming and limits the range of choices: organic farmers say they can no longer grow organic canola because they cannot guarantee that their product has not been contaminated by genetically modified canola.

If genetically engineered pork were approved for human consumption, consumers might shy away from pork products so they do not run the risk of eating genetically engineered pork. That would hurt the entire industry.

D. Regulation

Regulation is the foundation of the public's trust in products. Two visions of Canada's regulatory system were presented. On the one side are those who believe that biotechnology regulation in Canada is working and that we have one of the best regulatory frameworks in the world. There are areas that could be improved, but no drastic changes are needed. On the other, are those who think that the regulatory system needs to be reviewed and that the government must implement the recommendations made by the Royal Society of Canada in its 2001 report *Elements of Precaution: Recommendations for the Regulation of Food Biotechnology in Canada*. The witnesses discussed the following issues:

Scientific principles underlying the evaluation of new products: Some believe that the available scientific information shows that the current regulatory system is working. Since it is impossible to prove that there is no risk, the weight of scientific evidence has to be used, and measures have to be taken to ensure that new products pose no unacceptable risk to humans or the environment: when 1 study says one thing and 40 others say something else, we have to look at the weight of the evidence. Others believe that precautions have to be taken in regulating and approving new products; they oppose the principle on which current regulations are based, namely that genetically modified crops are by and large equivalent to conventional crops. They base their argument on a report from the National Research Center in the United States which says that we should reassess our study methods.

Need to evaluate products case by case: Canada regulates products, not the way they were obtained (technology), because a crop resistant to herbicides, for example, can be created using genetic engineering or conventional methods. Most of the witnesses support this approach, although some would like regulations that apply only to genetically engineered products. Everyone agrees, however, that each product has to be evaluated on its own merit. The point was also made that the current regulations give the same treatment to GMOs that essentially pose no risk as they do to GMOs that pose significant risks. Some are too regulated, and others are not regulated enough. Because every GMO poses a different risk, a multi-level regulatory system like the system currently used for drugs should be put in place. It was noted that there are no specific regulations for genetically engineered animals.

Trust in the system: The witnesses talked about the need to include as many stakeholders as possible in the regulatory process in order to ensure that the opinions of those who are in the field are heard. It was stated that people may get the impression that the regulatory system was designed to benefit companies, mainly because the government's decision-making processes are kept secret and do not have any public input. On the other side of the coin, some witnesses stated that the system is sometimes too slow and costly for companies. It was pointed out that the government's role is not to block these products or to promote them. The government is a third party; its role is to defend a regulatory system that protects the public's health and the environment.

Need for greater transparency: Some witnesses stressed the need for transparency in regulatory decisions so that everyone has confidence in the system. They stated that regulatory authorities examine all new scientific data, but that information is not in the public domain. Neither the public nor independent scientists have access to the scientific data the government evaluates. For now, regulatory authorities are required by law to keep confidential any information produced by a commercial venture. The witnesses talked about the need to come up with ways of making scientific data accessible. Peers could review scientific protocols and replicate experiments, and that would improve the regulatory process.

Science and socio-economic factors: For some witnesses, regulations must be based solely on scientific elements which show that a new product poses no risk to health or the environment. Straying from that concept would make the regulatory process too unpredictable and would drive investors away. They suggest that non-scientific elements are often commercial obstacles that do not mesh with World Trade Organization (WTO) rules. For others, the introduction of genetically modified wheat showed that evaluating biotechnology based on scientific criteria alone is not without problems. The case of genetically modified alfalfa shows that some products can be an economic threat for some farmers but that regulations are not designed to take that into account. They make the point that evaluation of the socio-economic impact of new genetically modified crops should be included in the Canadian regulations. There are quantitative methods based on scientific data that can be used to properly evaluate technology. Other countries, such as Argentina, take that approach without impeding trade.

Labelling and monitoring: Some witnesses talked about the need for a mechanism for monitoring the environmental and health effects of products after they go on the market. A government initiative to set up a project to monitor genetically modified foods was launched and then abandoned. Some witnesses stated that mandatory labelling of genetically modified foods could help track potential problems.

E. Coexistence

Studies show that genetically modified crops spread toward conventional crops and it is impossible to guarantee that there is absolutely no contamination. Some crops are better suited to segregation than others because of their biological properties. For example, soy growers and exporters have been able to put in place segregation systems that enable them to supply their customers with different types of soy with specific properties. This means they can supply Asian and European markets with GMO-free or certified organic products. This could not be done with other crops, such as canola: organic or non-genetically modified canola can be grown only in geographically isolated areas, such as Prince Edward Island. Some fear that the methods used by GMO growers will prevail and it will no longer be possible to guarantee GMO-free crops. In their view, not enough thought has been given to systems for segregating GMO and GMO-free crops.

Cohabitation of different types of farming: The witnesses talked about the importance of finding ways for all types of farming (organic, genetically engineered, etc.) to coexist. New technologies can be used to improve segregation, and it was stated that regulatory agencies should encourage molecular geneticists to come up with methods of preventing gene transfer in nature. Regulatory authorities already require buffer zones in some cases, but that method is not always effective. The United States is currently considering imposing geographical restrictions and segregation distances for some crops.

The industry has (or is hoping to) put in place protocols for segregating crops. Generally, however, it is very costly to keep crops apart so that they do not mix. For now, growers who do not use GMOs are the ones who assume the cost and the task of implementing measures to guarantee effective segregation. The organic farming sector says that biotechnology developers and users should pay for and implement measures to guarantee successful coexistence that respect both farming systems. Biotechnology companies and farmers who grow GMOs should compensate organic farmers for the financial losses caused by the sudden appearance of GMOs in plants and seeds.

Organic farming: Organic farmers accept pesticide residue on their products but do not tolerate any GMO contamination. That is a standard the organic farming industry has imposed on itself and can be found in international organic standards. To prevent pesticide contamination, organic producers create buffer zones. They also have to provide affidavits from their neighbours in which they undertake to refrain from spraying in windy conditions, etc. It is easier to take measures to prevent contamination by pesticides than by GMOs. The organic farming industry has not reached consensus on GMO contamination (zero tolerance or acceptance of a certain level of contamination as is the case for pesticides). Stakeholders do not believe that European consumers will accept a small percentage of GMOs in their products.

Alfalfa: The organic industry is afraid that the introduction of genetically modified alfalfa will eradicate certified organic alfalfa. Some stakeholders have called for a moratorium on the approval of genetically modified alfalfa. Genetically modified alfalfa has received regulatory approval in respect of health and the environment. However, it cannot be sold in Canada because the variety in question has not been approved. Some witnesses stated that the company has indicated it will not seek approval in Canada as long as farmers do not ask for it, there is no clear and acceptable policy on coexistence, and there has been no full deregulation in the United States (the United States has deregulated GM alfalfa since the end of the Committee study).

International trade: Internationally, there is zero tolerance of the presence of unapproved genetic material. That is the current policy in Canada, the United States, Australia, Japan, Korea and all European Union countries. The policy can be attributed to the fact that if a variety has not been approved, it is not yet considered safe. To avoid a situation where a variety has been approved in one country but not in another, the industry has made a commitment to try to obtain approval in all major countries in which a product will be marketed. For example, a variety of canola cannot be marketed in Canada unless it has been approved in the country's primary export markets. Others have stressed the importance of harmonizing approval processes so that producers can sell their products in countries where consumers are less amenable to biotechnology.

However, with the proliferation of varieties and properties, many stakeholders think it is unlikely that a zero tolerance policy will last. Efforts must therefore be made to find ways of adapting the tolerance rules to international trade. It was proposed that Canada take on a leadership role in the modernization of global regulations. The presence of small quantities of genetically modified crops in a given country should not impede the movement of products around the world. A policy aimed at managing the presence of traces or low levels of genes in products that growers would like to see approved in other countries would be good for international trade. Some witnesses stated that there are already international rules on the movement of GMOs: the *Cartagena Protocol on Biosafety* was established to manage the international transportation of modified living organisms. Canada signed the protocol but has never ratified it.

F. The Need for Dialogue

In the late-1990s, initiatives were taken to sit the various stakeholders down in one room. A number of authorities studied the issues related to biotechnology, in particular the Canadian Biotechnology Advisory Committee under the jurisdiction of Industry Canada and the Canadian General Standards Board's Committee on Voluntary Labelling and Advertising of Foods that are and are not Products of Genetic Engineering. The groups that opposed the technology withdrew from these initiatives primarily because they were biased and favoured the industry.

The debate over GMOs is certainly not over, and the witnesses stated that they support dialogue among all the stakeholders because the public needs to be fully informed and the interests of the stakeholders are better defined and reconciled. The debate has to be broad enough to incorporate all segments of society. The debate has often been

brought down by sensationalistic headlines (for or against) that have not served either cause. The type of media coverage can have a significant impact on the quality of the debate (United Kingdom, for example); the level of dialogue must be raised.

SUMMARY OF ISSUES — RESEARCH AND DEVELOPMENT

A. Funding

The witnesses noted the importance of investment by both the public and the private sectors. The industry has invested a great deal in biotechnology research, but only the big corporations can afford to invest heavily. Small companies have trouble raising capital. As a result, innovations are concentrated in a handful of companies and research is limited to a certain number of crops (e.g., canola, corn, soy), to the detriment of small grain crops and pulse. The private sector invests only in crops that are produced in large quantities and crops on which there is no research and development suffer.

Some witnesses remarked that public-sector spending on agricultural research has decreased in Canada, and that the decline has been accompanied by lower growth in agricultural productivity since the 1990s. The positive impact of public investment in research on agricultural productivity has been demonstrated. The involvement of the public sector also ensures independent research and investment in areas of the agricultural industry that are not as appealing to the private sector because they are too small or there is no product to market (for example, research on organic farming methods). The witnesses stated that China and many other countries invest heavily in public agricultural research.

The witnesses were adamant that agriculture remain a national research priority. They said they were disappointed by a number of recent decisions by grant-giving agencies. The National Science and Engineering Research Council (NSERC) has dropped “Quality and Novel Bioproducts” from its list of target areas for strategic grants, and the Networks of Centres of Excellence has not renewed its funding for the Advanced Foods and Materials Network (AFMNet).

Regarding the type of investment, the trend is toward short-term funding (one to three years). The witnesses stated that there is also a need for ongoing and permanent investment, particularly in basic research. They also talked about investing in research infrastructures and in what is known as the “death valley” of research, that area between a concept and an actual product; many good ideas die because there is no mechanism for moving them forward.

Almost all of the witnesses said that it is important to foster collaboration among the industry, producers, universities, governments and consumers. The food industry is fragmented at the national level, and research, too, is often dispersed. To help build partnerships, the government can, for example, provide the research infrastructure and thus attract corporations. According to the cluster theory, competitors will set up alongside each other. The witnesses talked about many partnerships they have formed, for example, pulse producers: the University of Saskatchewan, and the Saskatchewan Department of

Agriculture signed an agreement to develop new varieties. The development of new products must begin with a discussion with clients. Historically, research was done without giving any thought to clients or users.

B. Research and Regulations

To encourage investment in research and development, regulations must be clear and foreseeable; otherwise there is a risk of researchers going elsewhere. The issues raised were:

Cost: The witnesses mentioned the very high cost of getting a new product approved. It costs hundreds of thousands of dollars over several years to get a GMO on the market. That favours big corporations and reduces competition. It is also not good for small companies.

Administration: The industry finds that approval generally takes longer in Canada than in other countries. More and more crops are being developed for industrial applications (bioplastic, etc.) or energy, and regulations must be adapted to that shift. Regulations must also be flexible enough to ensure that undue obstacles to innovation are not created.

Intellectual property: Intellectual property rules ensure return on investment. In the field of biotechnology, Canada's legislative framework is equivalent to the frameworks established by our main partners. However, some aspects of the regulatory framework applicable to intellectual property create uncertainty that can undermine the investment climate. Intellectual property is not always evenly protected, and the practices used in research laboratories are not uniform.

APPENDIX B LIST OF WITNESSES

**41st Parliament – First Session
Growing Forward 2**

Organizations and Individuals	Date	Meeting
<p>As an individual Sylvain Charlebois, Associate Dean of Research and Graduate Studies, College of Management and Economics, University of Guelph</p> <p>Canadian Swine Research and Development Cluster Claude Miville, Chair</p> <p>Canola Council of Canada JoAnne L. Buth, President</p> <p>Vineland Research and Innovation Centre Jim Brandle, Chief Executive Officer</p>	2011/10/06	4
<p>As an individual Rene Van Acker, Professor and Associate Dean, External Relations, University of Guelph</p> <p>Genome Prairie Wilfred A. Keller, President and Chief Executive Officer</p> <p>P.E.I. Health Coalition Mary Boyd, Representative Leo Broderick, Representative</p> <p>Pulse Canada Gordon Bacon, Chief Executive Officer</p>	2011/10/18	5
<p>British Columbia Cattlemen's Association Kevin Boon, General Manager</p> <p>British Columbia Fruit Growers' Association Joe Sardinha, President</p> <p>University of Manitoba Michael Trevan, Dean Karin Wittenberg, Associate Dean, Research, Faculty of Agricultural and Food Sciences</p> <p>University of Saskatchewan Mary Buhr, Dean and Professor, College of Agriculture and Bioresources</p>	2011/10/20	6

Organizations and Individuals	Date	Meeting
Canada Organic Trade Association Matthew Holmes, Executive Director	2011/10/25	7
Saskatchewan Canola Development Commission Franck Groeneweg, Director		
University of Guelph K. Peter Pauls, Professor and Chair, Department of Plant Agriculture		
University of Saskatchewan Douglas Freeman, Dean, Western College of Veterinary Medicine		
As an individual Evan Fraser, Associate Professor, Canada Research Chair, Department of Geography, University of Guelph	2011/10/27	8
Canadian Horticultural Council Anne Fowlie, Executive Vice-President		
Sustainable Chemistry Alliance Murray McLaughlin, President and Chief Executive Officer		
University of Saskatchewan Peter W.B. Phillips, Professor, Johnson-Shoyama Graduate School of Public Policy		
BC Association of Farmers' Markets Jon Bell, President	2011/11/01	9
CropLife Canada Peter MacLeod, Vice-President, Crop Protection Chemistry Dennis Prouse, Vice-President, Government Affairs		
Dairy Farmers of Canada Émie Désilets, Scientific Coordinator Pierre Lampron, Member, Board of Directors		
Canadian Cattlemen's Association Andrea Brocklebank, Research Manager Travis Toews, President	2011/11/03	10
Canadian Poultry Research Council Jacob Middelkamp, Chair Bruce Roberts, Executive Director		

Manitoba Forage Council	2011/11/03	10
Jim Lintott, Chairman		
Department of Agriculture and Agri-Food	2011/11/15	11
Greg Meredith, Assistant Deputy Minister, Strategic Policy Branch		
Canadian Farm Business Management Council	2011/11/17	12
Richard Robert, Chair		
Heather Watson, General Manager		
Fédération des groupes conseils agricoles du Québec		
Mathieu Pelletier, Management Agronomist, Réseau d'expertise en gestion agricole		
Johanne Van Rossum, President		
George Morris Centre		
Robert Seguin, Executive Director		
Organic Meadow Co-operative		
Ted Zettel, General Manager		
Canadian Canola Growers Association	2011/11/22	13
Todd Hames, Vice-President		
Christina Patterson, Policy Analyst		
Canadian Organic Growers		
Beth McMahon, Executive Director		
Dairy Farmers of Canada		
Ron Maynard, Vice-President		
Turkey Farmers of Canada		
Phil Boyd, Executive Director		
Mark Davies, Chair		
Canadian Federation of Independent Business	2011/11/24	14
Virginia Labbie, Senior Policy Analyst, Saskatchewan and Agri-business		
Farmers of North America Inc.		
James Mann, President and Chief Executive Officer		
Grain Growers of Canada		
Trevor Petersen, Member, Alberta Barley Commission		
Richard Phillips, Executive Director		
Ontario Agri-Food Technologies		
Gord Surgeoner, President		

As an individual	2011/11/29	15
David Sparling, Professor, Richard Ivey School of Business, University of Western Ontario		
Canadian Vintners Association		
Luke Hartford, Vice-President, Economic and Government Relations		
Dan Paszkowski, President and Chief Executive Officer		
Organic Farming Institute of British Columbia		
Annamarie Klippenstein, Board Member		
Kevin Klippenstein, Chair		
Canadian Bankers Association	2011/12/01	16
Peter Brown, Director, Agriculture, Scotiabank		
Bertrand Montel, Market Segment Manager, Agriculture, National Bank		
David Rinneard, National Manager, Agriculture, BMO Bank of Montreal		
Marion Wrobel, Vice-President, Policy and Operations		
Farm Credit Canada		
Lyndon Carlson, Senior Vice-President, Marketing		
Greg Stewart, President and Chief Executive Officer		
National Steel Car Limited		
Gregory J. Aziz, Chairman and Chief Executive Officer		
Lorraine Johnson, Chief Operating Officer		
Michael Hugh Nicholson, Executive Vice-President, Marketing, Sales and Quality		
Peter Leigh Scott, Regional Vice-President, Marketing and Sales		
BC Breeder and Feeder Association	2011/12/06	17
Connie Patterson, Regional Administrator		
Éleveurs de volailles du Québec		
Nil Béland, Member, Board of Directors		
Potatoes New Brunswick		
Joe Brennan, Chairman		
Saskatchewan Association of Rural Municipalities		
Ray Orb, Vice-President		

Canadian Pork Council	2011/12/08	18
Catherine Scovil, Associate Executive Director		
Jean-Guy Vincent, Vice-President, Board of Directors		
Catalyst		
Terri Holowath, Partner, Assurance and Accounting		
Chicken Farmers of Canada		
Mike Dungate, Executive Director		
David Fuller, Chair		
Keystone Agricultural Producers		
Doug Chorney, President		
National Cattle Feeders' Association		
Russell Evans, Manager, Policy and Research		
As an individual	2011/12/13	19
Louis Dechaine, Farmer		
Jim Gowland, Owner, Operator, Farm Business		
Arden Schneckeburger, Farmer		
Okanagan Tree Fruit Cooperative		
Nirmal Dhaliwal, Director		
Atlantic Grains Council	2011/12/15	20
Michael Delaney, Member		
Allan Ling, Chairman		
Canadian Cattlemen's Association		
Ryder Lee, Manager, Federal Provincial Relations		
Travis Toews, President		
Canadian Federation of Agriculture		
Humphrey Banack, Second Vice-President		
National Farmers Union		
Kevin Wipf, Executive Director		
Agri-Food Export Group Quebec-Canada	2012/02/01	21
André A. Coutu, Chief Executive Officer		
Francine Lapointe, Director, Programs and Government Affairs		
Canada Pork International		
Jacques Pomerleau, President		

Canadian Agri-Marketing Association	2012/02/01	21
Stefanie Nagelschmitz, Member		
Western Canadian Wheat Growers Association		
Mike Bast, Director		
University of Alberta	2012/02/06	22
James Rude, Professor, Department of Resource Economics and Environmental Sociology		
University of Guelph		
Manish N. Raizada, Associate Professor, International Relations Officer, Department of Plant Agriculture		
University of Guelph		
Rickey Y. Yada, Professor, Department of Food Science		
University of Manitoba		
Derek Brewin, Associate Professor, Department of Agribusiness and Agricultural Economics		
Canadian Produce Marketing Association	2012/02/08	23
Ron Lemaire, President		
Jane Proctor, Vice-president, Policy and Issue Management		
Canadian Soybean Exporters' Association		
Martin Harry, Chair		
Martin VanderLoo, Treasurer		
Grape Growers of Ontario		
Mary Jane Combe, Market Analyst		
Debbie Zimmerman, Chief Executive Officer		
Pulse Canada		
Gordon Bacon, Chief Executive Officer		
Canadian Agri-Food Trade Alliance	2012/02/13	24
Kathleen Sullivan, Executive Director		
Canadian Food Inspection Agency		
Paul Mayers, Associate Vice-President, Programs		
Department of Agriculture and Agri-Food		
Fred Gorrell, Director General, Market Access Secretariat		
Steve Tierney, Assistant Deputy Minister, Market and Industry Services Branch		

Viterra	2012/02/13	24
Richard Wansbutter, Vice President, Government and Commercial Relations		
As an individual	2012/02/15	25
Evan Fraser, Associate Professor, Canada Research Chair, Department of Geography, University of Guelph		
Agriculture Union		
Bob Kingston, National President		
Consumer and Market Demand Network		
John Cranfield, Member, Management Team		
Food and Consumer Products of Canada		
Carla Ventin, Vice-President, Federal Government Affairs		
Canadian International Grains Institute	2012/02/27	26
Rex Newkirk, Director, Research and Business Development		
Canadian Restaurant and Foodservices Association		
Christine Moore, Vice President, Supply Chain, Unified Purchasing Group of Canada Inc.		
Justin Taylor, Vice-President, Labour and Supply		
Consumers' Association of Canada		
Bruce Cran, President		
Humane Society International/Canada		
Sayara Thurston, Campaigner		
Alberta Food Processors Association	2012/02/29	27
Ted Johnston, President and Chief Executive Officer		
Bioniche Life Sciences Inc.		
Rick Culbert, President, Food Safety Division		
Food Secure Canada		
Anna Paskal, Senior Policy Advisor		

APPENDIX C LIST OF BRIEFS

41st Parliament – First Session Growing Forward 2

Organizations and Individuals

1. Agriculture Union
2. British Columbia Cattlemen's Association
3. Canada Pork International
4. Canadian Agri-Food Trade Alliance
5. Canadian Cattlemen's Association
6. Canadian Poultry Research Council
7. Canadian Soybean Exporters' Association
8. Canadian Swine Research and Development Cluster
9. Chicken Farmers of Canada
10. Dietitians of Canada
11. Farmers of North America Inc.
12. Food and Consumer Products of Canada
13. Fraser, Evan
14. George Morris Centre
15. Humane Society International/Canada
16. National Cattle Feeders' Association
17. Saskatchewan Association of Rural Municipalities
18. Sustainable Chemistry Alliance
19. Turkey Farmers of Canada
20. University of Guelph (Rickey Y. Yada)
21. University of Manitoba (Michael Trevan)
22. University of Manitoba (Derek Brewin)
23. Vineland Research and Innovation Centre

APPENDIX D LIST OF WITNESSES

40th Parliament – Third Session Biotechnology Industry

Organizations and Individuals	Date	Meeting
<p>Ontario Agri-Food Technologies Gord Surgeoner, President</p> <p>University of Guelph Rickey Y. Yada, Professor, Department of Food Science</p> <p>University of Victoria Ian J. Mauro, Postdoctoral Fellow, School of Environmental Studies</p>	2010/12/14	44
<p>Canadian Biotechnology Action Network Lucy Sharratt, Coordinator</p> <p>CropLife Canada Lorne Hepworth, President Janice Tranberg, Vice-President, Western Canada</p>	2010/12/16	45
<p>As an individual Richard Gold, Professor, Faculty of Law, McGill University</p> <p>Réseau québécois contre les organismes génétiquement modifiés (OGM) Éric Darier, Quebec representative, Greenpeace André Nault, Representative</p> <p>Saskatchewan Pulse Growers Kofi Agblor, Director of Research</p> <p>University of Florida Andrew Schmitz, Professor, Food and Resource Economics Department</p>	2011/02/03	47
<p>As an individual John Cross Brad Hanmer, President, Hanmer Ag Ventures Inc.</p> <p>University of Saskatchewan Mary Buhr, Dean and Professor, College of Agriculture and Bioresources Jill Hobbs, Professor and Department Head, Department of Bioresource Policy, Business and Economics</p>	2011/02/07	48

Organizations and Individuals	Date	Meeting
William A. Kerr, Professor, Department of Bioresource Policy, Business and Economics	2011/02/07	48
Andrew Potter, Director, Vaccine and Infectious Disease Organization-International Vaccine Centre		
Bert Vandenberg, Professor		
Mark Wartman, Development Officer, College of Agriculture and Bioresources		
Advanced Foods and Materials Network	2011/02/09	49
Allan Paulson, Associate Scientific Director		
As an individual		
Frank Ingratta, President, Ingratta Innovations Inc.		
Monsanto Canada Inc.		
Mike McGuire, East Sales, Marketing Lead		
Derek Penner, President and General Manager		
Nutrasource Diagnostics Inc.		
William J. Rowe, President and Chief Executive Officer		
Ontario Fruit and Vegetable Growers' Association		
John Kelly, Vice President, Erie Innovations		
University of Guelph		
Michael J. Emes, Dean, College of Biological Science		
Manish N. Raizada, Associate Professor, International Relations Officer, Department of Plant Agriculture		
Steven Rothstein, Professor, Department of Molecular and Cellular Biology		
Rene Van Acker, Professor and Associate Dean, Department of Plant Agriculture		
As an individual	2011/02/15	50
William Van Tassel		
Canadian Soybean Council		
Jim Gowland, Chair		
Michelle McMullen, Manager		
Organic Council of Ontario		
Jodi Koberinski, Executive Director		
A&L Canada Laboratories Inc.	2011/02/17	51
George Lazarovits, Research Director		
Greg Patterson, President and Chief Executive Officer		

Organizations and Individuals	Date	Meeting
As an individual Larry Black	2011/02/17	51
Canadian Organic Growers Arnold Taylor, Past President		
Wilfrid Laurier University Alison Blay-Palmer, Associate Professor, Department of Geography and Environmental Studies		
Agrisoma Biosciences Inc. Steve Fabijanski, President and Chief Executive Officer	2011/03/01	52
Organic Federation of Canada Nicole Boudreau, Coordinator Ted Zettel, President		
University of Saskatchewan Peter W.B. Phillips, Professor, Johnson-Shoyama Graduate School of Public Policy		
FarmStart Christie Young, Executive Director	2011/03/03	53
National Research Council Canada Jerome Konecsni, Director General, Plant Biotechnology Institute		
Science Media Centre of Canada Suzanne Corbeil, Founding Chair and Champion Penny Park, Executive Director		
Canadian Canola Growers Association Richard White, General Manager	2011/03/24	57
Canola Council of Canada Jim Everson, Vice-President, Corporate Affairs		
Grain Growers of Canada Richard Phillips, Executive Director Stephen Vandervalk, President		

APPENDIX E

LIST OF BRIEFS

40th Parliament – Third Session

Biotechnology Industry

Organizations and Individuals

1. A&L Canada Laboratories Inc.
2. Agrisoma Biosciences Inc.
3. Canadian Biotechnology Action Network
4. Canadian Canola Growers Association
5. Canadian Soybean Council
6. Canola Council of Canada
7. Gold, Richard
8. National Research Council Canada
9. Organic Council of Ontario
10. Réseau québécois contre les organismes génétiquement modifiés (OGM)
11. University of Guelph (Manish N. Raizada)
12. University of Saskatchewan (Mary Buhr)
13. University of Saskatchewan (Jill Hobbs)
14. University of Saskatchewan (William A. Kerr)
15. University of Saskatchewan (Bert Vandenberg)
16. Van Tassel, William

REQUEST FOR GOVERNMENT RESPONSE

Pursuant to Standing Order 109, the Committee requests that the government table a comprehensive response to this Report.

A copy of the relevant Minutes of Proceedings for the study of *Growing Forward 2* from the 41st Parliament, First Session ([Meetings Nos. 3 to 28 and 35 to 39](#)) is tabled.

A copy of the relevant Minutes of Proceedings for the summary of the study of the *biotechnology industry* from the 40th Parliament, Third Session ([Meetings Nos. 44, 45, 47 to 53 and 57](#)) is tabled.

Respectfully submitted,

Larry Miller, M.P.

Chair

Dissenting Opinion: Growing Forward 2 New Democratic Party of Canada

While we appreciate the content and much of the witness testimony identified in the Committee Report on Growing Forward 2, we feel there are several glaring problems with the report as it stands. The report does not sufficiently reflect important concerns raised by numerous witnesses who testified before the committee. It does not adequately acknowledge some of the most critical needs facing the Canadian Agricultural and Food sector, and under-emphasizes the important supports that producers, retailers, and consumers will need in the coming years.

We applaud the recommendation relating to support for supply management in future trade negotiations.

To adequately set the stage for a robust agricultural and agri-food sector, the New Democratic Party has presented an additional set of recommendations:

- 1. Begin immediate development of a National Food Strategy**
- 2. Establish transparent and timely performance management of Business Risk Management (BRM) programs**
- 3. Reverse erosion of food safety**
- 4. Strengthen public research and ensure long-term stable funding for agricultural innovation**
- 5. Assess and respond to the regional needs of Agricultural and Agri-food sectors**
- 6. Adopt a prudent risk management approach to the use and uptake of biotechnology**
- 7. Support consumer driven demand for more humane livestock conditions**
- 8. Investigate concentration in retail and distribution markets**
- 9. Encourage the development of the co-operative sector**

This dissenting report outlines these recommendations in order of their priority.

Recommendation 1: Begin immediate development of a National Food Strategy

The Committee recommends that Agriculture and Agri-Food Canada facilitate the development of a national food strategy and that it initiate discussion of the links between the strategy and Growing Forward 2. (OR of the inclusion of the strategy into Growing Forward 2)

Canada needs a national food strategy that bolsters local food production, and builds linkages between consumers, retailers, public institutions, and producers. Such a strategy would also be an opportunity to address the need to reduce entrance barrier for new farmers, and restore Canada's food safety system. Growing Forward 2 is defined as 'Canada's agricultural policy agreement' (Agriculture and Agri-Food Canada website) and it therefore is appropriate that a National Food Strategy is part of that mandate:

“Growing Forward 2 will represent an evolution of previous frameworks and will aim to help the industry position itself to respond to future opportunities and challenges and create the conditions for long-term competitiveness, sustainability and adaptability, with an emphasis on industry capacity and self-reliance.” (Agriculture and Agri-Food Canada website)

Despite including a National Farm and Food Strategy in their latest platform, and despite hearing testimony from several witnesses about the important role the Federal government has as a facilitator of such a strategy, it was not recommended by this committee to include this process as part of Growing Forward 2:

“In addition, to ensure our continuing efforts to support farmers are as effective as possible, we will develop a National Farm and Food Strategy to guide federal policy through the coming years. The Strategy will build on our efforts to sustain the Canadian family farm, to strengthen food safety, and to open new markets for the world-class products of Canadian farmers.” (Conservative Platform 2011)

It is unfortunate that this campaign promise is not being kept. Given that numerous other OECD countries have adopted food strategies, including England, Scotland, Australia, and Ireland, Canada is being left behind. Furthermore, numerous Canadian organizations have developed National Food Strategies that should be reviewed by the Committee. These include: Food Secure Canada (People’s Food Policy), Canadian Federation of Agriculture Conference Board of Canada, Canadian Agri-Food Policy Institute . Furthermore, the NDP has begun elaborating a national food strategy (Food For Thought — Towards a Canadian Food Strategy).

Recommendation 2: Establish transparent and timely performance management of Business Risk Management (BRM) programs

Given that Recommendation 15 outlines the critical elements of timeliness and transparency in Business Risk Management (BRM) programs, the Department should institute a mandatory semi-annual review to ensure the department is meeting its commitments to improve the management of such programs and the program is achieving operational goals.

We heard from several witnesses who felt the major concerns with BRM implementation were the lack of predictability and timeliness when it came to payments. Findings from Chapter 3 of the 2011 Fall Auditor General Report (Payments to Producers — Agriculture and agri-Food Canada) confirmed many of these concerns:

The Auditor General recommended in 3.46 of the report:

Agriculture and Agri-Food Canada should analyze processing of payments for AgriStability and AgriInvest in a more systematic manner and follow up on remedies to improve the timelines of payments to producers.

The Department agreed and committed to fully implement this recommendation by April 2013.

The Department will more systematically review the design of income support programming as part of Growing Forward 2 discussions and will analyze its payment processing system to improve the timeliness of processing of payments. In that regard, the recent implementation of an updated application processing system will provide the Department with the capacity to produce more systemic reporting on application processing. The Department will use the reporting capacity to further improve the timeliness of producer payments. This recommendation will be fully implemented with Growing Forward 2 by April 2013.

We applaud the that Recommendation 15 addresses these issues, but feel that it does not go far enough in ensuring timely performance review. Given that these programs are a critical lifeline for farmers, they should be reviewed semi-annually to address any problems in implementation and ensure resources are directed accordingly.

Recommendation 3: Reverse erosion of food safety

That the Department ensures resources for food safety inspection are increased, and adopt immediately the major recommendations of the Report of the Independent Investigator into the 2008 Listeriosis Outbreak.

Given recent cuts to the Canadian Food Inspection Agency, New Democrats are gravely concerned that the health of Canadians is at risk. The Department should immediately cease any cuts to frontline inspectors and ramp up resources in order to ensure the continued quality of Canadian food. The 2008 Report of the Independent Investigator into the 2008 Listeriosis Outbreak included 57 recommendations, most of which have not been adequately considered or adopted by the Department.

The Committee heard testimony that emphasized the need for further inspection in the importation of food substances:

“Regarding import inspection and testing, the committee was led to believe that the rules are the same for both imports and exports, that producers in Canada have a level playing field, and that this is administered evenly. Nothing could be further from the truth. There is one set of rules, but they're certainly not applied the same way. Export inspection always gets top priority, because when you don't do it, the exports don't move. Imports are discretionary, and they get slid off the table in many cases. The ratio is approximately 100% of exports being inspected to about 2% of imports being inspected.” (Bob Kingston, National President, Agriculture Union, *Evidence*, 1st session, 41st Parliament, February 15, 2012)

The Canadian Medical Association has warned Canadians to `eat at their own risk`. In regards to the Listeriosis outbreak, they have pointed to glaring errors in Federal policy: “Government policy errors helped bring about this epidemic... The listeriosis epidemic is a timely reminder that the Harper government has reversed much of the progress that previous governments made on governing for public health. ... And listeriosis may be the least of it” (Canadian Medical Association, Editorial, October 7, 2008). Given these repeated warnings, it is time that the Department ensure a heightened state of readiness toward any emergencies in the food system, and that gaps in the current food safety inspection system are addressed.

Recommendation 4: Strengthen public research and ensure long-term stable funding for agriculture innovation

Funding for science and innovation provided by Agriculture and Agri-Food Canada should be maintained at sufficient financial levels, quality of delivery, and time spans to ensure world class research at public institutions, and should be governed to monitor and address potential conflicts of interest in research and commercialization.

Currently, the lack of predictable funding has an impact on research efforts. Research dollars provided by industry may be limited in scope, designed for specific needs of one self-interested company. It is imperative that public research is necessary to fill in gaps left by industry.

A Spring 2010 report of the Auditor General found key areas for improvement in the research capacity at AAFC. They pointed to a lack of appropriate documentation, predictable funding, and misallocation of capital costs. This is unacceptable.

We heard a large number of witness testimony that confirmed the need for long-term stable funding:

“I would emphasize the importance of building long-term relationships between industry, commodity groups, and public research organizations.” (K. Peter Pauls, Professor and Chair, Department of Plant Agriculture, *Evidence*, 1st session, 41st Parliament, October 25, 2012)

“...Third, develop programs for emerging issues that are not restricted to a five-year timeline.” (K. Peter Pauls, Professor and Chair, Department of Plant Agriculture, *Evidence*, 1st session, 41st Parliament, October 25, 2012)

“Second, we're becoming too short term. We're moving from seven- to 10-year planning horizons to one- to two-year planning horizons. Our main competitor in many of our product lines is Australia. They took the lessons we showed them in the centres of excellence program and embedded them system-wide in the agrifood system through the GRDC. I think we should be re-examining our horizons there.”

(Peter W.B. Phillips, Professor, Johnson-Shoyama Graduate School of Public Policy, *Evidence*, 1st session, 41st Parliament, October 27, 2011)

“Time now has become shortened on a lot of funding, and we need to think about that. As I look at Europe, most European countries now have plans out to 2025 or 2030 on their programs, and they don't change those programs. They might tweak them as they move forward, as they learn from this year and going into next year, but they have a plan that's out there for 20 or 30 years on how they want to develop their agricultural community. We tend to operate on a two-year to four-year timeline, so I think we need to think longer term than that.” (Dr. Murray McLaughlin, President and CEO, Sustainable Chemistry Alliance, *Evidence*, 1st session, 41st Parliament, October 27, 2011)

“We're very worried that long-term research, which is the forte of public research in this country, will suffer in the near future, given the funding dilemma. That type of research is the basis for a lot of Canada's ability to lead the world in terms of its agriculture.” (Bob Kingston, National President, Agriculture Union, *Evidence*, 1st session, 41st Parliament, February 15, 2012)

Recommendation 5: Assess and respond to the regional needs of Agricultural and Agri-food sectors

Due to the sector's determination to supply the local food market, The Growing Forward 2 framework should include government policies that assess and respond to the needs of regional producers and distribution networks, thereby supporting local food systems that meet consumer demands closer to home.

There has been an increase in demand for local food products (demonstrated by increase of farmers' markets on an annual basis). A 2009 Ipsos Reid poll found that “the popularity of farmers' markets is at an all-time high, with almost nine in ten respondents saying they enjoy visits to farms and farmers' markets where they can buy their food fresh off the farm and meet the grower in person.” There were 28 million shopper visits to farmers' markets in Canada in 2008. (Farmers' Markets Canada Economic Impact Study, 2008).

Witnesses attested that:

“Local food systems are useful for two key reasons. First, they foster greater food literacy (which will be critical if the predictions are correct and food prices continue to rise for the next generation). Second, alternative food systems provide a buffer between urban consumers and the international market.” (Evan Fraser, *Evidence*, Meeting No. 8 1st session, 41st Parliament, Ottawa, October 27th, 2011)

There is currently a lack of leadership in identifying the needs of the growing number of local producers and their regional customers. Growing Forward II should adopt a

regional approach with the aim of identifying opportunities and barriers in local food markets, and potential strategies to meet producer and consumer needs.

Recommendation 6: Adopt a prudent risk management approach to the use and uptake of biotechnology

- 1) ***That the government undertake a comprehensive review of the regulations governing GE seeds, fish and animals with a view to:***
 - *Implementing the Royal Society of Canada's 58 recommendations*
 - *Introducing transparency in the scientific reviews and approval processes*
 - *Creating a mechanism to consider market implications in the approval process*
 - *creating a separate category of regulations to govern GE seeds, fish and animals*
- 2) ***That an independent body be created to peer-review relevant scientific data***
- 3) ***Impose an immediate moratorium on GE food/ animals/fish, alfalfa and wheat until such time as a regulatory review has been conducted and modernized rules brought into effect***

Given the scientific complexity of genetically engineering vital food crops and the numerous economic, environmental and social considerations that were raised throughout the Committee's study of biotechnology, New Democrats believe the government has a clear obligation to act on these recommendations.

On the whole Appendix A: Committee Hearings on the Biotechnology Industry During the 40th Parliament, 3rd Session of the Growing Forward II report has taken a balanced approach in documenting what was heard from various witnesses. However, it is unfortunate that the logistics involved did not permit the committee to continue with the study after the election of the 41st Parliament so that a full report with appropriate recommendations to the government for a direction in going forward could have resulted.

Appendix A documents many significant concerns which were expressed throughout the study period concerning genetically engineered seeds, fish and animals. At many times, the gaps and oversights in Canada's regulations governing this technology were pointed out which are seen to have not kept up with the growth of the industry. It is no small matter that under the current science based approach to our regulations, which relies on privately owned science and a secretive decision making process, there is no mechanism to allow for consideration of market rejection, or even a special category dealing with genetically engineered animals. For instance, farmers concerned that their established markets would be jeopardized by the commercialization of a GM seed such as Alfalfa or wheat or a GM Animal such as the trademark Enviropig, have no recourse but to organize public protests and enter into time consuming lobbying efforts with the government. This is exhausting and takes time away from actual farming which farmers can ill afford.

As studies have shown, the benefits of GE crops, as espoused by its proponents, are often overblown and, in many cases, outweighed by negative impacts such as increasing pest and weed resistance to the GE crop's companion chemical applications, market rejection, and unwanted contamination of non-GE seed stock, to name just a few. So far, the oft repeated promises that genetic engineering would revolutionize agriculture in terms of reduced chemical use, increased yield, climate tolerance and nutritional improvements remain mostly promises. Meanwhile, the fact remains that improvements to plant and animal qualities are still derived in the greatest degree from conventional breeding methods. GE 'benefits' are mainly limited to rendering certain high-value commodity crops impervious to the killing effects of pesticides and herbicides. An estimated 130 different types of weeds are now resistant to Roundup, forcing farmers to resort to higher amounts and more toxic varieties of herbicides, which will inevitably lead to even more resistance.

A lot of discussion is centered on the fallacy of 'co-existence', the ability of conventional crops to exist side by side with GE crops. Unwanted contamination happens and will continue to happen. The introduction of GE Roundup Ready Alfalfa, a perennial crop pollinated by bees, would establish beyond a doubt the futility of coexistence. What is certain, however is that GE Alfalfa would be highly damaging to both organic and conventional farming.

In February 2000, the Royal Society of Canada (RSC), Canada's senior national body of pre-eminent scientists and scholars, convened an "Expert Panel on the Future of Food Biotechnology" at the request of Environment Canada, Health Canada and the Canadian Food Inspection Agency. The Panel was asked to evaluate the Canadian regulatory system and the scientific capacity needed to cope with products in the future. The RSC Panel made 58 recommendations for changes to the regulatory system, many of which would have profound implications. The Government responded with an 'Action Plan;' but ultimately only one of these recommendations was ever implemented. Furthermore, to avoid specifically having to regulate the infant science of genetic engineering, the Canadian government created the new term and category "Plants with Novel Traits" (and "Novel Foods") which includes GE but also crops produced by other technologies such as traditional breeding and mutagenesis (where chemicals and gamma-radiation are used to induce mutations in genes). There is no labeling, traceability or human health studies to discover potential problems post-market.

Appendix A mentions there are those who believe that genetically modified crops are by and large equivalent to conventional crops. The facts however show this claim to be completely false. In natural history, the exchange of genes between species has not been possible except in certain cases such as, for example, horizontal gene transfer between species of bacteria. Species that are closely related might be able to interbreed, like a donkey and a horse, but their offspring will usually be infertile (e.g. mule). Recombinant DNA technology or genetic engineering allows scientists to move genetic material between species and even kingdoms, such as, for example, between a tomato and a fish.

Many studies continue to raise questions or add to the slowly emerging public body of scientific literature regarding the processes of genetic engineering that point to the inherent unpredictability of transgenic manipulation about which there is an implicit need for greater study.

Recommendation 7: Support consumer driven demand for more humane livestock conditions

This committee recommends that the government support industry with efforts to transition to more humane enriched housing systems in order to satisfy consumer demands and trends.

On May 4th, 2012, Tim Hortons announced major initiatives to improve animal welfare for pigs and chickens. The company called for elimination of gestation stalls for sows and committed to more than 10 per cent of egg supply from more humane enriched hen housing systems by the end of 2013¹. Just recently, McDonalds, Wendy's, and Compass Group, Burger King announced a new policy of eliminating the use of both gestation crates and battery cages from their supply chains in the United States². Witnesses to the Committee also identified the growing power of consumer-driven changes in animal treatment:

“We know that consumers want more information on how farm animals are raised. Mandatory labelling of cage eggs is already used in countries around the world. These labels, mandatory in parts of Australia since 2010, have increased sales of cage-free eggs by 90% in some stores. In the European Union, mandatory labelling of eggs with the method of production used was required from 2004 to January of this year when a ban on the use of battery cages came into effect. In the United States, mandatory labelling has been proposed as part of the Egg Products Inspection Act amendments of 2012, which were presented to the United States Congress last month, jointly supported by the United Egg Producers and our partner association, the Humane Society of the United States.” (Sayara Thurston, Campaigner, Humane Society International/Canada, Committee, *Evidence*, Meeting No. 26, 1st session, 41st parliament, Ottawa, February 27, 2012)

Growing Forward II should identify best practices in ensuring the success of efforts to transition to more humane enriched housing systems. Any regulatory or legislative barriers to improving systems to respond to consumer desire for more humane systems should be addressed.

Recommendation 8: Investigate concentration in retail and distribution markets

This committee recommends that Agriculture and Agri-Food Canada investigate potential imbalances of market power in the food chain.

1 <http://www.timhortons.com/us/en/about/animal-welfare-initiatives.html>.

2 <http://hsus.typepad.com/wayne/2012/04/burger-king.html>.

Given the worrisome consolidation of producers and retailers in the Canadian food sector, this is an important area of investigation for the Department. While the Competition Bureau in Canada tolerates a high level of consolidation in the agricultural and agri-food industry, more evidence from other diverse markets, such as Europe, would help to inform regulators in Canada of the distinct criteria and benefits of a truly diversified market. Furthermore, more in-depth research is needed on the changing characteristics and effects of vertical consolidation in the Canadian food sector. This investigation is critical given the recent changes with grain marketing due to the loss of the Canadian Wheat Board Single Desk.

Recommendation 9: Encourage the development of the co-operative sector

This committee recommends that the Government re-institute the Co-operative Development Initiative (CDI) as part of Growing Forward 2.

Co-operatives have been a powerful tool for agricultural and rural development including both primary production and value added production. The Government has recently cancelled the Co-operative Development Initiative a program which since 2003 has helped to develop hundreds of co-ops across Canada.

Dissenting Opinion: Growing Forward 2 Liberal Party of Canada

In July 2011 federal, provincial and territorial ministers of agriculture met in St Andrews, New Brunswick to establish a foundation for ongoing discussions respecting the development of *Growing Forward 2*. At the time, we expressed our concern about the insignificant attention directed to a number of issues which I feel cannot go unaddressed in what will amount to a framework for Canadian farmers and the rest of the agriculture and agri-food sector in Canada for the next 5 years. We wrote then and remain of the belief that the federal, provincial and territorial ministers must consider thoroughly the following issues: Business Risk Management; the commercialisation of innovation; the transition of farms and farm capital from one generation to the next; a responsive, reliable rail service and the absolute necessity for a comprehensive National Food Policy.

NATIONAL FOOD POLICY

Testimony throughout the study on *Growing Forward 2* addressed the importance of a national food policy – whether from the perspective of food as a market commodity or as a necessity. Emerging as common themes among most witnesses were the myriad connections between agriculture and agri-food and various other elements touched by the federal government: health, the continued sustainability of the agricultural sector, international trade, food safety and at the most basic, important level, food security in Canada.

I think we take food for granted; it appears on our plates, and we don't realize the economic and intellectual ramifications of agriculture in the Canadian landscape. So that's why...a public discourse on a food policy might help to remind some of the funding agencies of the crucial importance of agricultural research, writ large.¹

Missing from the committee is a recommendation for the need of a national food policy. Developed countries Scotland, Wales, New Zealand, and Brazil each already have a national food policy. Witnesses argued that we do not have a national agricultural and food based vision in Canada due in large part to a chasm between farmers, processors, researchers, distributors and consumers along the food supply chain. Understanding the necessity of a national food strategy and incorporating all other parties into that strategy are entirely different things.

A national food policy would bring together diverse stakeholders including farmers and consumers, government, Aboriginal groups and other community activists toward a comprehensive set of measures which would ensure among other elements: nutrition education, affordable access to healthy foods and a strategy for food sovereignty and food safety all ultimately guaranteeing Canadian food security.

¹ Dr K. Peter Pauls, Chair, Department of Plant Agriculture, University of Guelph, Committee, Evidence, Meeting No. 7, 1st Session, 41st Parliament, Ottawa, 25 October 2011, 1605.

As it stands, a number of organizations have signalled their intent to create their own national food policy: the Canadian Federation of Agriculture, the Conference Board of Canada, Food Secure Canada the National Farmers Union and the Liberal Party of Canada. We wrote the Ministers of Agriculture of the federal, provincial and territorial governments in July 2011 about the importance of including a national food policy in *Growing Forward 2* and maintain still, as negotiations continue, that it must be included.

Recommendation:

That Agriculture and Agri-food Canada engage the provinces, territories and all stakeholders to facilitate the development of a national food policy which includes specific objectives for the Canadian agriculture, and agri-food sector and that it initiate discussion of the links between strategy and *Growing Forward 2*.

SCIENCE AND INNOVATION

Similarly to witnesses who advocated a national food policy, most if not all witnesses who came before the committee agreed that innovation, research and development, and commercialisation are essential to meeting and maintaining a sustainable agriculture and agri-food sector.

It was agreed that multiple stakeholders are responsible for agricultural and agri-food research independently and that there is a necessity to link producers, processors, universities and governments. Witnesses spoke highly of clusters and about the need to form partnerships.

Our whole piece is really again to create this new system, to move from the old isolation model of science, where it's an individual researcher and you have to work really hard to lever them together into groups who work on their own, to a new connection model...How we make our 60 people at Vineland into 6,000 – you do it with partnerships. Through the cluster program [...] you can reach all the way across the country...²

Missing from the committee report is a desire for agriculture to figure more prominently in the federal government's science and innovation priorities commensurate to the need expressed by witnesses. In its *Economic Action Plan 2012* the government signalled its intentions to centralise research in pursuit of economies. Meanwhile, witnesses were quite clear that public, university and private research can and must complement one another, but that stable funding is essential not only to attracting both researchers and investors, but it is vital to keeping them here.

² Dr Jim Brandle, Chief Executive Officer, Vineland Research and Innovation Centre, *Evidence*, Meeting No. 4, 1st Session, 41st Parliament, Ottawa, 6 October 2011, 1550.

The recent announcements about changes within the management structure and operating system within the National Research Council world are causing a lot of what I regard as the highest value-added and the most creative scientists to say, “You’re suggesting I go from a full-time permanent position to a world where I have to go out and raise my own capital to do my job, and it’s all going to be two- to five-year contracts rather than a career path.” Many of them are burnishing up their CVs right now and applying to the USDA and the European institutes, the ones that we think are doing better than us. Our people are wanting to leave there because they’re saying the direction in which we’re going right now will make them less creative. It will make them into the bureaucrats and managers and research design people that we were talking about in response to a previous question.³

Economic Action Plan 2012 made it clear that the government is interested only in science that will yield immediate results from research designed for products or processes that are immediately marketable. This ignores the need for basic research. Meanwhile, we believe that the solutions lie in stabilising funding and enhancing programs such as the Canadian Agricultural Adaptation Program (CAAP) – which is not part of *Growing Forward* – to allow for industry based, region specific research and innovation.

Commercialisation of innovation must be better supported. Many witnesses shared their concern with the lack of access to seed and venture capital and spoke of the need for a defined effort to link innovative minds with money, manufacturers and the market. Commitments have been made before and Canadians have yet to see any real action from governments that have a role to play in incentivizing the advancement of commercialisation, critical to a value added approach to farming and agricultural technology.

At present Canada’s commercialisation efforts have failed to provide the incentives needed to effectively encourage innovation. Governments can incentivize commercialisation through new tax laws that would not forgo the receipt by governments of current tax revenues but rather provide government with a share of newly generated revenues in private industry. While success is the desired outcome of any new business, it is never guaranteed and investment in commercialisation through tax incentives will generate commercial activity in Canada’s economy whether the business is successful or not. We are on the cutting edge of discovery in a multitude of areas within the agricultural industry and need governments help to get these discoveries to market.

³ Dr Peter W.B. Phillips, Professor, Johnson-Shoyama Graduate School of Public Policy, University of Saskatchewan, Committee, *Evidence*, Meeting No. 8, 1st Session, 41st Parliament, Ottawa, 27 October 2011, 1535.

Recommendation:

That Agriculture and Agri-food Canada acknowledge the importance of research and innovation to the continued sustainability of Canada's agricultural and agri-food sector by acknowledging agriculture as a science and innovation priority.

Recommendation:

That Agriculture and Agri-food Canada acknowledge the importance of research clusters, but more importantly provide stable and adequate funding to programs linking public and private research like the Canadian Agricultural Adaptation Program (CAAP) and other similar short- and long-term, cooperative, locally administered programs and include them in *Growing Forward 2* to facilitate short- and long-term research on emerging issues that may involve one or more commodities.

Recommendation:

That Agriculture and Agri-Food Canada conduct a study of the effectiveness of flow through shares or other tax credit models to that may be used encourage investments in agricultural commercialisation.

RAIL SERVICE REVIEW

The committee heard from multiple witnesses that the rail freight system is crucial to our international trade and yet it continues to be plagued by a lack of consistency, reliability and responsiveness to producers and industry alike.

The comment made at the meeting was that the 15% tariff advantage was tempered somewhat by the fact that Canada does not have a reliable transportation system. He was citing his particular experience of having a vessel waiting in Vancouver for 50 days...The challenge we face is that this lack of consistency ultimately ends up costing us in invisible things like vessel demurrage; but also, a lot of things that are less visible, such as risk premiums, also get factored in.⁴

In order for our producers to be reliable suppliers, they require dependable rail transport infrastructure, service level agreements and a commercial dispute resolution process. Moreover, they require it in short order. The Rail Service Review was concluded in March 2011 and industry has yet to see any real results on its recommendations.

Recommendation

⁴ Gordon Bacon, Chief Executive Officer, Pulse Canada, Committee, *Evidence*, Meeting No. 5, 1st Session, 41st Parliament, Ottawa, 18 October 2011, 1605.

That the government immediately report to the Committee on the actions it has taken subsequent to the rail freight services review and indicate how it will implement a service level agreement and a commercial dispute resolution process which properly address industry concerns and end the pattern of Canada as an unreliable shipper.

YOUNG FARMERS AND NEW FARMERS

In the face of higher debt burdens and significant demographic shifts, the number of farms is decreasing as the average age of Canadian farmers increases above 55. A viable and sustainable agricultural sector requires young farmers and cannot disadvantage new entrants.

While there are certain tax benefits available to new farmers, one of the most significant obstacles to farm estate transitions is the definition of “family” within the Income Tax Act. Allowing farms to transition more widely to the next generation (i.e. nephews, cousins) would greatly assist a broader entry of new farmers into the industry.

Recommendation

That Agriculture and Agri-food Canada, in coordination with Finance Canada revisit the definition of “family” with respect to transition of farms from one generation to include a wider range of family and to ease entry for new and young farmers.

BUSINESS RISK MANAGEMENT

BRM programs must be enhanced as risk management is essential in a sector where risk is significant, unpredictable and can unilaterally affect the continued viability of a farm. Witnesses argued that not only should BRM programs be renewed, but that Growing Forward 2 must ensure that they are reliable in their delivery. Missing from the committee’s report is any recommendation respecting the need to maintain sustainable and effective BRM programs. Prior to the dissolution of the 40th Parliament, the Committee recommended the following and we resubmit:

Recommendation:

As AgriStability is the main farm income support program in Canada, we recommend that Agriculture and Agri-Food Canada conduct a comparative analysis of the application of the following calculation methods: calculation of reference margins over ten years rather than five; calculation of reference margins using the greater of the Olympic average or the average of the last three years; using the average of the last five years and seven years to determine the reference margin; and calculating support based on average production costs.

CONCLUSION

While the Liberal Party can support many of the recommendations and conclusions of the Committee's report, it is compelled to address a number of the issues that witnesses brought forward, but were not included in the report to ensure the Government reads and addresses them. These include the necessity for a national food policy, supporting science, research and development, innovation and commercialisation in an environment removed from centralisation and politics; and, that Canadian farmer's risk is adequately managed through well-funded and stable Business Risk Management programs.