

**GOVERNMENT RESPONSE TO THE 15th REPORT OF THE STANDING
COMMITTEE ON AGRICULTURE AND AGRI-FOOD, ENTITLED: *ADVANCEMENTS
OF TECHNOLOGY AND RESEARCH IN THE AGRICULTURE AND AGRI-FOOD
SECTOR THAT CAN SUPPORT CANADIAN EXPORTS***

The Government of Canada is pleased to respond to the Report of the Standing Committee on Agriculture and Agri-Food (the Committee) entitled: *Advancement in Technology and Research in the Agriculture and Agri-Food Sector That Can Support Canadian Exports* (the Report).

The Government commends the members of the Committee, and the witnesses who appeared before it, for their insight and commitment toward improving the sector's export competitiveness. The Government of Canada agrees with the Committee's overall assessment that adopting new technologies, which support Canadian exports, is a major driver of growth in the agriculture and agri-food sector. The Government supports the broad, positive approach, and the constructive ideas put forth by the Committee.

The Government appreciates the comprehensive recommendations developed by the Committee, and is working collaboratively with provincial and territorial governments, and stakeholders to adequately address the challenges highlighted throughout the Report. Details are provided below regarding the Government's response to the specific recommendations of the Committee in this regard.

The response is the product of a collaborative effort among implicated federal departments, commissions, and agencies including: Agriculture and Agri-Food Canada (AAFC); Health Canada (HC); the Canadian Food Inspection Agency (CFIA); Environment and Climate Change Canada (ECCC); Global Affairs Canada (GAC); Finance Canada (FIN); Employment and Social Development Canada (ESDC); Innovation, Science and Economic Development Canada (ISED); the Canadian Radio-television and Telecommunications Commission (CRTC); Canada Revenue Agency (CRA); the Pest Management Regulatory Agency (PMRA); Transport Canada (TC); the Canadian Dairy Commission (CDC); Immigration, Refugees and Citizenship Canada (IRCC); and Infrastructure Canada.

RECOMMENDATION 1

That the Government of Canada incentivize the Canadian agriculture sector's efforts to reduce its carbon footprint

The Government supports this recommendation. Through a variety of programs and initiatives, the Government provides incentives to reduce greenhouse gas (GHG) emissions from agriculture.

In particular for agriculture, significant investments are being made by the Government

to enable the Canadian agriculture sector to further reduce its carbon footprint in livestock and crop production. In 2018 the Government, through Agriculture and Agri-Food Canada (AAFC), launched with provincial and territorial partners the \$3-billion Canadian Agricultural Partnership (the Partnership). One of the Partnership's priorities is to advance innovation and help the sector grow sustainably, as well as to reduce GHG emissions, and adapt to climate change.

Under the Partnership, climate change mitigation actions in the agriculture sector are incentivized through a variety of programs and research activities. For example, on-farm environmental stewardship programs help farmers and ranchers identify and build on environmental strengths, as well as mitigate risks in their operations. These programs provide incentives to producers for the adoption of environmentally beneficial management practices. The federally funded programs under the Partnership, AgriScience and AgrilInnovate, also support the sector's efforts to reduce its carbon footprint. AgrilInnovate supports the sector in the adoption of innovation technologies including the accelerated adoption of clean technology such as precision agriculture. AgriScience provides funding for cutting-edge research addressing environmental challenges, and for firms to create and adopt new clean technologies.

AAFC also offers additional programs such as the Agricultural GHG Program, which aims to enhance the understanding and adoption of agricultural technologies and practices that reduce GHGs. AAFC's complementary initiative, the Agricultural Clean Technology Program, supports research, development and adoption of agricultural clean technologies in the areas of precision agriculture and bio-product, with the objective of generating positive impacts on land, water and air, and reducing the intensity of GHG emissions from agricultural production.

AAFC also supports the organic industry's efforts to improve carbon sequestration and soil health through the Carbon Sequestration Task Force under the Organic Value Chain Roundtable. *Carbon sequestration* is the process of removing carbon from the atmosphere and depositing it in a reservoir, such as organic matter in soil. The Government has announced a federal investment of \$8.3 million to the Organic Federation of Canada to help the organic sector enhance productivity while minimizing its environmental impacts on soil, water and biodiversity.

There are also incentives to reduce the sector's carbon footprint within the federal carbon pollution pricing system. Part of the federal carbon pollution pricing system is the Output-Based Pricing System, a regulated trading system for large industrial emitters. This component of the system took effect Jan. 1, 2019 in Saskatchewan (in part), Manitoba, Ontario, New Brunswick and Prince Edward Island. As part of this, Environment and Climate Change Canada (ECCC) has proposed that eligible offset credits from existing provincial offset systems may be used by facilities covered under the Output-Based Pricing System to meet their compensation obligations. Provincial offset programs and protocols are deemed eligible if they meet criteria that will ensure the integrity and credibility of the emission reductions or removals including ensuring that activities are additional to regulations and are not considered business as usual. These criteria build on the recommendations in the Pan-Canadian GHG Offsets Framework for the design of offset systems agreed by the Canadian Council of

Ministers of the Environment in November 2018. Protocols for activities that occur across multiple jurisdictions and that are not covered by carbon pricing will be assessed first, including protocols covering agriculture, waste and forestry project types. ECCC is actively working to finalize the assessment criteria and complete the assessment of existing programs and protocols.

While pricing carbon pollution is key, the Government of Canada is taking more additional initiatives to fight climate change. Canada's clean growth and climate plan includes more than fifty concrete measures to reduce carbon pollution, help us adapt and become more resilient to the impacts of a changing climate, foster clean technology solutions, to a stronger economy.

The Government's Low Carbon Economy Fund (LCEF), which is part of the Pan-Canadian Framework on Clean Growth and Climate Change, supports projects that reduce GHG emissions in several sectors, including agriculture. To date, through its Leadership Fund, the LCEF has provided over \$25 million for provincial and territorial agricultural projects that support energy efficiency and innovative agricultural practices.

RECOMMENDATION 2

That the Department of Agriculture and Agri-Food (AAFC) institute a technology monitoring initiative to identify growth opportunities for the agriculture sector in international markets.

The Government supports this recommendation. Technology is an important driver of export growth for the agriculture and agri-food sector. AAFC has several programs and initiatives underway and is working together with provincial and territorial governments, industry, and academia to monitor emerging technologies. Recognizing that industry is often closest to emerging technologies and trends, AAFC offers funding programs to support industry in exploring new opportunities to develop and use technological innovations.

On February 12, 2019, the Government announced a \$50.3 million investment over five years for a Canadian Agricultural Strategic Priorities Program (CASPP). CASPP's objective is to facilitate the Canadian agricultural sector's ability to identify and seize opportunities, to respond to new and emerging issues, and to path-find and pilot solutions to new and ongoing issues in order to remain competitive. In particular, CASPP focuses on four priority areas: adoption of new technology; environmental sustainability; strategic development and capacity building; and emerging issues.

On April 1, 2018, federal, provincial and territorial governments launched the Canadian Agricultural Partnership (the Partnership), a \$3 billion investment over five years. Within the Partnership, the \$128 million AgriInnovate Program will prioritize project applications that advance the Government's agenda through the four priorities including securing or expanding new export markets.

Through the national Value Chain Roundtables (VCRTs), AAFC also has a unique mechanism for ongoing dialogue between industry and government that contributes to

an overarching approach to supporting the sector's competitiveness and growth within Canada, and in international markets. VCRTs discuss a wide range of topics, including government and industry investments, and approaches to technology and innovation, and can serve as a means to discuss and monitor new technologies/processes.

AAFC scientists are active participants in global research networks, keeping them well-informed of technological trends and emerging innovations that can support the sector. AAFC participates in international working groups to discuss agriculture-related technological growth opportunities that could expand Canadian exports. For example, AAFC participates in the International Bio-economy Forum, an informal, multilateral platform where global research and innovation partners discuss and act on common thematic challenges in the bio-economy.

Collectively, these government initiatives provide integrated, multi-dimensional, broad-based knowledge for identifying potential growth opportunities in international markets by way of advancements in technology and research.

RECOMMENDATION 3

That the Government of Canada increase capacity for transporting and shipping exports, particularly grain, and communicate infrastructure investments and planned results.

The Government supports this recommendation. The Government is investing in increasing the capacity of transportation infrastructure across Canada to expand our trade with global markets.

Infrastructure Canada's Investing in Canada Plan (IICP) is the Government's long-term commitment to infrastructure, providing more than \$180 billion over 12 years, across five investment streams: public transit, green infrastructure, social infrastructure, trade and transportation, and rural and northern communities.

Under the theme of trade and transportation, the IICP includes significant funding for trade and transportation corridors, including \$2 billion in funding for the National Trade Corridors Fund (NTCF). Budget 2019 proposed an increase to the funding by \$400,000. The NTCF is a competitive, merit-based program which funds projects that build stronger, more resilient and more efficient transportation corridors to international markets by alleviating capacity constraints and bottlenecks. The IICP also provides \$50 million to the Trade and Transportation Information System for improved trade and transportation system data, and analysis. At least \$5 billion from the Canada Infrastructure Bank will also be invested in trade and transportation-related infrastructure.

As of February 2019, more than \$800 million in federal funding has been announced for 39 projects identified under the first NTCF call for proposals. This federal funding has leveraged more than \$1 billion from partners in other levels of government and the private sector. Projects are located across each province and territory, and include highways, ports, short-line railways, grade separations and airports. Many of these

NTCF projects will have direct benefits for the transportation and shipping of exports, including grain, to international markets. For example, the NTCF has provided \$220 million to seven projects in the Lower Mainland of British Columbia that will improve rail access and fluidity to marine terminals across the Port of Vancouver.

The NTCF continuous call for proposals for trade diversification projects is now open. The criteria for this call reflect the 2018 Fall Economic Statement and support the Government of Canada's Export Diversification Strategy to increase Canada's overseas exports by 50 percent by 2025. Grain and other agriculture and agri-food products are seen as key commodities for this Strategy. To reduce bottlenecks and help Canadian businesses take advantage of new overseas markets, the 2018 Fall Economic Statement accelerates funding available under the NTCF.

RECOMMENDATION 4

That the Government of Canada undertake a campaign to promote high-tech job opportunities in the agriculture sector to Canadian youth.

The Government supports this recommendation. The Government offers a broad array of programs and initiatives promoting job opportunities for Canadian youth, including in the agriculture sector.

The Government uses the "Our Way" marketing campaign, Job Bank, social media, and partnership outreach to promote opportunities available to youth. Since 2015, the Government's Youth Employment Strategy (YES), which is a horizontal initiative involving eleven federal departments and agencies, has served youth across a range of sectors through initiatives such as the Summer Work Experience/Canada Summer Jobs Programs, Career Focus, and Skills Link.

The AAFC YES Career Focus Program provides matching contributions to help agricultural employers and organizations to create internships that enable youth between the ages of 15 and 30 to gain valuable experience, enhance their professional skills and gain a better understanding about the opportunities available in agriculture. The program helps to fund roughly 50 agricultural internships for Canadian graduates per year. In addition to Career Focus, the recently sunset three year Agricultural Youth Green Jobs Initiative helped create green internships for youth between 15 and 30. This initiative provided young Canadians with valuable work experience implementing environmentally beneficial activities, both on the farm and with organizations engaged in the agriculture and agri-food sector.

Through the Canadian Agricultural Partnership's (the Partnership) AgriCompetitiveness Program, AAFC supports a number of projects by national agricultural organizations that focus on educating youth on the wide range of opportunities available in the agriculture sector, including high-tech areas. For example, AAFC supports Ag in the Classroom, along with 4-H Canada's educational programming, such as their agricultural science fair.

In tandem to YES and the Partnership programs, AAFC attends career fairs in

universities across the country to promote employment opportunities in the agriculture and agri-food sector. It attended over 20 venues in 2018. AAFC also undertakes active outreach with university faculties to promote the sector as an attractive career choice to post-secondary students. Additionally, as part of its Workforce Development Initiative, the Canadian Dairy Commission which is under the AAFC Portfolio, has committed \$300,000 over three years in a Career Promotion Program. This program matches expenses incurred by industry associations or learning institutions to produce and distribute promotional material that encourages young people to consider a career in the dairy sector and promotes the type of education that can lead to such careers.

Funded by the Employment and Social Development Canada's (ESDC's) Sectoral Initiatives Program, the Canadian Agricultural Human Resource Council (CAHRC) has developed products that provide information on the jobs and careers in modern agriculture. For example, CAHRC's Agrijobs program provides detailed job information on a variety of careers in animal, plant and marine production, including job descriptions, career information and skills requirements.

RECOMMENDATION 5

That the Government of Canada address labour shortages to increase capacity in food processing, equipment manufacturing, and in primary agriculture, year-round and seasonally.

The Government supports this recommendation and agrees with the Committee on the need to address both seasonal and year-round labour shortages in the agriculture and agri-food sector. The Government is taking action in a number of areas.

Recent immigration initiatives are expected to help the agriculture sector recruit and retain workers. Budget 2019 announced the intention to launch a three-year agri-food immigration pilot to provide a pathway to permanent residency for full-time, non-seasonal workers. The new pilot program is expected to address some of the labour market shortages identified by agriculture and agri-food industries across Canada.

Additionally, the Rural and Northern Immigration Pilot will partner the federal government with selected rural and northern communities across Canada seeking immigration to boost economic development and fill labour market shortages. Selected communities are expected to begin recruiting newcomers later in 2019. The Government has also extended the Atlantic Immigration Pilot for two years. These immigration pilots all aim to support targeted economic immigration that aligns with local year-round employment needs, including in the agricultural and agri-food sector.

The Government also supports provincial immigration priorities through the Provincial Nominee Program and in March 2019, announced an additional 2,000 spaces annually to transition intermediate skill level temporary foreign workers to permanent residents.

The Government also funds additional initiatives aimed at addressing agriculture and agri-food labour shortages, including those led by the Canadian Dairy Commission, the

Canadian Agricultural Human Resource Council, and Agriculture in the Classroom Canada.

The Government is working in collaboration with provincial governments to better understand the sector's issues around skills development, recruitment and retention of employees, and the availability of data and market analysis to support business decisions.

There are a number of initiatives within the Temporary Foreign Worker (TFW) Program currently underway. The Minister of Employment, Workforce Development and Labour and the Minister of Agriculture and Agri-Food, with support from the Canadian Federation of Agriculture, have created a new industry/government TFW Program Service Delivery Working Group to discuss service delivery issues and explore potential solutions. Of significant importance is reducing delays in the arrival of seasonal agricultural workers on to Canadian farms and farm businesses. In addition, the Government is reviewing the TFW Program's Primary Agricultural Streams and is exploring potential changes to ensure they meet the changing needs and priorities of the agriculture sector.

RECOMMENDATION 6

That the Government of Canada enhance regulatory cooperation with its foreign partners to harmonize science-based regulatory requirements.

The Government supports this recommendation. The Government works with its trading partners, in bilateral and multilateral fora, to develop international rules and standards, and to contribute to risk-assessment activities that underpin the development of international standards. Adoption of international standards by other countries advances harmonization of regulatory requirements and reduces the incidence of non-tariff trade barriers.

The Government continues to actively engage in the development of international standards within three International Standard Setting Bodies (ISSBs): 1) Codex Alimentarius Commission for food safety and fair practices in the food trade; 2) the International Plant Protection Convention for plant health; and 3) the World Organisation for Animal Health. Participating in the development of international standards and guidance at the ISSBs is of major importance to Canada from not only from a health and safety perspective, but also from a trade perspective. International regulatory coherence is significantly improved (and conversely, market access risks are reduced), as more internationally accepted standards and guidelines are developed and revised, and as more countries agree to incorporate this information in their regulatory systems. The 2018 Fall Economic Statement identifies additional resources to enhance Canada's engagement with the ISSBs over the next five years.

Where appropriate, the Government also seeks to enhance regulatory cooperation with foreign partners through free trade agreements (FTAs) with dedicated text on sanitary and phytosanitary measures, technical barriers to trade, and other regulatory practices. Canada's FTAs build on the commitments outlined in World Trade Organization Agreements and establish appropriate mechanisms for cooperation, and the exchange of information. The 2018 Fall Economic Statement also identifies new resources to support Canada's work on regulatory cooperation and Free Trade Agreements.

The Government also seeks to further regulatory cooperation with its largest trading partner through the Canada–United States Regulatory Cooperation Council (RCC). The RCC brings together Government regulators from both countries with health, safety, and environmental protection mandates to reduce differences between regulatory frameworks. In June 2018, Canada and the U.S. reaffirmed the RCC and its continued work.

RECOMMENDATION 7

That the Government of Canada provide the appropriate resources to support Canadian exporters by promoting the harmonization of science-based regulatory requirements within foreign jurisdictions.

The Government supports this recommendation. Working with the industry, the Government develops concrete initiatives that promote the alignment of science-based regulatory requirements within other countries and works both bilaterally and multilaterally, to create conditions to re-open, maintain, and expand market access.

Canada has taken a leadership role in promoting the use of international standards to harmonize risk and science-based regulatory requirements among jurisdictions. For example, in February 2018, Canada chaired international discussions on Maximum Residue Limits (MRLs). MRLs are the maximum amounts of residues that are expected to remain on food products when a pesticide is used according to label directions that will not be a concern to human health when consumed. In addition, Canada provided funding to host a Food and Agriculture Organization/World Health Organization Joint Meeting on Pesticide Residues, which focused on reducing the backlog on pending Codex Alimentarius Commission standards.

In 2012, Canada launched the Global Low-Level Presence Initiative (GLI). It is a group of 15 importing and exporting countries committed to developing practical, science-based and trade-facilitative solutions for the management of the unintended Low-Level Presence (LLP) of unapproved products in grain shipments. As of March 2019, the GLI has held six meetings and has advanced appreciation of the causes of LLP and its recognition as a compliance issue that warrants risk-based management to facilitate trade.

In the 2018 Fall Economic Statement, the Government announced the Export Diversification Strategy, which includes additional resources toward the development and adoption of science-based standards in countries and regions that are of strategic

interest to Canada and to strengthen the activities of the three International Standard Setting Bodies.

The Government, in consultation with the industry, will continue to undertake and lead international advocacy activities to promote the development and adoption of standards and measures based on scientific evidence to support and maintain a transparent and rules-based global trading system for the benefit of Canadian exporters.

RECOMMENDATION 8

That the Government of Canada support initiatives for the establishment, start-up and growth of agriculture and agri-food businesses using new technologies.

The Government supports this recommendation. A number of ongoing Government initiatives assist both start-ups and established agriculture and agri-food businesses in taking advantage of new technologies.

Under the Canadian Agricultural Partnership (the Partnership), federal, provincial and territorial cost-shared programs support activities that facilitate the establishment, start-up and growth of the sector's enterprises using new technologies. The Partnership includes the following activities: 1) helping producer groups demonstrate and evaluate new agricultural practices and technologies at the local level; 2) targeting support for farms and firms to accelerate adoption of new or improved products, processes or practices; 3) accelerating the adoption of transformative technologies; and 4) supporting the growth of enterprises in the agriculture and agri-food sector through the development and commercialization of new products and processes.

Specific Partnership programs support investments that have the potential to facilitate expansion into local, domestic and international markets. The AgrilInnovate program, administered by AAFC, provides support to the sector aimed at accelerating the commercialization of innovative products, technologies, processes or services.

Several horizontal government initiatives, led by Innovation, Science and Economic Development (ISED), also support the start-up and scale-up of innovations in the agriculture and agri-food sector. For example, the Strategic Innovation Fund (SIF) has a broad mandate to support research, development, commercialization, and firm expansion and growth. In December 2018, ISED launched a new competition through the SIF that will have consortia or networks develop and deliver large-scale approaches to automation and digital technologies including applications within the agriculture and agri-food sector value chain.

Innovative Solutions Canada (ISC) is an ISED program that supports the scale-up and growth of Canada's innovators and entrepreneurs. The program supports Canadian companies through direct funding to early-stage, pre-commercial research and development, late-stage prototypes, and through to commercialization. For example, three initiatives related to the agriculture sector have been launched which includes: 1) making precision agriculture or "smart" farming technologies more affordable to

smaller farms; 2) improving composting of bioplastics derived from agriculture or wood; and 3) improving the reliability and accuracy of soil sampling techniques.

Through ISED's Innovation Superclusters Initiative, the Government is investing in business-led innovation hotbeds (i.e., superclusters) with the greatest potential to: build world-leading innovation ecosystems, secure Canada's future as an innovation leader, and accelerate economic growth. For example, the Protein Industries Supercluster will use plant genomics and novel processing technology to increase the value of key Canadian crops that are in a high demand in fast growing foreign markets.

The development of intellectual property (IP) is increasingly part of agriculture and agri-food innovation. Recognizing the need for Canadian businesses and innovators to understand, protect and access IP, particularly internationally, ISED launched a five-year program to implement an IP strategy. This IP strategy includes the following three pillars: 1) IP awareness, education and advice for industry; 2) IP tools for growth such as IP Marketplace and Expedite IP Dispute Resolution; and 3) amendments to IP legislation such as exception for research purposes.

RECOMMENDATION 9

That the Canadian Food Inspection Agency and Pest Management Regulatory Agency modernize regulatory approval processes and improve their performance.

The Government supports this recommendation. On the advice of the Advisory Council for Economic Growth, Budget 2018 launched the Government's ambitious Regulatory Reform Agenda, including a Targeted Regulatory Review of the Agri-Food and Aquaculture Sector (the Review). Government departments and agencies, including the Pest Management Regulatory (PMRA) and the Canada Food Inspection Agency (CFIA), have worked collaboratively to conduct the Review with a focus on modernizing the regulatory system to support innovation and business investment. The Budget 2019 also proposed continued momentum on the Government's regulatory reform agenda such as funding for Regulatory Roadmaps, which describe actions to be taken to address issues raised during the targeted Regulatory Reviews. The Government is committed to reforming and modernizing federal regulations while continuing to protect Canadians' health and safety and the environment.

PMRA is currently conducting a comprehensive review of the *Pest Control Products Regulations*. The review will ensure that the PCPR continue to meet program objectives (e.g., of health and environmental protection) in an effective and efficient manner, while minimizing regulatory burden. Furthermore, in 2020, the *Pest Control Products Act*, as prescribed within the Act, will be referred to a Committee of Parliament for review, which may provide further recommendations to improve the efficiency and effectiveness of the regulatory program.

CFIA is proposing to finalize and implement amendments to the *Fertilizers Regulations*, which would reduce the volume of products requiring pre-market assessment and

increase the length of the registration period in order to decrease administrative burden. The CFIA's pre-market assessment consists of a detailed, science-based evaluation of product safety information and labelling **prior** to their import or sale in Canada. The Agency is also proposing to implement amendments to the *Feeds Regulations*, which would reduce the volume of products requiring pre-market assessment and streamline the approval of new feed products based on equivalency of authorizations by foreign governments. Further, the CFIA is aiming to implement an electronic submission process for the pre-market assessment of agricultural input commodities. This will reduce regulatory burden, and allow for automated case tracking. As well, the CFIA is pursuing revisions to service fees for pre-market assessments of agricultural inputs.

RECOMMENDATION 10

That the Government of Canada continue to improve access to broadband Internet in rural farming communities by further investing and provide transparency on existing planned coverage.

The Government supports this recommendation. In Budget 2019, the Government committed to ensuring that every household and business in Canada has access to high-speed Internet no matter how rural or remote.

The Government recognizes that reliable access to high-speed broadband Internet in rural communities is essential to their success, especially for Canadian farmers. It is a critical requirement for the adoption of the latest technological advances being introduced by farm equipment, product, and service suppliers. The Government is committed to providing broadband connectivity to all rural Canadian communities that meets universal speed targets of 50 Mbps download, 10 Mbps upload (50/10), and has a range of initiatives and proposed initiatives underway. To bring focus to this commitment, in January 2019, Canada's first Minister of Rural Economic Development was appointed, who will lead the delivery of federal rural infrastructure and broadband programming, including increasing high-speed broadband coverage in rural Canada.

To meet our targets, the Government is leveraging investments from many sources. The successful implementation of the \$500 million Connect to Innovate program will improve broadband access in over 900 communities. Building on this progress, Budget 2019 proposed \$1.7 billion in new broadband investments, including for a new Universal Broadband Fund, a top-up for the Connect to Innovate program, and support for low-latency Low Earth Orbit satellite capacity–technology that can help connect Canada's most remote communities. The Canadian Radio-television and Telecommunications Commission is targeting to launch a \$750 million Broadband Fund this summer to improve connectivity services across the country. What's more, broadband infrastructure projects are eligible for funding under the \$2 billion Rural and Northern Communities stream of the Investing in Canada Infrastructure Program, and the Canada Infrastructure Bank will seek to invest \$1 billion to further leverage private sector investment to increase broadband access for Canadians. The Accelerated Investment Initiative, announced in the 2018 Fall Economic Statement, is also anticipated to encourage private investments in rural broadband projects.

In addition to directly supporting connectivity projects, the Government has also undertaken complementary activities to improve rural connectivity. This includes \$100 million, over five years, of the Strategic Innovation Fund, with a particular focus on supporting projects that include low Earth orbit satellites and next generation rural broadband.

The Government collaborates directly with stakeholders regarding: the state of current broadband coverage; proposed projects and ongoing programs; and facilitation and coordination of efficient public policy efforts. These federal efforts are complementary to provincial and territorial initiatives. Past and ongoing activities include: regular information sharing on gaps and potential projects, sharing mapping data, providing input on project proposals submitted, and cost-sharing of projects.

To further coordinate connectivity efforts and broader digital policy issues, federal, provincial, and territorial ministers, in October 2018, announced their commitment to collaborate on the development of a National Connectivity Strategy that aims to provide all Canadians with access to high-speed Internet and mobile coverage along major roads.

RECOMMENDATION 11

That the Government of Canada create an expedited tax deduction process for the acquisition of new agricultural equipment.

The Government acknowledges this recommendation. The Government has recently taken steps to support Canada's competitiveness by introducing broad-based accelerated capital cost allowances.

The Federal Government's 2018 Fall Economic Statement announced a change to Canada's tax system that allows businesses to immediately write-off the cost of machinery and equipment used for the manufacturing or processing of goods. The Government further announced that businesses will immediately be able to write-off the full cost of specified clean energy equipment, and introduced the Accelerated Investment Incentive (an accelerated capital cost allowance for businesses making capital investments). These three incentives are available to businesses in the agriculture and agri-food industry, and allow eligible businesses making capital investment to write-off a larger share of their costs in the year an investment is made. These measures apply to qualifying assets acquired and put in use after November 20, 2018. They will allow businesses to position themselves for long-term growth, and will make it more attractive to invest in assets that continue to strengthen the agriculture and agri-food sector. Starting in 2024, these measures will be gradually phased out, and will no longer be in effect for investments put in use after 2027.

RECOMMENDATION 12

That the Government of Canada review Canada's *Income Tax Act* to address the competitive imbalance between Canadian farmers and Canada's main trade partners.

The Government acknowledges this recommendation. The Government recognizes the importance of supporting farmers through the income tax system. To this end, the tax system contains a number of measures that benefit farmers.

The Lifetime Capital Gains Exemption (LCGE) allows a farmer to shelter from income tax up to \$1 million of capital gains realized on the disposition (e.g., a sale) of qualified farming property. In contrast, the LCGE for small business shares is currently \$866,912 for 2019. The LCGE is applied on an individual basis, so that each taxpayer is allowed an exemption up to the \$1 million limit. As a result, a couple could shelter up to \$2 million if both the farmer and their spouse, or common-law partner, qualify for the exemption. The LCGE provides an incentive to invest in the development of productive farm businesses, and helps farm business owners to accumulate capital for retirement and plan for business succession.

In addition to the LCGE, if the proceeds of disposition have not been fully received, farmers are entitled to claim a capital gains reserve over a five year period. This capital gains reserve is extended to a 10-year period where the transfer is of qualified farming property to the farmers' child. This provision may be useful where the capital gains upon disposition exceed an individual's available LCGE.

Additionally, the Intergenerational Farm Rollover for family farms allows for a tax deferral on the transfer of eligible farm property to a child. For the purposes of the rule, a "child" is broadly defined to be a child, grandchild, or great-grandchild of an individual or of that individual's spouse or common law partner. This rule, which is only available in respect of farm or fishing property, recognizes the particular challenges faced in the continued management of family farms.

RECOMMENDATION 13

That the Government of Canada simplify the application process for the Scientific Research and Experimental Development Program to include on-farm research to facilitate access to tax incentives.

The Government acknowledges this recommendation. The Government is continuously looking to make it easier for claimants to access the Scientific Research and Experimental Development (SR&ED) tax credit for which they are entitled. The SR&ED program is a Federal tax incentive program that encourages Canadian businesses in all industry sectors to conduct research and development (R&D) in Canada. The program offers broad-based support, including to the agriculture and agri-food sector, by providing a tax credit for the expenditures incurred on R&D work done that meets the definition of "SR&ED" in the *Income Tax Act*. This can include eligible, on-farm research. Agricultural producers can benefit from the ability to claim the SR&ED

investment tax credit on contributions made to agricultural organizations that fund SR&ED, such as associations, universities and certain non-profit corporations. This measure allows individual agricultural producers to claim the tax credit on part of their contributions for SR&ED conducted on their behalf.

In its administrative capacity, the Canada Revenue Agency (CRA) is improving the information, tools and services available to SR&ED claimants to help them understand the eligibility and filing requirements. In the coming year, the CRA will be engaging the agriculture and agri-food sector to: 1) promote the SR&ED tax credit; 2) educate and provide guidance to businesses to self-assess their eligibility; and 3) create opportunities for the industry to interact with the CRA, and voice their experiences with the program.

RECOMMENDATION 14

That the Government of Canada improve access and awareness of programs to help companies take new products and technological processes from design to commercialization to export sales and trade services.

The Government supports this recommendation. The Government is committed to improving access and awareness of programs to help companies take their innovations to commercialization and export markets.

In 2017, ISED under the Innovation and Skills Plan announced a review of all innovation programs to make the services more responsive to client needs, more efficient, and better able to promote business growth. This review took place across 20 federal departments and agencies. As a result, Budget 2018 included a reform of innovation programs to consolidate, streamline, and strengthen the program suite through a single window. This single window, called Innovation Canada, allows businesses to easily navigate all program offerings across the Government.

Innovation Canada's digital platforms allow businesses to input their specific needs, goals, and statistics, and in-turn the platforms provide them with a tailored list of government programs and services. From funding to expert advice to driving new collaborations, there are hundreds of programs and services designed to help businesses innovate, create jobs, and grow Canada's economy. This single window is a client-focused tool aimed at improving access to and awareness of programs across the Government. Programs have been streamlined, in part, into four flagship platforms: 1) the Industrial Research Assistance Program, which provides innovation and funding services; 2) the Strategic Innovation Fund (SIF), which simplifies application processes, accelerates processing, and provides assistance; 3) the Canadian Trade Commissioner Service, which has offices around the world and across Canada that provide companies with advice, connections and funding to help them explore new markets; and 4) Regional Development Agencies, which work closely with businesses and innovators in their regions.

AgPal, part of the single window tool, is specifically targeted to the agriculture and agri-food sector. AgPal is a web-based discovery tool that helps farmers, processors, agri-businesses, and other organizations find agriculture and agri-food related information and resources tailored to their unique needs. AgPal pulls information from all levels of government and agricultural organizations.

RECOMMENDATION 15

That the Minister of Health review how Health Canada regulates agricultural products through the Office of Controlled Substances and coordinate with the Minister of Agriculture to identify and remedy regulatory oversights/overlaps that are inhibiting technological advancement and innovation in the agricultural industry.

The Government acknowledges this recommendation. On the advice of the Advisory Council for Economic Growth, Budget 2018 launched the Government's ambitious Regulatory Reform Agenda, including a Targeted Regulatory Review of the Agri-Food and Aquaculture Sector (The Review). Government departments and agencies, including Agriculture and Agri-Food Canada and Health Canada, have worked collaboratively to conduct the Review with a focus on modernizing the regulatory system to support innovation and business investment. The Budget 2019 also proposed continued momentum on the Government's regulatory reform agenda such as funding for Regulatory Roadmaps which describe actions to be taken to address issues raised during the targeted Regulatory Reviews.

Health Canada is the federal body responsible for regulating controlled substances under the *Controlled Drugs and Substances Act*. Current regulations for controlled substances include a pathway to permit research and innovation involving agricultural products containing controlled substances.

Canada is party to three United Nations international drug conventions that tightly regulate controlled substances activities, including certain agricultural products. It is important to ensure that Canada continues to respect its international obligations, as well as continue to protect public health and maintain public safety.

The Government's objective is to ensure regulations are the following: 1) easily understood; 2) reflective of international commitments and relations; 3) flexible so that they continue to be appropriate as the environment evolves; 4) responsive so that they can accommodate changes in the Canadian and global business environment; and 5) protective of public health and public safety. The Government through its legislation, regulations, and programs, strives to balance the protection of public health and safety of Canadians with enabling innovation and advancement in its industries. As part of this comprehensive approach, products may be regulated under a number of regulatory frameworks administered by different departments.

RECOMMENDATION 16

That in order to ensure technological advancements and innovation in agriculture are not being hindered, the Minister of Agriculture and Agri-Food undertake an evaluation of its procedures and practices regarding the *Agricultural Growth Act*.

The Government acknowledges this recommendation. The Government is in the process of modernizing regulations to improve consistency, reduce complexity, and maintain or enhance safety and protection goals, while at the same time fostering innovation and supporting the growth of the Canadian agriculture and agri-food sector.

The *Agricultural Growth Act* (AGA) amends a number of acts with the following intentions: 1) to modernize and strengthen existing federal agriculture legislation; 2) to support innovation in the Canadian agriculture industry; and 3) to enhance global market opportunities.

In the AGA, a number of amendments were made to the *Plant Breeders' Rights (PBR) Act* to align the statute with the *1991 Act of the International Convention for the Protection of New Varieties of Plants (UPOV'91)*. Canada's ratification of the UPOV'91 has encouraged increased investment in domestic plant breeding and has fostered greater accessibility to foreign varieties for Canadian producers. For example, between 2012 and 2018, private sector investment in agriculture varietal development has grown by 56 percent with a greater emphasis on investing in a diversity of crop kinds. Private sector investment growth is largely attributed to *PBR Act* amendments and the ratification of UPOV'91. Additionally, the horticulture sector is witnessing greater opportunity, with facilitated access to foreign-bred varieties. Since 2014, the average number of PBR applications for new potato varieties has grown by 62 percent, while fruit and vegetable applications have increased by 45 percent.

The AGA contains amendments to a number of other Acts, providing new authorities to support the approval processes, for example: the consideration of information available from foreign reviews when approving new agricultural products under the *Feeds Act*, *Fertilizers Act*, *Health of Animals Act* and the *Seeds Act*.

Draft regulations to modernize *Fertilizers Regulations*, which are more responsive to industry needs and shorten the time to market through the exemption of already deemed safe fertilizers and supplements from registration, have been published in *Canada Gazette Part I* (December 8, 2018). Stakeholder consultations also are ongoing, examining potential amendments to streamline the *Feeds Regulations*.

The Government is developing administrative, or non-regulatory tools to improve assessment timelines and decrease time to market for new agricultural products that meet all safety requirements. For example, the Government is evaluating the feed ingredient assessment and approval schemes of other jurisdictions (e.g., the European Union and the United States) with a view to recognizing their equivalency. An administrative (non-regulatory) proposal for recognizing the equivalency of foreign jurisdictions' systems is being developed for consultations with stakeholders.

The CFIA's Forward Regulatory Plan outlines the specific agriculture and agri-food regulatory initiatives that the Government expects to bring forward over the next two years. It also identifies public consultation opportunities for each regulatory initiative. Through this planned process, the Government will be evaluating procedures and practices within the acts and regulations administered by the CFIA, including those amended by the AGA.

The Government is committed to continue to work with stakeholders to modernize its regulatory frameworks governing food safety, plant and animal health. The intent is to develop outcome-based regulation, and to align with technological advancements, innovation and leading industry practices.

RECOMMENDATION 17

That the Government of Canada resolve irritants and issues that limit innovation and competitiveness in export markets to have them accept domestically approved products or technological processes.

The Government supports this recommendation. The Government continuously engages with trading partners in various fora to help ensure international rules and standards reflect Canadian interests. The Government actively participates in the World Trade Organization (WTO) Sanitary and Phytosanitary (SPS) Committee, and the Technical Barriers to Trade (TBT) Committee to raise concerns related to measures introduced by other countries. In addition, Canada informs WTO members of new domestic rules and regulations being implemented for feedback and comment.

The Government also participates within each of the three International Standard Setting Bodies and their relevant subcommittees so that the establishment of international standards, recommendations and guidance reflect the interests of the Canadian agriculture and agri-food sector.

When negotiating trade agreements, Canada negotiates SPS and TBT chapters to establish additional rules aimed at preventing the unjustified use of regulatory measures as barriers to trade. In addition, Canada often seeks the establishment of bilateral mechanisms within trade agreements to promote good regulatory practices, including regulatory cooperation and communication between the Parties, and to serve as a forum to discuss and resolve bilateral irritants arising from regulatory measures.

Canada engages bilaterally with many countries, on the margins of multilateral meetings, during trade missions, or under specific mechanisms such as the Consultative Committees on Agriculture.

Lack of international standards can limit export markets. Canada has taken a leadership role in promoting the use of international standards to harmonize science-based regulatory requirements among jurisdictions. For example, in February 2018, Canada chaired international discussions on Maximum Residue Limits (MRLs). In addition, Canada provided funding to host a Food and Agriculture Organization/World Health Organization joint meeting on pesticide residues, which focused on reducing the

backlog on pending Codex Alimentarius Commission standards.

Similarly, trade disruptions can be caused by the unintended Low-Level Presence (LLP) of unapproved products in export shipments. In 2012, Canada launched the Global Low-Level Presence Initiative (GLI). It is a group of 15 importing and exporting countries committed to developing practical, science-based and trade-facilitative solutions for the management of the unintended LLP of unauthorized genetically modified crop in grain shipments. As of March 2019, the GLI has held six meetings and has advanced appreciation of the causes of LLP and its recognition as a compliance issue that warrants risk-based management to facilitate trade.

Canada will continue to initiate and participate in technical and policy discussions in multiple fora to: promote understanding of Canada's food safety, animal health, and plant health systems; allow for information exchange; and, advance the resolution of market access issues to avoid trade disruptions.

RECOMMENDATION 18

That the Pest Management Regulatory Agency undertake a review of its regulatory processes with the aim of evaluating how its procedures may inhibit technological advancement and innovation.

The Government supports this recommendation. On the advice of the Advisory Council for Economic Growth, Budget 2018 launched the Government's ambitious Regulatory Reform Agenda, including a Targeted Regulatory Review of the Agri-Food and Aquaculture Sector (The Review). Government departments and agencies, including the Pest Management Regulatory (PMRA) and the Canada Food Inspection Agency (CFIA), have worked collaboratively to conduct the Review with a focus on modernizing the regulatory system to support innovation and business investment. The Budget 2019 also proposed continued momentum on the Government's regulatory reform agenda such as funding for Regulatory Roadmaps which describe actions to be taken to address issues raised during the targeted Regulatory Reviews. The Government is committed to reforming and modernizing federal regulations while continuing to protect the health and safety of Canadians and the environment.

PMRA is currently conducting a comprehensive review of the *Pest Control Products Regulations*. Recognizing that regulatory burden may inhibit technological advancement and innovation, the review will ensure that the *Pest Control Products Regulations* continue to meet program objectives of health and environmental protection in an effective and efficient manner, while minimizing regulatory burden. Furthermore, in 2020, the *Pest Control Products Act*, as prescribed within the Act, will be referred to a committee of Parliament for review, which may provide further recommendations to improve the efficiency and effectiveness of the regulatory program.

RECOMMENDATION 19

That the Pest Management Regulatory Agency and the Canadian Food Inspection Agency modernize, simplify, and speed up the regulatory approval process so companies can take advantage of market opportunities as they arise.

The Government supports this recommendation. The Government is committed to reforming and modernizing federal regulations while continuing to protect the health and safety of Canadians and the environment.

PMRA is currently conducting a comprehensive review of the *Pest Control Products Regulations*. The review will ensure that the regulations continue to meet program objectives of health and environmental protection in an effective and efficient manner, while minimizing regulatory burden. Furthermore, the *Pest Control Products Act*, as prescribed within the Act, will be referred to a committee of Parliament for review in 2020, which may provide further recommendations to improve the efficiency and effectiveness of the regulatory program.

The CFIA is proposing to finalize and implement amendments to the *Fertilizers Regulations* and the *Feeds Regulations*, both of which would reduce the volume of products requiring pre-market assessment. Amendments to the *Fertilizers Regulations* would also increase the length of the registration period thus decreasing regulatory burden. As well, the CFIA proposes to streamline the approval of new feed products based on equivalency of authorizations by foreign governments, and to implement an electronic submission process for the pre-market assessment of agricultural input commodities. This will reduce regulatory burden by enabling online applications and payments, as well as automated case tracking.

RECOMMENDATION 20

That the Government of Canada support knowledge transfer in agriculture to bring science to the public as new agricultural technologies are developed.

The Government supports this recommendation. The Government recognizes knowledge transfer as an essential component to advancing the adoption of new agricultural technologies and innovations, supporting public trust, and helping the sector expand market opportunities and exports.

The federally funded AgriInnovate and AgriScience programs within the Canadian Agricultural Partnership (the Partnership) enhance the competitiveness of the sector through advancements in research, science and innovation, resulting in increased rates of adoption and commercialization of innovative products, technologies, and processes. To be eligible for the AgriScience funding, projects require a comprehensive knowledge transfer process to ensure the distribution and adoption of research outcomes to producers. This increases knowledge transfer capacity within the agriculture and agri-food sector, which is best positioned to encourage uptake of information and new technologies by producers and end-users. The Partnership's provincial or territorial led programs transfer knowledge through events, activities, demonstration sites, and

information products, thus increasing producers' and public understanding, trust and adoption of new technologies, practices, and products.

The Government's new Living Laboratories Initiative, administered through AAFC, enhances communication, and knowledge transfer between researchers and producers regarding new technologies. Across the country, producers and end-users are collaborating with scientists to: identify priority issues, plan and conduct experiments, and interpret results. This collaborative research model will lead to increased implementation of sustainable management practices and innovations. Research results will be widely shared, fostering greater awareness and adoption of best practices and new technologies.

The Government is committed to increasing the availability of agricultural research. Between 2014 and 2018, AAFC published over 5,000 scientific articles in peer-reviewed journals. An increasing number of those AAFC research articles are Open Access, or are published in Open Access journals. AAFC has also published over 300 hundred datasets to the Government of Canada Open Data Portal, and thousands of datasets have been published in open repositories such as the National Center for Biotechnology Information, Canadian Biodiversity Information Facility, the National Soil Database, and the Federal Geospatial Platform. To further increase the availability of its research assets, AAFC is digitizing its biological specimens of insects, plants, fungi, bacteria and nematodes. These collections will be made publicly available through an online portal.

AAFC knowledge and technology transfer officers, located across the country, evaluate and implement clear, fast adoption pathways of science and technologies for the agriculture and agri-food sector. Federal officers have a strong relationship with provincial and territorial extension staff, resulting in a strong network of knowledge transfer practitioners.

The Government's communication and outreach strategy is evolving to reflect how the public accesses information. The sharing of AAFC's science efforts further supports the public's understanding, trust and acceptance of new agricultural technologies. For example, in 2018, the department issued over 1,200 tweets and Facebook posts regarding science achievements to its 35 thousand and 28 thousand followers, respectively; 209 media inquiries were addressed (164 of which resulted in interviews with scientists); and 10 open houses were held at AAFC Research and Development Centers across the country. The department regularly promotes scientists' work directly to regional and national media outlets, as well as through participation at various exhibit and trade shows across the country every year.

RECOMMENDATION 21

That the Government of Canada allocate resources to inform the public about regulatory processes, and how regulators make their decisions, and to make this information public.

The Government supports this recommendation. Openness and transparency continue

to be core values guiding government operations to give Canadians access to information.

The Government regularly consults and engages with Canadians when developing, managing and reviewing regulations. The *Cabinet Directive on Regulation* (CDR) outlines requirements for consultation and engagement in the development of regulations. The CDR requires that departments and agencies identify stakeholders impacted by regulations, including Indigenous peoples, and meaningfully consult and engage with them throughout the development, management, and review of regulations. Consultation comments from stakeholders are documented and made available to the public upon request. To allow for public comment, the pre-publication of a regulation is published in the *Canada Gazette*, Part I along with the Regulatory Impact Analysis Statement (RIAS) that includes a summary of consultations and analysis undertaken to design the proposed regulatory instrument. The final regulation and the RIAS are published in the *Canada Gazette*, Part II.

The Government of Canada is committed to reforming and modernizing federal regulations. Under Budget 2018, the Government of Canada announced funding for a Targeted Regulatory Review of the Agri-Food and Aquaculture sector (the Review) and the development of a Regulatory Roadmap to explore ways to enable regulations to be more agile, transparent, and responsive so that Canadian businesses can grow, resulting in benefits for all Canadians. A “What We Heard Report” from national public engagement on the Regulatory Review, and a Regulatory Roadmap is intended to be published in 2019.

Under the *Pest Control Products Act*, Health Canada’s (HC) PMRA is required to consult with the public and other interested stakeholders on all major decisions, including; registrations and re-evaluation, as well as on proposed policies, guidelines and codes of practice. In the case of regulatory decisions, the PMRA posts proposed re-evaluation and registration decision documents on its website that explain the scientific rationale behind each decision. The PMRA also maintains a public registry where information on pesticides and the pesticide regulatory system, including information on how regulatory decisions are made, may be accessed.

The PMRA is currently undertaking an evaluation of business practices to seek efficiencies and improvements to the post-market review (e.g. the re-evaluation older pesticides), and exploring legislative and funding options to improve the overall sustainability of the program. This includes exploring mechanisms for enhancing engagement with all stakeholders, collecting robust data, addressing and avoiding data gaps early in the regulatory process, and enhancing transparency for all Canadians.

Since 2011, the CFIA Transparency Agenda has guided its efforts to become a more service-oriented, responsive and accountable organization. For example, as part of this commitment to transparency, the CFIA provides information on its website that allows the public insight into the decision-making process at key points throughout a comprehensive safety evaluation for novel plants and plant-based animal feed ingredients. The Agency maintains a public database of approved novel plant products in Canada, and also provides information about compliance and enforcement actions it

may take when unauthorized products are found. As well, scientific research to support regulatory programs and decisions are publicly shared through media interviews, postings on its website, and through social media channels.

HC assesses the safety of all novel foods (including those which have resulted from genetic modification) proposed for sale in Canada. Companies are required to submit detailed scientific data for review and approval by HC, before such foods can be sold. As part of this process, HC is committed to openness and transparency, including in the pre-market assessment system for novel foods. Summaries of HC's assessments of each approved novel food are available.

HC and the CFIA have established a process to increase the transparency for Genetically Modified (GM) crops and foods prior to their authorization. Companies producing GM crops are encouraged to notify the public when they submit a new product for assessment and authorization. To facilitate this, a voluntary notice referred to as a Notice of Submission is posted on the CFIA's website for public comment. Any comments received are then considered, where scientifically relevant, as part of the assessment of the product in question.

HC currently uses digital media and platforms as the primary means to connect and interact with the public on the role of HC with regard to the regulation and safety assessment of novel foods.

RECOMMENDATION 22

That the Government of Canada provide more open access to information for federal research in agriculture and processing.

The Government supports this recommendation. The Government recognizes the innovation potential and economic value of increased access to federal research for the Canadian agriculture and agri-food sector. The Government released its fourth Open Government Action Plan in the fall of 2018, in which it commits to increase the availability of federal government funded science, scientific data, and scientists through the establishment of two new positions, the Minister of Science, and the Chief Science Advisor, who have the mandate to promote science-based policy decisions, and to increase the availability of government science.

As a key consultation mechanism to engage with the sector, AAFC established fourteen Value Chain Roundtables (VCRTs). The VCRTs have identified access and availability of research as a key priority to increase the competitiveness of the sector. In 2016, AAFC commissioned a report, on behalf of the VCRTs, entitled: *Strengthening Canada's Agricultural and Agri-Food Business Data Systems*. The report identifies the information gaps and weaknesses that hinder Canada's agriculture and agri-food sector in making key business decisions to get products to market efficiently and reliably.

As noted in recommendation 20, the Government is committed to increasing the availability of agricultural research. Between 2014 and 2018, AAFC published over 5,000 scientific articles in peer-reviewed journals, and an increasing amount of those

AAFC research articles are Open Access, or are published in Open Access journals. The new AAFC Policy on Science and Technology Publications will also promote publishing practices that are aligned with the Open Science commitment to support the availability of science and technology publications. The Department has also published over 300 datasets to the Government of Canada Open Data Portal, and thousands of datasets to open repositories such as the National Center for Biotechnology Information, Canadian Biodiversity Information Facility, the National Soil Database, and the Federal Geospatial Platform. To further increase the availability of its research assets, AAFC is digitizing its biological specimens of insects, plants, fungi, bacteria and nematodes. These collections will be made publicly available through an online portal.

AAFC leverages social media platforms to disseminate its research and engage with the public and producers. For example, in 2018, the department issued over 1,200 tweets and Facebook posts regarding science achievements to its 35 thousand and 28 thousand followers, respectively. The Department responded to over 200 media inquiries (164 of which resulted in interviews with scientists), and hosted 10 open houses in research centers across the country. AAFC scientists' work is reported directly to regional and national media outlets, as well as through various exhibit and trade shows across the country every year.

Recommendation 23

That the Government of Canada put a priority on research and development projects that can result in export development and make this part of funding decisions.

The Government supports this recommendation. Investments in research and development are an important avenue to expand exports. Growing trade and expanding markets is a federal priority under the federal, provincial and territorial agreement under the Canadian Agricultural Partnership (the Partnership). This agreement will help the sector reach the Government's ambitious goal to grow Canada's agriculture and food exports to \$75 billion by 2025.

Federal programs under the Partnership provide incentives to identify science and innovation needs including those that reflect market conditions and export opportunities. For example, the \$338 million AgriScience Program funds projects along five priority areas, including accelerating the growth of the Canadian food and beverage processing sector through research and development. Additionally, one of the priorities of the \$128 million AgriInnovate Program is to secure and expand new export markets.

Furthermore, the Government's internal research and development projects support the sector's export objectives. For example, AAFC's Sustainability Metrics initiative provides sustainability data and agri-environmental indicators to the public. These data are used by industry groups to demonstrate sustainability attributes of Canadian commodities to international markets. Data produced through AAFC research helps to overcome potential trade barriers. For example, AAFC's Agricultural Greenhouse Gases Indicators were used to demonstrate that Canadian canola exceeded the European Union's

greenhouse gas emissions reduction threshold, enabling access to the European market for Canadian canola producers.

More broadly, ISED's Innovation and Skills Plan includes a number of new research and development initiatives and strengthens existing research and development programs. As part of the Government's Innovation and Skills Plan, the Innovation Superclusters Initiative aims to strengthen innovation in new commercial and global opportunities for Canadian businesses. As one of its goals, the Protein Industries Canada Supercluster will be funding projects to increase Canada's plant protein agri-food exports through leveraging strategic partnerships within Canada and abroad.

The ISED led Strategic Innovation Fund (SIF) has the objective of spurring innovation and investment across all sectors, including agri-food. Projects are being assessed on their expected innovation, economic and public benefits, with potential economic benefits including increases in exports.

The National Research Council (NRC) enables technologically innovative Canadian small and medium enterprises to grow faster by facilitating participation in international collaborative research and development projects. These projects are aimed at accelerating and improving the likelihood of successfully entering international markets and global value chains. Specifically, the Industrial Research Assistance Program helps accelerate the growth of innovative small and medium enterprises by: providing guidance and advice; collaborating with Canadian and international partners for targeted matchmaking; and engaging in co-funding of international research and development projects.

Conclusion

The Government extends its gratitude to the Members of the Committee, and the witnesses that appeared before it, for their work to identify ways to address challenges and opportunities facing the advancements of technology and research in the agriculture and agri-food sector that can support Canadian exports.

The Committee Report and the federal initiatives detailed in this response highlight the important roles and contributions that governments make in support of the on-going efforts by the agriculture and agri-food sector. The Government will continue to work with the provinces and territories, agriculture stakeholders, and other partners to support the sector in the advancement of technology and research in the agriculture and agri-food sector that is supportive of Canadian exports.