

# Results Analysis

## Review Engagement Report

To the Members of the Legislative Assembly

I reviewed three of nine performance measures in the Ministry of Agriculture and Rural Development's Annual Report 2014–2015. The reviewed performance measures are the responsibility of the ministry and are prepared based on the following criteria:

- *Reliability*—The information used in applying performance measure methodologies agrees with underlying source data for the current and prior years' results.
- *Understandability*—The performance measure methodologies and results are presented clearly.
- *Comparability*—The methodologies for performance measure preparation are applied consistently for the current and prior years' results.
- *Completeness*—The goals, performance measures and related targets match those included in the ministry's budget 2014.

My review was made in accordance with Canadian generally accepted standards for review engagements and, accordingly, consisted primarily of enquiry, analytical procedures and discussion related to information supplied to me by the ministry.

A review does not constitute an audit and, consequently, I do not express an audit opinion on the performance measures. Further, my review was not designed to assess the relevance and sufficiency of the reviewed performance measures in demonstrating ministry progress towards the related goals.

Based on my review, nothing has come to my attention that causes me to believe that the performance measures identified as reviewed by the Office of the Auditor General in the ministry's annual report 2014–2015 are not, in all material respects, presented in accordance with the criteria of reliability, understandability, comparability and completeness as described above.

[Original signed by Merwan N. Saher, FCA]

Auditor General

May 19, 2015

Edmonton, Alberta

Performance measures reviewed by the Office of the Auditor General are marked with an asterisk (\*)  
on the Performance Measures Summary Table.

# Performance Measures Summary Table

Performance Measures	Prior Years' Results				Target	Current Actual
<b>Goal 1: Alberta's agriculture industry is positioned for growth through access and development of new and existing markets</b>						
1.a: Alberta's agri-food exports by market (\$ million)						
• United States	2,431	2,551	2,967	3,050	3,000	3,931
• China	1,069	937	1,646	1,511	1,702	1,324
• India	8	58	58	39	65	18
• CETA member countries	217	370	280	244	289	307
• TPP member countries (excluding U.S.)	1,456	2,023	2,232	2,061	2,308	2,023
• Rest of the World	1,594 (2010)	2,122 (2011)	2,026 (2012)	1,800 (2013)	2,100	2,110 (2014)
1.b: Alberta's agri-food exports by sector (\$ million)						
• Primary commodities	3,262	4,520	5,529	5,061	5,643	5,475
• Processed/manufactured products	3,513 (2010)	3,541 (2011)	3,681 (2012)	3,644 (2013)	3,757	4,238 (2014)
<b>Goal 2: Consumers have confidence and assurance that Alberta is an environmental steward and leader in farmed animal health and welfare, plant health, and safe food products</b>						
2.a: Average percentage of improved environmentally sustainable agriculture practices adopted by producers (biennial survey)						
	n/a (2010-11)	55% (2011-12)	n/a (2012-13)	56% (2013-14)	n/a	n/a (2014-15)
2.b: Percentage of active provincial licensed meat processing plants that meet provincial meat processing standards						
	n/a (2010)	n/a (2011)	91% (2012)	94% (2013)	93%	96% (2014)
2.c: *Percentage of eligible seeded acres for major crop categories insured under Production Insurance						
• Annual Crops	73%	73%	75%	77%	77%	76%
• Perennial Crops	28% (2010)	23% (2011)	28% (2012)	26% (2013)	26%	25% (2014)
<b>Goal 3: Alberta's agriculture industry development initiatives maximize value and enable economic sustainability</b>						
3.a: Number of value-added products developed and successfully introduced to market with assistance from Agriculture and Rural Development						
	90 (2010-11)	157 (2011-12)	216 (2012-13)	217 (2013-14)	216	220 (2014-15)
3.b: *Research and development investment by collaborators leveraged through ministry resources (\$ million)						
	7.4 (2010-11)	6.2 (2011-12)	6.4 (2012-13)	4.8 (2013-14)	6.4	5.2 (2014-15)
<b>Goal 4: Rural Alberta has the development opportunities necessary for ongoing economic success</b>						
4.a: *Total leveraged investment in rural businesses facilitated through AFSC lending services (\$ million)						
	640 (2010-11)	658 (2011-12)	663 (2012-13)	644 (2013-14)	680	716 (2014-15)
4.b: Percentage of ministry-supported, agricultural-related community activities that focus on leadership development						
	33% (2010-11)	29% (2011-12)	35% (2012-13)	34% (2013-14)	33%	35% (2014-15)

\* Indicates performance measures that have been reviewed by the Office of the Auditor General. These were selected for review by ministry management based on the following criteria established by government: enduring measures that best represent the goal; measures for which new data is available, and; measures that have well established methodology.

All notes regarding these measures appear under the corresponding goal in this report. Further information on performance measures methodology, including data sources and limitations, can be found in Appendix C starting on page 38.

# Ministry Overview

Our ministry provides the framework and services necessary for Alberta's agriculture and food sector to excel, to inspire public confidence in the quality and safety of food, to support environmentally sustainable production practices, and to lead the collaboration that enables resilient rural communities. In our 2014-17 Business Plan, our goals included:

- Alberta's agriculture industry is positioned for growth through access and development of new and existing markets.
- Consumers have confidence and assurance that Alberta is an environmental steward and leader in farmed animal health and welfare, plant health and safe food products.
- Alberta's agriculture industry development initiatives maximize value and enable economic sustainability.
- Rural Alberta has the development opportunities necessary for ongoing economic success.

In order to achieve our goals, we focus on providing extension and applied research services to industry, building strong relationships, and working collaboratively with industry, ministry partners across the Government of Alberta, other levels of government and stakeholders that have a vested interest in the continued success of the agriculture industry and vitality of rural communities.

We also partner with the federal government in the delivery of Growing Forward 2, a five-year program (running from 2013-18) that focuses on agricultural innovation, competitiveness, and market development. It also helps ensure producers and processors across Canada have the tools and resources they need to continue to innovate and capitalize on emerging market opportunities. In 2014-15, we administered the following through Growing Forward 2:

- \$15.1 million for Agri-Processing, Innovation, Automation, and Commercialization programs to assist industry in improving productivity, developing new products, and achieving growth in new and existing markets.
- \$1.9 million for the International Market Development and Investment Attraction Initiative to build market development strategies, in-market relationships, and in-market expertise, as well as facilitate investment attraction.
- \$8.9 million for Environmental Resource Management programs to address energy efficiency and environmental risks to water.
- \$16.2 million for Assurance Systems programs and initiatives to enhance food safety, biosecurity, plant and animal health, livestock welfare, and traceability.
- \$3.1 million for Water Management programs to improve the efficiency and security of rural and agricultural water supplies.
- \$1.5 million for the Research Opportunities and Innovation initiative to support applied research.
- \$4.6 million for Business Management, Opportunities, and Skills Development programs and initiatives to enable industry to pursue new business opportunities.

This Annual Report details some of the specific actions and results we took to support our business plan goals. Our consolidated accomplishments are presented in an integrated manner under common themes, rather than focusing on individual planned action items.

# Discussion and Analysis of Results

## Financial Results of Operations

### Expense by Function:

All Ministry Expenses, with the exception of debt servicing costs, are reported under the Government of Alberta function: Agriculture, Resource Management and Economic Development.

### Revenue:

Ministry revenue was \$760 million, \$58 million lower than 2013-14, and \$60 million lower than budget.

#### *Compared to 2013-14 Actual*

Lower revenues from the previous year are primarily due to lower spring commodity prices resulting in reduced AgrilInsurance premiums and lower spring price endorsement premiums. Federal government grants were lower due to reduced shareable insurance premiums.

#### *Compared to Budget 2014*

Lower revenues compared to budget resulting from lower than anticipated federal contributions for Growing Forward 2 programs, lower AgrilInsurance premiums, spring price endorsement premiums and federal insurance contributions resulting from lower spring commodity prices, and lower than anticipated endowment funding due to the repeal of the *Savings Management Act* in December 2014.

### Expense:

Ministry expense was over \$1 billion. Insurance and agriculture income support accounted for \$642 million or 62 per cent of total expense.

#### *Compared to 2013-14 Actual*

Total Expense was \$169 million higher than 2013-14.

- Insurance expense was \$74 million higher than the previous year mainly due to higher crop and hail insurance indemnity expenses as a result of adverse weather conditions in the 2014-15 growing season.
- Expenses for agriculture income support were \$61 million higher due to lower commodity prices on grains and oilseeds, lower quality products due to weather, and higher input costs for the cattle and hog industries.
- Higher allowance for doubtful accounts due to increases in specific lending reserves.
- Increased expenses on Growing Forward 2 strategic initiatives programming.
- Introduction of the Agriculture and Food Innovation Endowment Account in 2014-15.

#### *Compared to Budget 2014*

Total expense was \$33 million lower than budget.

- Reduced spending due to in-year cost-containment measures ministry-wide being implemented due to the drop in government resource royalty revenue.
- Lower than anticipated 2013 Alberta Flood disaster payments.
- Lower anticipated Innovation Endowment expenses due to the repeal of the *Savings Management Act* in December 2014.
- Debt servicing costs were \$3 million lower than budget due to lower interest rates.

# GOAL 1

## Alberta's agriculture industry is positioned for growth through access and development of new and existing markets

### What this means:

This goal involves providing effective extension services to grow businesses and industry, as well as building relationships that grow opportunities in the United States, Mexico, and several priority markets including Asia Pacific Basin, Europe, India and nations of the Trans-Pacific Partnership.

### Our responsibilities:

In pursuit of this goal, we facilitate investment attraction, promote opportunities for trade, and conduct trade missions in partnership with industry. We also provide factual information that helps the agriculture industry capitalize on new opportunities and remain competitive, develop policies, and administer enabling legislation and regulations aimed at creating a stable and secure business environment.

### Planned actions to achieve this goal included:

- **Develop and implement a market access plan for Alberta's agriculture sector that identifies priority markets, key relationships, outcomes and opportunities to work with key stakeholders.**
- **Work with industry to develop and expand access into China, India and Europe through the Canada-EU Comprehensive Economic Trade Agreement (CETA), and nations of the Trans-Pacific Partnership (TPP).**
- **Work with other ministries, provincial governments and the federal government to ensure that Alberta's agriculture products can reach markets effectively and efficiently.**
- **Address and maintain market access to the United States through effective engagement with both federal and state level stakeholders.**
- **Identify and pursue opportunities for growth in domestic agriculture markets.**

## Results and Contributions from 2014-15

### Trade Agreements and Advocacy

- Worked with the federal and provincial governments and the Government of Mexico to advocate the United States government end mandatory Country of Origin Labelling (COOL) requirements on beef and pork imports, following multiple rulings by the World Trade Organization (WTO) that COOL violates American trade obligations. COOL invokes substantial additional costs (estimated to be over \$1 billion annually) on the meat supply chain from animals born, reared or slaughtered outside the U.S., requiring them to be labelled to indicate the country or countries involved.
- Increased engagement with Europe in anticipation of the Comprehensive Economic and Trade Agreement (CETA) implementation. Trade and advocacy missions have been critical to enhancing market access, and increasing opportunities for Alberta's small and medium enterprises in international markets. Discussions with industry partners provide awareness of the opportunities created by the various trade agreements.
- Led 41 outgoing trade and advocacy missions to foreign markets, received 82 incoming delegations to Alberta, and introduced 83 exporters to new markets or market channels by working with Alberta agri-food companies. This led to anticipated sales of \$108 million and an increase in more than 1,300 new network contacts. We did face some specific challenges that had an impact on our results, including not being able to take advantage of new opportunities in Russia because of international sanctions and the *Bovine Spongiform Encephalopathy* (BSE) case causing some international markets to be temporarily closed. This reinforces the need for increased market awareness and the continued advocacy and conveyance of Alberta's strong food safety system in addressing animal health and food safety.

### Market Access

- Worked with our federal partners and embassies to bring awareness to issues that were affecting Alberta exporters. We resolved specific market access issues in getting canola oil to India, pet food to Turkey and China, and mutton meat to Mexico, among others.
- Developed and implemented regional strategic plans in consultation with Alberta's agri-food industry for 15 different geographic markets, including the Gulf Cooperation Council, India, China, and European Union. Additionally, we are undertaking an increased focus on client outreach and export readiness training to ensure the continued growth and capability of the export-ready sector.

### Investment Attraction

- Facilitated an estimated \$10 million to \$15 million investment by a European company into Alberta's food processing sector, as well as the retention of a dairy processing investment that secures 25 jobs in rural Alberta. We continue to work to attract domestic and international firms to invest in Alberta agri-businesses.

### Domestic Market Growth

- Identified opportunities for Alberta products with food service companies and retail grocers, which resulted in 71 existing products being introduced into new Canadian markets. Through the services we offer, 18 Alberta processing companies were matched with buyers and 68 food processors received in-depth market development coaching.

### Sector Development

- Provided access to capital through Agriculture Financial Services Corporation lending products and services to support Alberta's agriculture and commercial industries and sectors. In total, \$523 million in loans were approved, with a loan portfolio of \$2.08 billion, administered and supported through interest income, fees, and the Government of Alberta. This resulted in a total investment in Alberta of \$805 million by leveraging the direct lending by 1.54 times.



## GOAL 1

- Provided \$2.9 million in support of 60 livestock and meat initiatives through the Alberta Livestock and Meat Agency Ltd., to assist with business development, build market development strategies and in-market expertise, and increase skill development in the livestock and meat sector. Over \$276,000 was targeted toward industry participation in international trade missions, forums for dialogue on key trade agreement negotiations, and the development of industry trade strategies.

### Ministry Information Services

- Provided benchmark data, information, and analysis on Alberta's agri-food industry to producers, industry, government, and agri-businesses. This information is conveyed through a number of client focused products that track industry trends and performance, as well as inform public policy and program development. These include the Agriculture Statistics Yearbook, AgriProfit\$, CropChoice\$, Agricultural Marketing Guide, Alberta Food Consumer View, Weekly Crop Review, and Livestock Market Review. This data and information produced also serve as benchmarks in evidence based decision making relating to production, marketing, and competitiveness, where accuracy and reliability of unbiased information is of vital importance to our clients.

### Performance Measure 1.a

- Alberta's agri-food exports by market (\$ million)

	Year Ending December 31					
	Actual 2010	Actual 2011	Actual 2012	Actual 2013	Actual 2014	Target 2014
United States	2,431	2,551	2,967	3,050	3,931	3,000
China	1,069	937	1,646	1,511	1,324	1,702
India	8	58	58	39	18	65 <sup>1</sup>
CETA member countries	217	370	280	244	307	289 <sup>1</sup>
TPP member countries (excluding the U.S.)	1,456	2,023	2,232	2,061	2,023	2,308
Rest of the World	1,594	2,122	2,026	1,800	2,110	2,100

Source: Statistics Canada and Agriculture and Rural Development (results current as of May 5, 2015)

<sup>1</sup> Note: Targets for India and CETA member countries were interchanged in the 2014-17 ARD Business Plan and have been revised.

- This measure is an indicator of our success in facilitating industry growth through export market diversification for Alberta's agri-food products. By diversifying our agri-food export markets, we reduce demand uncertainties for agri-food products and raise the expected benefits of investing in agri-food processing. Further developing our current markets in addition to accessing new export markets is of central importance to the industry's growth and continued performance.
- While agri-food revenues are driven by market conditions and are not wholly under our control, growth in revenue does act as an indicator of our success in trade development activities. By providing market analysis services, maintaining existing markets, and opening new markets through domestic and international trade-related agreements, we are able to contribute to the results.
- In 2014, Alberta's total agri-food exports set a record at \$9.7 billion, which is approximately a 12 per cent improvement over the 2013 result of \$8.7 billion. This improvement in export performance was primarily driven by favourable market conditions, a low Canadian dollar, an increased volume of primary commodities and processed products, as well as high livestock prices (particularly for meat products). The export of beef and live cattle in 2014 was nearly 50 per cent higher in value than in 2013.
- The growth in agri-food export revenues varies by export market destination. Agri-food exports to the United States, CETA member countries, and the rest of the world showed significant growth in 2014 due to larger export values and quantities for both primary commodities and processed products.



- In contrast, the value for agri-food exports to China, India, and TPP member countries (excluding the United States) declined. Though China had increases in primary commodity exports, the value and quantity of processed product exports decreased with significantly lower exports of crude canola oil. For India, there was a significant reduction in export quantities of primary commodities, driven by dry peas. Exports to TPP member countries were lower due to reduced quantities and values of primary commodities, mainly crops such as canola seed, barley, oats, and dried beans.
- A larger share of processed high value products in total agri-food exports to China, India, and TPP members would improve the revenue obtained from agri-food shipments to these markets.

## Performance Measure 1.b

- Alberta’s agri-food exports by sector (\$ million)

Year Ending December 31

	Actual 2010	Actual 2011	Actual 2012	Actual 2013	Actual 2014	Target 2014
Primary commodities	3,262	4,520	5,529	5,061	5,475	5,643
Processed/manufactured products	3,513	3,541	3,681	3,644	4,238	3,757

Source: Statistics Canada and Agriculture and Rural Development (results current as of May 5, 2015)

- This measure tracks the type of Alberta’s agri-food exports and provides an indication of whether the industry is shifting from primary commodities to processed products. By increasing the export share of processed products relative to primary commodities, the industry is able to generate and retain a larger portion of revenues and economic benefits from global agri-food trade.
- Primary commodities are products that are in a raw or unprocessed state, such as crops or livestock. Processed or manufactured products involve refining primary commodities to increase its value, such as turning raw canola into the higher valued canola oil. The processing sector also fortifies a diverse range of secondary industries across the food supply chain, including transportation and logistics, refrigerated storage facilities, beverage manufacturing, wholesale and retail distributors, and the food service industry.
- While agri-food exports are driven by market conditions and are not wholly under our control, growth in agri-food exports does act as an indicator of our success in trade development activities. To enhance industry performance, we work with companies and producers to develop new agri-food products for domestic and international markets, promote Alberta agri-businesses as attractive investment opportunities to foreign and private investors, support provincial export-ready agri-food industries to access international markets, and stimulate demand through the promotion of our high-quality agri-food products.
- In 2014, Alberta’s total agri-food exports set another record at \$9.7 billion, of which processed agricultural products accounted for 44 per cent. Revenues from both primary commodities and processed products increased in 2014, but the growth in processed products revenues more than doubled that of primary commodities.
- The \$5.5 billion in actual revenues from primary commodity exports is eight per cent higher than the previous calendar year, reversing the drop experienced in 2013. This was primarily due to higher values and quantities in wheat, canola seed, and live animals.
- The \$4.2 billion in revenues from processed and manufactured product exports is 16 per cent higher than the previous calendar year and 15 per cent higher than the target of \$3.8 billion, primarily driven by higher export volumes and pricing levels for meat and other livestock products.

## Alberta advantage draws international investment

Investors from around the world continue to look at Alberta as an exciting place in which to invest.

Since 2012, Agriculture and Rural Development has assisted in securing investments for the agriculture and agri-food industry valuing over \$270 million dollars.

To facilitate these investments, a variety of services are offered to prospective investors from all across the globe. International trade missions are frequently used to promote Alberta as the ideal place to do business, sometimes with companies that had not previously considered the province for their operations.

When a large international company wanted to create a production facility in rural Alberta in 2012, ARD researched and presented several site selection options, worked with other ministries to deal with labour and transportation issues, and even provided advice on how to navigate required permits.

Sometimes companies have already set up shop in Alberta but want to expand operations. ARD has an advantage of being able to connect businesses to the variety of services available, whether it is financing through Agriculture Financial Services Corporation or efficiency improvement grants through the Growing Forward 2 agreement.

Successful businesses are critical drivers of the provincial economy and mean gainful employment for many Albertans employed in the agriculture industry. Hundreds of jobs can be traced back to the successful investments facilitated by ARD, but jobs aren't the only benefit. Increased processing capacity means greater profits for producers and expanded agriculture and agri-food products available to consumers.

With the expertise and guidance provided by the Department, a great number of risks for businesses can be reduced before they even set foot in the province.

# GOAL 2

## Consumers have confidence and assurance that Alberta is an environmental steward and leader in farmed animal health and welfare, plant health and safe food products

### What this means:

This goal involves creating and promoting disease management systems, meeting evolving consumer expectations of food safety, and supporting the sustainable use of environmental resources.

### Our responsibilities:

In pursuit of this goal, we focus on traceability systems, pest management, responsible management of natural resources, animal and plant health, animal welfare and protection, and supporting the industry to maintain food safety. We also provide inspections and surveillance, and maintain early-warning mitigation systems that enable the prevention, detection, response and recovery from disease and pest outbreak events. We develop policies and programs and facilitate the adoption of beneficial management practices in pursuit of being a leader in environmental stewardship. Additionally, we collaborate across government on the completion of regional plans under the Land-use Framework.

### Planned actions to achieve this goal included:

- Develop innovative policies and business models that facilitate the adoption of integrated environmental management practices.
- Work with other ministries toward the completion of regional plans for the remaining regions under the Land-use Framework.
- Work with Energy and Environment and Sustainable Resource Development to design and implement initiatives that will make Alberta the national leader in energy efficiency and sustainability.
- Implement Alberta's Irrigation Strategy to support the irrigation industry in achieving improvements in the areas of productivity, efficiency, conservation, water supply and environmental stewardship.
- In collaboration with stakeholders, establish and maintain effective warning and mitigation systems that enable government and industry to prevent, detect, respond to and recover from events that can impact trade, consumer confidence, the health of crops, and the health, welfare and protection of farmed animals.
- Support research and innovation that encourages the development of integrated systems relating to disease and pest management and environmental sustainability.
- Work with Health to ensure a coordinated and effective approach to food safety, including harmonized food safety policy and improved reporting.
- Work with stakeholders to enhance frameworks for animal protection and welfare.

## Results and Contributions from 2014-15

### Environmental Stewardship

- Enabled the completion of over 300 new Environmental Farm Plans, which are an on-farm self-assessment tool for producers that helps identify risk and provides guidance toward long-term solutions regarding on-farm stewardship. Utilizing a new online version of the plan, we continue to work through the Agriculture Service Boards and the applied research associations to deliver the program.
- Assisted producers with conducting more than 500 Long-Term Water Management Plans and more than 120 Long-Term Irrigation Management Plans. These plans are an assessment of a producer's current water management program and provide technical assistance on methods for improving water efficiency and security.
- Developed a Phosphorus Risk Assessment Tool for producers, which aids in assessing nutrient risks along watersheds. As part of the Bow River Phosphorus Management Project, which includes a variety of municipal and industry stakeholders, the tool helps producers determine risks, set priorities, and provide viable solutions in improving efficiencies or reducing nutrient losses.
- Provided information about energy saving technologies and practices to producers and provided total funding of just over \$3 million to 304 producer projects to adopt energy saving technologies and practices on their farms.
- Continued a three year pilot project to coach nine agri-processing companies in developing strategic plans to improve the use of energy, and reduce water consumption and waste.

### Traceability, Identification, Surveillance and Emergency Response

- Detected the first case of Chronic Wasting Disease in farmed cervids since 2003 and the first case of *Bovine Spongiform Encephalopathy* (BSE) in Alberta Cattle since 2011. Such early detection is attributable to having a strong surveillance system for disease in the province.
- Worked with the pork industry to enhance surveillance for the Porcine Epidemic Diarrhea Virus and Swine Delta Corona Virus, which have been spreading across much of North America and causing significant losses to the swine sector outside of Alberta. To date, no cases have been reported among Alberta pork operations. Strong biosecurity measures and surveillance systems that enable early detection and intervention are in place to help reduce any potential losses.
- Collaborated with provincial and federal partners to support an investigation and response to an *E.coli* outbreak, which included food safety expertise and laboratory support.
- Developed and delivered provincial Aquatic Invasive Species (AIS) initiatives in collaboration with Irrigation Districts and Environment and Sustainable Resource Development, focusing on education, extension, inspections, and water monitoring to prevent and detect the establishment of AIS in Alberta waters. Aquatic Invasive Species have the potential to cause annual damages estimated at \$75 million to Alberta's water infrastructure, as well as significant damage to aquatic ecosystems.

### Regional Planning

- Represented agricultural interests and developed specific agricultural content related to the development of the North Saskatchewan Regional Plan, as part of the Land-use Framework process. Regional plans constitute the core component of the government's Integrated Resource Management System (IRMS), which is being implemented to ensure Alberta's resources are developed and planned by taking economic, environmental, and social wellbeing into consideration. We are continuing to engage and educate all stakeholders and cross-ministry partners on the importance and contribution of agriculture to the Alberta economy and the environment.

## Animal Protection and Welfare

- Worked with the livestock and poultry industries to adapt and facilitate adoption of technology that will improve industry ability to humanely euthanize birds and animals in the event of an emergency.
- Facilitated an industry round-table on Pain Mitigation Strategies in livestock. This round-table included government representatives, producers, veterinarians, academia, and industry who worked to identify future focus areas for collaboration.

## Pest and Disease Management

- Developed and implemented the Wild Boar Containment Standards and the associated Action Plan, in consultation with Wild Boar Producers, Rural Municipalities, Agricultural Fieldmen, and Alberta Pork. The current boar-at-large population is estimated to be approximately 3,000 animals and creates concerns related to property and crop damage, disease, and the ecosystem. The Implementation Plan allows for minimum equivalency of containment standards in the short term and full compliance by December 2018. Our inspectors are continuing to work with identified producers and Agricultural Fieldmen to reach full compliance.
- Assumed responsibility for the administration of the provincial rabies program after the Canadian Food Inspection Agency ceased providing service for the rabies program (excluding laboratory testing) across the country.

## Irrigation and Water

- Completed a study about efficiency gains and water savings within the irrigation districts through rehabilitation of water conveyance infrastructure and upgrades of on-farm irrigation systems from 1999 to 2012. Efficiency gains provide opportunities for irrigation districts to expand their irrigated area without using more water and allow some of the water saved to be used for other purposes. Potential water savings ranged from about 170 million m<sup>3</sup> in wet years to 200 million m<sup>3</sup> in high demand years, even with 30,000 hectares of expansion during the same interval.
- Conducted applied research of irrigation management practices for optimum production of soybean and grain corn and for enhanced use of variable-rate (precision) irrigation technology. Applied research studies provide information for irrigation of new crops and for adaptation of new technologies for optimum production and water-use efficiency.
- Completed the Nutrient Beneficial Management Practices Evaluation Project, which was a multi-year field research project that quantifies the environmental impacts and operational costs of implementing agricultural beneficial management practices to protect water quality.

## Sector Development

- Administered the \$21 million Irrigation Rehabilitation Program to ensure an efficient and reliable irrigation and rural water supply system. This cost-sharing program supports irrigation districts to upgrade existing water conveyance infrastructure to more water-efficient technology. Approximately 1.4 million irrigation acres, multiple food processors, rural Albertans, and 50 towns and villages rely on water supplied through the irrigation infrastructure.
- Provided \$10 million in support of sustainability efforts to the livestock and meat industry, helping to bring Alberta to the forefront in sustainable production. With collaboration from the Canadian Roundtable for Sustainable Beef, producers, major beef processors, and retailers, the beef industry is a leader in providing verified sustainable beef to the consumer. In working with the Alberta Beef Producers, we are helping leverage efforts in forage research for improved yields and nutritional quality, grazing management, improved drought resistance, and carbon sequestration.

## GOAL 2

### Performance Measure 2.a

- Average percentage of improved environmentally sustainable agriculture practices adopted by producers (biennial survey)

Year Ending March 31					
Actual 2010-11	Actual 2011-12	Actual 2012-13	Actual 2013-14	Actual 2014-15	Target 2014-15
n/a	55%	n/a	56%	n/a	n/a

Source: Agriculture and Rural Development  
 Note: Survey is conducted every second year.

- This measure tracks the level of adoption of 41 key environmentally sustainable agriculture practices by Alberta producers within the areas of: manure management; water quality and quantity; wildlife habitat conservation; grazing management; general practices; agriculture waste management; energy and climate change; and soil conservation. Albertans are increasingly aware of potential environmental issues and the effects of crop and livestock production on soil, water, air, and biodiversity, and the need for the effective management of these resources.
- The Environmentally Sustainable Agriculture Tracking Survey is used to inform decision making related to our environmental programs on nutrient management, grazing, soil management, water management, agricultural waste management, and energy use. This biennial survey was last conducted in 2013-14, where the result of 56 per cent did show an improvement over the previous result of 55 per cent, indicating that producers in Alberta are working in a manner that protects the environment.
- Since the result is an overall average, there is variation in the level of adoption across the eight focus areas. For example, 75 per cent of applicable environmentally sustainable agriculture practices were adopted to address manure management, and water quality and quantity issues. In contrast, less than 25 per cent of applicable environmental practices were adopted to address soil conservation, agricultural waste management, and energy and climate change. These results are influenced in part by regional variability in environmental conditions, limited rural agriculture product disposal sites, or lower awareness of new energy technologies. Increasing awareness of new and effective soil conservation and no-tillage practices may accelerate improvements in areas where crop type and tillage leaves the soil exposed and vulnerable to erosive forces.
- We have an important role in working with industry and government partners to implement innovative, environmentally-responsive solutions that enable producers to be environmentally responsible and competitive. We have refocused research and extension capacity and incentive-based programming toward improving the adoption of environmentally sustainable agriculture practices. This focus includes: agriculture waste management solution options; research capacity and extension activities; strategic engagement with agriculture commodity associations to determine best approaches of measuring cumulative effects of agri-environmental risks; providing incentive based programming; and exploring alternative approaches of delivering customized information to producers.

### Performance Measure 2.b

- Percentage of active provincial licensed meat processing plants that meet provincial safe meat processing standards

Year Ending December 31					
Actual 2010	Actual 2011	Actual 2012	Actual 2013	Actual 2014	Target 2014
n/a	n/a	91%	94%	96%	93%

Source: Agriculture and Rural Development  
 Note: Results prior to 2012 are not comparable because operating procedures for audits were changed from one scheduled audit to three unannounced inspections over the course of the year.



- This measure tracks the percentage of active Alberta-licensed meat processing plants that meet and/or exceed provincial safe meat processing standards under the *Meat Inspection Act* and *Meat Inspection Regulation*. An appropriate and transparent regulatory environment is essential in maintaining continued excellence in food safety at the meat processing level.
- An active provincial licensed meat plant is a poultry and/or red meat abattoir or mobile butcher plant licensed by Agriculture and Rural Development, which receives at least one processing inspection in a calendar year. It excludes provincially-licensed meat plants that either relinquished their licenses in the calendar year before a processing inspection occurred, or were not operating but retained their licenses in the calendar year.
- The scope of provincial meat processing standards, established under the *Meat Inspection Regulation*, encompasses food safety risk factors associated with: slaughter equipment; hot and cold potable water; protection from contamination; personnel hygiene practices; food contact surfaces; cool time and temperature; handling and storage of meat products; cleaning and sanitation practices; ventilation and lighting; plumbing and sewer facilities; and maintenance of written procedures for all processing operations (including the recall of meat products that is suspected to be inedible). Each plant is required to demonstrate continued knowledge and strict adherence of all food safety practices at all unannounced inspections. Food safety staff track and respond to areas of noncompliance by issuing a corrective action report when inspections reveal that processing practices or meat products create a potential food safety risk.
- Our role is to obtain consistency and compliance through inspection and enforcement activities, as well as enhance integrated food safety process controls by: maintaining a food safety surveillance system to validate the safety of meat products processed by provincially-licensed facilities; facilitating adoption of internationally accepted meat processing safety systems and standards; and delivering information, training, and other programs that enhance food safety awareness and emergency response.
- We licensed 145 meat processing plants (red meat, poultry, and mobile abattoirs) at the beginning of the 2014 calendar year, with 138 receiving at least one unannounced inspection. Seven meat processing plants were not inspected in 2014 because the inspections are unannounced and these operators were not processing at the time they were visited. This was due to the limited processing activities that occur in these facilities, and was identified as an inherent weakness of unannounced inspections for these facilities. Steps have been put in place for 2015 to ensure these facilities are processing at the time that a processing inspection would occur.
- Approximately 96 per cent (132 out of 138 plants) of the Alberta-licensed meat processing plants that received unannounced inspections met or exceeded provincial safe meat processing standards, with the remaining six not meeting standards during at least one of the unannounced inspections. Follow-up unannounced inspections confirmed that all six plants addressed all areas of noncompliance that were noted during their respective inspections, although two of these plants continue to be monitored to ensure continued compliance. This follow-up monitoring is designed as an educational tool to reduce the risk of lapsing into non-compliance.
- The high level of compliance among meat processing facilities is influenced by an increased familiarity and understanding of regulatory requirements by processors, though additional factors can impact compliance including: customer expectations; plant operator's buy-in to food safety standards; market drivers; internal competition between plants; and the relationship between the Department and the plant.
- We are working with Alberta Health and Alberta Health Services in reviewing ways to streamline and improve the effectiveness of food safety inspections along the meat processing continuum. A key objective of this initiative is to ensure consistency and uniformity in the application of meat inspection protocols and meat processing permits. As a result, this performance measure has been replaced by a new measure that focuses on the Department's role as it pertains to animal slaughter regulatory oversight.



## Performance Measure 2.c

- Percentage of eligible seeded acres for major crop categories insured under Production Insurance

Year Ending December 31

	Actual 2010	Actual 2011	Actual 2012	Actual 2013	Actual 2014	Target 2014
Annual crops	73%	73%	75%	77%	76%	77%
Perennial crops	28%	23%	28%	26%	25%	26%

Source: Statistics Canada and Agriculture Financial Services Corporation

- This measure indicates our success in providing customized insurance products to producers, based on type of crop, risk area, and coverage level selected (individual producer risk preference). Production Insurance (AgriInsurance) mitigates the effects of unstable production for Alberta producers by providing protection against losses caused by designated natural peril on annual and perennial crops.
- Agriculture Financial Services Corporation (AFSC) provides a wide variety of risk management products and financial services to fit the business needs of producers, the agriculture industry, and small businesses in Alberta. This includes the delivery of the federal/provincial AgriStability program, which provides compensation for the decline in farm margins relative to historical margins, regardless of the commodities they produce. Additional offerings include farm loans and guarantees for new and expanding farm businesses, as well as financing for those facing disastrous reductions in farm production or income.
- In the 2014 calendar year, Production Insurance claims for annual crops (including hail endorsement) totaled \$350.4 million and claims for perennial crops totaled \$9.3 million.
- The uptake of annual crops insured under Production Insurance was 76 per cent in 2014 and continues to be high, due to the financial risk involved in crop production, high input costs, and commodity prices. The result remains close to the maximum that could be expected to be insured (80 per cent), as smaller producers and a small percentage of large producers self-insure, and some producers are not eligible to insure due to outstanding premiums or fraud. In total, 14.5 million acres and \$3.4 billion in risk is insured on annual crops.
- The uptake of perennial crops insured under Production Insurance was 25 per cent in 2014 and has been more variable over the past few years, most likely related to good growing conditions and a reduced loss experience. The result was also influenced by hay supply, and after a strong 2013 year for hay producers, 2014 saw an increased carry-over of hay and other feed supplies. Typically, more insurance is purchased on perennial crops when the feed supply for producers is decreased. In total, 6.8 million acres and \$91.8 million in risk is insured on perennial crops.
- Overall results demonstrate that Alberta producers continue to view Production Insurance as an important risk management tool. With the variety of risk management tools being offered through AFSC, individual producer risk preferences are able to be met. By having a strong selection of choices, backed by sound financial management practices, Alberta producers are better protected against the risks of production.

## World-class Traceability System Key to Agricultural Prosperity

Where does your food come from?

It's a question that has gained a lot of traction in recent years. From grocery stores to farmers' markets, news reports to magazine articles – the source of food has been top of mind for more Canadians than ever before. Consumers are concerned about not only the safety and quality of their food, but also how and where that food was produced. But how does food get traced in a province where agriculture is such a huge business?

The Premises Identification (PID) system enables us to link livestock and poultry to geographic locations for disease, health, and food safety purposes. The system has also been used extensively and effectively to plan and respond to emergency events and natural disasters.

When a natural disaster occurs, such as the 2013 floods in southern Alberta, the PID system is used to determine if there are animals in the area that may be affected, or if government support is required to relocate them to a safe place. If carcass disposal is unfortunately necessary, the PID system can be used to map out the best route for the trucks to take in order to reduce the chance of exposing healthy populations to a particular contaminate.

While many producers have registered with the PID system, ARD has continued to promote registration through extension and introducing cross-compliance initiatives that provide that extra boost of encouragement. Producers are now being asked by dispensaries to demonstrate that they are registered before getting access to products and services they require. Producers understand the value of the system, but it will be even better when everyone is registered and we have a complete picture of livestock and poultry across the province.

Being able to quickly identify the geographic history of an infected animal greatly reduces the likelihood that disease will be transmitted to other animals, and makes it easier to nip a potential disease outbreak in the bud.

Producers in Alberta know all too well the devastating impact that disease can have on the agriculture industry, which makes it all the more important to invest in systems that can tackle the issue from several angles. Whether that is providing an additional \$1.35 million to Alberta Pork to help address the threat of pig diseases, or continuing to encourage producers to register with PID, Agriculture and Rural Development is taking steps toward a more proactive approach.

# GOAL 3

## Alberta's agriculture industry development initiatives maximize value and enable economic sustainability

### What this means:

This goal involves research, product development and commercialization activities that ensure Alberta has a variety of high quality products to meet consumer demands and that support producers in increasing the value of their products.

### Our responsibilities:

In pursuit of this goal, we invest in research that enables innovation, technology uptake and new methods of efficiently managing industry by-products, work collaboratively with industry and partners to share information and best practices, provide business development services, and develop strategic policies and practices that promote the capitalization of value-added opportunities.

### Planned actions to achieve this goal included:

- Enable the establishment of next generation and emerging industries through advanced research and business development tools that facilitate growth in food processing, technology and infrastructure.
- Engage with partner ministries and the federal government on the Temporary Foreign Worker program and immigration file to develop longer term solutions that address labour issues in the agricultural sector.
- Integrate and collaborate with other ministries, industry stakeholders, and provincial and federal counterparts on knowledge sharing, research and innovation systems, regulatory systems, and commercialization strategies and activities.
- Support and leverage industry investments in identifying new products, processes and services that result in increased diversification and value-added opportunities.
- Develop waste reduction strategies and targets to support innovative and sustainable food production systems.
- Support agricultural research and extension, emerging product development and commercialization opportunities.

## Results and Contributions from 2014-15

### Product Development and Commercialization

- Facilitated supply chain linkages and built upon value and supply chains established for bio chemicals, biomaterials, and renewable energy. Additionally, we helped successfully demonstrate pea protein extraction in a pilot plant, which has the potential for the first commercial crop fractionation plant in Alberta. Products from renewable agriculture feedstocks, biomass, and processing sidestreams offer the potential to develop high value and innovative ingredients and products, which reduces overall agriculture waste and enhances economic growth.
- Provided product development, sensory analysis, and interim processing services to strengthen and expand the capabilities of the agri-food processing sector in Alberta. Through the Food Processing Development Centre, we assisted industry in the development and commercialization of new products. The centre enables companies to develop food products from bench-top through to commercialization, with the assistance of experienced food scientists and state-of-the-art equipment and technology. Consolidated accomplishments on product development and commercialization are reported under Performance Measure 3.a.

### Partnerships and Agreements

- Developed an Alberta Beef, Forage, and Grazing Agreement, which is a platform for supporting and advancing research and extension activities related to the forage and beef sectors. This partnership between Agriculture and Agri-Food Canada, Alberta Beef, and Alberta Agriculture and Rural Development is a result of over three years of collaboration and provides long-term strategic goals that are supported by all parties toward responsible and efficient resource development.
- Implemented the Western Livestock Price Insurance Program (WLPIP) to include the remaining western provinces of British Columbia, Saskatchewan, and Manitoba, as part of the Growing Forward 2 Agreement, resulting in \$26 million in premiums and providing \$1.67 billion in coverage. Producers utilized the WLPIP suite of risk management programs to help protect themselves from price volatility. This is a four-year pilot program, administered by Agriculture Financial Services Corporation.

### Research and Innovation

- Assisted 28 companies and clients through Agri-Food Discovery Place by offering a suite of facilities, equipment, and expertise in support of Alberta's innovative value-added industries and technologies. Our capacities at the facility allow companies to develop, test, and improve their proof-of-concepts and processes before committing to a huge investment. Successes included building a model for sorting waste textile streams, turning resin acids (from black liquor soap) into gasoline via hydrogenation, and the production of polyurethanes from polyols made from forest waste.
- Created an organic waste management inventory that addresses deficiencies, such as waste composition, food processing and bi-products, and geographic distribution. The inventory is a key foundational piece to maximize value in the Alberta agri-food sector, since many high-value items (chemicals, materials, nutrients, and energy) can be made out of the bi-products from other core products. This inventory provides the ability for entrepreneurs and businesses to know what feedstocks are available for new high-value product streams and identifies inefficiencies and waste in existing products, which if eliminated, will result in higher value per unit product. This will also divert waste from landfills and reduce the environmental impact of agricultural processing and production.
- Developed a zero-waste nutrient recycling technology for use in food production, which uses a highly efficient microbial mineralization process to generate nutrient rich solutions from organic wastes. In areas such as greenhouse crops, which can exceed field crop uptake by 20 to 30 times, greenhouse food production is a means to remediate water and utilize manure from intensive livestock operations. Through this, food is produced while eliminating potential soil and water harm from excessive manure applications.

## GOAL 3

- Conducted research projects leveraging industry investments through the Crop Development Centres, Agri-Food Discovery Place, the Alberta Irrigation Technology Centre, and the Agricultural Technology Centre.

### Labour and Skills Development

- Enabled industry to pursue new business opportunities, innovative business solutions, and market development strategies as well as increase its adoption of best management practices and management capacity through the provision of Growing Forward 2 programming. A strong emphasis was given to employing Albertans in the agriculture and food processing industries through the use of job fairs, which linked Alberta employers with under and unemployed Albertans. Additional priority was given to address changes to the federal Temporary Foreign Worker (TFW) Program and in keeping employers up-to-date on the changes and how to further address labour force challenges.

### Sector Development

- Increased funding to \$3.5 million for the Agriculture Opportunity Fund (AOF), which supports industry and business development. The purpose of the AOF is to provide funding assistance to eligible organizations to enhance competitiveness at the farm gate and promote long term sustainability of the agriculture industry and rural communities in their areas. Funded projects encourage best practices and technology adoption that results in more than \$200 million in impacts to the agriculture economy per year, as reported by the applied research organizations based on the number of clients receiving extension support, the best practice adoption rate, and the economic value of the new technology or practice.
- Provided \$4.3 million through the Alberta Livestock and Meat Agency Ltd. (ALMA), in support of product differentiation initiatives. These funds supported new products and processes for livestock and meat industry growth, and helped introduce 30 new meat and dairy products to 21 new markets. Additionally, \$13.85 million was provided to enhance industry productivity, efficiencies, yields, health and safety, and energy reduction. By leveraging supports through ALMA, industry reported an additional 33.5 million kilograms of meat and dairy product capacity, estimated at nearly \$84 million in value.
- Provided \$8.27 million through the Alberta Livestock and Meat Agency Ltd. in support of research for new technologies and beneficial management practices for the livestock and meat sector. For example, genomics research will improve livestock productivity by enabling the selection of animals that have desired traits, such as robust, productive, healthy, and good carcass quality. Research efforts supported the education of 360 highly qualified personnel and the disbursement of results through scientific publications and industry communications.

## Performance Measure 3.a

- Number of value-added products developed and successfully introduced into market with assistance from Agriculture and Rural Development

Year Ending March 31					
Actual 2010-11	Actual 2011-12	Actual 2012-13	Actual 2013-14	Actual 2014-15	Target 2014-15
90	157	216	217	220	216

Source: Agriculture and Rural Development

- This measure tracks the number of value-added products developed and successfully introduced into market with support from ministry staff. Value-added agriculture refers to manufacturing processes that increase the value or consumer appeal of a primary agricultural commodity. This value-added processing of agriculture commodities is facilitated using a food grade pilot plant and associated food technology and consumer science facilities at the Food Processing Development Centre, the Consumer Product Testing Centre, the Food Science and Technology Centre (Brooks), and the Agri-Value Processing Business Incubator.

- We facilitate new and diversified product development and commercialization by providing scientific, technical, and business development expertise, helping guide producers and agri-processors looking to market new value-added products. Our services help start-up companies reduce the risk for investment in product development and help established companies access short-term scientific consultancy services on a competitive fee-for-service basis.
- In 2014-15, a total of 220 new value-added products were developed and successfully introduced to market with assistance from Agriculture and Rural Development, continuing the upward trend in results over the past six years. This result is directly related to the improvement in uptake of our short-term consultancy services provided to agri-processors, which accounted for 12 per cent of these new value-added products. The result can also be partially attributed to the success of the Growing Forward Agreement, which provided grants to develop and commercialize 64 per cent of the new value-added products. Future performance may vary though, due to the difference in the length of time it takes to develop a product from concept to commercialization.
- Examples of the products, which focus on strong and broad-range niche market areas with significant growth potentials, include: bio-based products for industrial applications in energy, transportation and agriculture; gluten-free bakery products; skin and health products; energy drinks; and ready-to-eat healthy products.

### Performance Measure 3.b

- Research and development investment by collaborators leveraged through ministry resources (\$ million)

Year Ending March 31

Actual 2010-11	Actual 2011-12	Actual 2012-13	Actual 2013-14	Actual 2014-15	Target 2014-15
7.4	6.2	6.4	4.8	5.2	6.4

Source: Agriculture and Rural Development

- This measure tracks the amount of funds leveraged from outside sources for applied agricultural research and development, and provides an indication of our success in building partnerships with external collaborators. External collaborators include industry organizations, producer groups, private companies, universities, government departments, and agencies.
- We collaborate with the agri-food industry to perform research and development because businesses are ideally positioned to understand their needs and to foresee opportunities. The research and development projects covered under this measure include: value added processing; livestock development; crop diversification; and environmental sustainability.
- In 2014-15, we collaborated with industry to conduct 78 research and development projects, leveraging \$5.2 million to fund innovative solutions in the primary agricultural production and value-added processing sectors relating to productivity, competitiveness, and profitability. Some of these projects included: technology-based solutions to product development and lean manufacturing; cost effective approaches for feeding livestock; improvements in crop varieties yields and yield stability; production of agricultural products in an ethically and environmentally sound manner; and response capability of emerging disease threats to crops and livestock production.
- While the result is approximately eight per cent higher than the previous year, it was still lower than our forecasted target. The target was based on historical performance from the preceding five years and was higher due to the completion of major external-funded projects in 2012-13 that are not likely to be repeated in the next three years.

## GOAL 3

- Grants for our scientific activities are used to support either basic research (research and development) or knowledge transfer and commercialization. We have been increasing our focus on funding knowledge transfer and commercialization opportunities in research projects because of the need to demonstrate tangible results for research investments in the short to medium term. As a result, a smaller amount is available to support basic research. Future performance results will be affected by the mix of our resources that are dedicated to basic research versus knowledge transfer and commercialization efforts.

### Facilities adding more than just value to the agriculture industry

New ideas are germinating at the Agri-Food Discovery Place (AFDP), and it's not just in crops research. This bio-product processing facility, shared between the University of Alberta and Agriculture and Rural Development (ARD), houses unique processing equipment and knowledgeable staff that are an asset to Alberta's research environment and business community.

AFDP provides an opportunity for industrial partners to use the state-of-the-art facility at competitive prices, while leveraging the expertise of world-class researchers. The facility allows pilot-scale processing of agri-food and agri-industrial products and the development of novel technologies through separation, conversion and application technologies that can all be found under one roof.

AFDP is just one of five research and development facilities run by ARD. The Food Processing Development Centre (FPDC), located in Leduc, is another - a modern, fully-equipped pilot plant and product development laboratory facility. The services provided at FPDC are intended to help companies meet the challenges of the marketplace through applying new technology or developing new and improved products. From labeling assistance to product packaging, the staff at FPDC help companies take their ideas to new levels.

Rounding out the list is a Sensory Evaluation Program that provides comprehensive sensory evaluation services for new products through the use of expert consumer panels, and the Food Science and Technology Centre, where applied research improves producers' know-how when it comes to the handling, storing and processing of crops.

Companies also have the opportunity to take up residence in the Agrivalue Processing Business Incubator, a multi-tenant facility that provides the infrastructure and services necessary to help support and establish new companies and business ventures in Alberta. The uniqueness of this arrangement is that business planning, accounting, marketing, distribution, and quality assurance advice can be provided to the Incubator clients in a shared environment. Red tape for the client is reduced and ARD is able to provide targeted services much more efficiently.

ARD has a full suite of programs and services available to support a business along the spectrum, from the testing of an idea, through commercialization and marketing, all the way to scaling up a start-up venture into an independently established facility. This may be ARD's best-kept secret but you need only look at the success stories to know why it shouldn't be a secret any longer.



# GOAL 4

## Rural Alberta has the development opportunities necessary for ongoing economic success

### What this means:

This goal involves supporting a positive economic environment in rural Alberta where businesses can succeed, where a productive and skilled workforce can capitalize on opportunities, and where families are able to enjoy a high quality of life. This strongly aligns with the focus of Alberta's Rural Economic Development Action Plan, which outlines areas to further advance the health of local economies and the sustainability of communities in rural Alberta.

### Our responsibilities:

In pursuit of this goal, we facilitate the development of community infrastructure, support the management of a sustainable water supply for economic development, work with industry and rural Alberta to promote and enhance farm safety, administer programs to reduce the costs of utility services for Albertans living in remote regions of the province, and provide loans, insurance products and farm income disaster assistance. We also facilitate connections between rural Alberta and the demands of international and domestic consumers. Rural communities are supported by actively building rural Alberta's leadership base in collaboration with youth and rural stakeholders, partnering with educational institutions to facilitate learning and skill development opportunities, and encouraging collaboration within and between regions to better focus planning and service delivery.

### Planned actions to achieve this goal included:

- Develop a rural economic development action plan addressing strategic agriculture infrastructure, leadership and entrepreneurial capacity, rural tourism and agricultural diversification, to help create the conditions for ongoing economic success in rural Alberta.
- Review and enhance financial tools and structures, utilizing AFSC to generate economic development, increase business investment and grow rural Alberta through enhanced programs and services.

## Results and Contributions from 2014-15

### Rural Economic Development

- Developed and released the Rural Economic Development Action Plan (REDAP), after engaging with over 200 stakeholders in eight rural communities across the province. The plan lays out clear strategies and specific actions that governments, industries, businesses and communities can take to increase economic development capacity, improve on the current suite of initiatives, and orchestrate new opportunities to enable rural Alberta's continued success.
- Provided funding to extend the Final Mile Rural Community Program to support additional broadband infrastructure projects in Lacombe County, Montana First Nation, and Saddle Hills County. Since 2012, the program has invested more than \$6.5 million to expand access to high-speed Internet in unserved or underserved locations in rural Alberta.

### Financial Instrument Improvements

- Doubled the maximum individual loan limit of the Feeder Association Loan Guarantee Program from \$500,000 to \$1 million, and the loan cap of \$100,000 for first time feeders was removed. The changes to the Feeder Association Loan Guarantee Program provide cattle feeders and new entrants with greater flexibility and access to capital in response to higher market prices. The program has a maximum loan guarantee of \$55 million, which translates into \$367 million in funding for producers. Because of market conditions, AFSC provided supplementary guarantees of \$5.8 million, under the Specific Loan Guarantee Program, to provide Alberta Feeders with access to an additional \$45 million in loan capital.

### Engagement and Leadership Development

- Released the recommendations of the Next Generation Advisory Council report and extended the mandate of the Council by 12 months. The Council's role is to provide advice and recommendations to support and enhance the next generation of agricultural, food and rural entrepreneurs. With the release of the Rural Economic Development Action Plan, the Council was mandated to advise government to help focus programs and ensure the needs of the next generation and new entrants are met.
- Engaged 5,898 youth and 2,197 adult volunteers in leadership development through 358 4-H clubs across the province and enrolled a record-high 1,479 students in the Green Certificate Program, with 378 obtaining certification. The Green Certificate Program is an approved complementary program available to all Alberta high schools and provides trainees with opportunities to earn credentials leading to a career in the agriculture sector. The apprenticeship style of delivery allows participants to learn through actively performing the skills required, providing relevant experience for today's modern agriculture industry.

### Business Coaching and Supports

- Provided business coaching services to over 344 entrepreneurial agriculture clients and 45 agri-food companies. One-on-one business coaching supports agricultural businesses in long-term planning and building a financially sustainable enterprise. These extension services help enable businesses to improve strategic planning, increase efficiencies, close performance gaps, and adopt new business management skills.
- Provided direct farm safety extension to 430 workers, owners, and rural youth through FarmSafe workshops, the Sustainable Farm Families program, and the Young Farm Worker program. In partnership with the Farm Safety Centre and rural community organizations, we reached nearly an additional 74,000 rural youth and their families. Through client coaching, building partnerships, and supporting community groups, we are able to expand our reach to more Albertans. While safety practices are voluntary on Alberta farms, teaching rural children safety practices is an effective way to influence the adoption of new practices.

## Legislation and Regulations

- Amended the *Agricultural Societies Act* to ensure legislation remains relevant to guide and support the operations of agricultural societies in Alberta. The 293 agricultural societies form partnerships with a variety of agricultural and community groups to develop programs, services, and facilities that encourage the improvement of agriculture and quality of life for communities across Alberta. The modernization of the Act was intended to support agriculture societies in having strong board governance and effective decision making.

## Milestones and Awards

- Awarded the Century Farm and Ranch Award to 65 families and inducted three new members to the Alberta Agriculture Hall of Fame. Through these initiatives, Alberta recognizes and celebrates the families who have made a multi-generational commitment to the agriculture industry, as well as those who have made significant contributions to the agriculture and food industry and to the development and sustainability of rural life in Alberta.
- Celebrated 22 agricultural societies for achieving over 100 years of dedicated service to their communities, recognizing their significant contribution to agriculture and the quality of life in rural communities.

## Funding and Grant Programming

- Reviewed the rural gas and rural electric grant programs as part of the 2013 decision to transfer the responsibility of administering capital grants for the rural gas and rural electric programs to industry associations. After completion of the first year of delivery and the improved delivery methods by the associations, we have entered into the second year of this program delivery for these capital grants. While budget funding remained the same, delivery methods were revised, which enables us to focus on our assurance function and continue to support rural development infrastructure needs.
- Provided \$1.2 million in funding through the Remote Area Heating Allowance Program to reduce the cost of heating fuels for Albertans who generally reside in remote regions of the province and do not have access to natural gas service. The program provides direct rebates of up to 25 per cent of the cost of fuel on consumption, up to 18,185 litres of propane or 12,275 litres of heating oil per year or a proportionate combination of both.
- Provided income stabilization programs to protect Alberta producers (including AgriStability) and Agrilnsurance through Agriculture Financial Services Corporation, supported by contributions from Alberta, Canada, and producers. Income stabilization programs resulted in \$1.9 billion in coverage and \$37 million in payments to Alberta producers, while Agrilnsurance (including hail insurance) provided \$4.2 billion in coverage for \$641 million in premium and paid \$425 million in indemnities.

## Performance Measure 4.a

- Total investment leveraged in rural businesses facilitated through AFSC lending services (\$ million)

Year Ending March 31					
Actual 2010-11	Actual 2011-12	Actual 2012-13	Actual 2013-14	Actual 2014-15	Target 2014-15
640	658	663	644	716	680

Source: Agriculture Financial Services Corporation

Note: Values reported for investments are a proxy measure based on approved loans. Not all loans are disbursed, and in some cases, there may be timing differences between approval and disbursement of loans.

- This measure gauges the success of Agriculture Financial Services Corporation’s (AFSC) direct contribution, partnership, and collaboration with stakeholders in providing funding to rural businesses for farming and/or commercial activities in rural Alberta. Without access to capital, rural businesses would not have an opportunity to prosper or continue to sustain a vibrant agriculture and commercial business sector in many rural communities in Alberta.
- Regardless of the economic cycles that can create difficulties in accessing capital for businesses in rural Alberta, AFSC lending services help ensure that primary agriculture producers and rural business enterprises can access the capital necessary to foster growth. These lending services are demand-driven by the agriculture and rural business community, with total dollar investment in agri-businesses and farm loans serving as a proxy value for investment based on loans approved. Dollar investment is any fund (i.e. debt, equity, or investment) that would be used to support the growth of farming and commercial activities.
- The \$716 million in investments leveraged in rural businesses in 2014-15 is significantly higher than the target and the actuals for the four preceding years, primarily due to AFSC’s participation in the Feeder Association Loan Guarantee Program (FALGP). The increased uptake of loan guarantee by the Feeder Associations resulted in \$147 million in total investment leveraged in the cattle industry, of which AFSC provided \$5.8 million in loan guarantees. Future performance results will be affected by the amount of loan guarantees provided under FALGP.

## Performance Measure 4.b

- Percentage of ministry-supported, agricultural-related community activities that focus on leadership development

Year Ending March 31					
Actual 2010-11	Actual 2011-12	Actual 2012-13	Actual 2013-14	Actual 2014-15	Target 2014-15
33%	29%	35%	34%	35%	33%

Source: Agriculture and Rural Development

- This measure indicates our success in developing leadership capacity in rural communities, including the provision of diverse initiatives under our agricultural community programming. Leadership development is a key contributor in achieving a vibrant, resilient, and sustainable rural Alberta. Continued support for leadership activities, for both youth and adults, helps to develop those who wish to contribute to their communities.
- Activities provided under a variety of settings enhance the capacity of rural communities to nurture, retain, and enhance critical skills in management, public speaking, economic development, and rural stewardship. The breadth and diversity of agricultural-related community activities allows each rural community to address their specific needs under the general umbrella of rural development.
- In 2014-15, we provided funding for 3,187 agriculture-related community activities, of which 35 per cent, or 1,124 activities, focused on leadership development. We provide both block funding and project-specific funding to agricultural societies and community groups to initiate projects that address community-specific needs in terms of achieving a vibrant, resilient, and sustainable rural community. The funding arrangement provides flexibility on how rural communities use program funds, and is provided for eligible activities completed by community groups. The improvement in the result is the continued shared commitment we have with rural communities in enhancing leadership capacity.
- As part of effective performance measurement processes, all our performance measures are reviewed on an ongoing basis to ensure they are still providing relevant information for decision makers and appropriately gauging our progress toward our goals. Going forward, this measure has been removed from the business plan, as it focuses primarily on the internal activities of leadership development programs as opposed to result-oriented changes in behaviours, knowledge, and skills associated with leadership development. Results will continue to be monitored within our organization to enable management to assess the operational efficiency of our leadership development programs and services.

# Appendix A: Organizational Descriptions

The ministry is comprised of the:

- Department of Agriculture and Rural Development
- Agriculture Financial Services Corporation
- Alberta Livestock and Meat Agency Ltd.
- Office of the Farmers' Advocate of Alberta
- Alberta Grains Council
- Agricultural Products Marketing Council
- Irrigation Council

## Department of Agriculture and Rural Development:

The Department of Agriculture and Rural Development operates in three key sectors: Food Safety and Technology, Industry and Rural Development, and Policy and Environment.

### Food Safety and Technology:

The Food Safety and Technology Sector focuses on safe food production systems and animal health programs that protect public health and support market access for Alberta's agriculture and food industry. The sector facilitates the adoption of internationally-accepted food safety systems and standards; conducts surveillance for food safety and animal health; minimizes the impact of animal diseases on public health; provides essential non-routine animal disease investigation services; and plans for and responds to food safety and animal health emergencies. The sector supports the safe processing of meat and dairy products through technical support and regulation, and also ensures compliance with legislation through investigation and enforcement activities. The Office of the Chief Provincial Veterinarian (OCPV) is part of the sector and advocates the use of current scientific principles and information in the development of animal health legislation and disease control programs. The OCPV liaises with international, federal and other provincial governments, as well as industry, on food and animal health issues.

In addition, the sector administers and coordinates the development of legislation that provides the framework for the establishment and management of Agricultural Boards and Commissions. The sector is also responsible for working in partnership with program areas to optimize program delivery, contribute to business innovation and increase efficiencies by enabling modern technologies and through information management, as well as information sharing best practices. The sector provides the secure, robust and reliable technology infrastructure necessary to support the ministry's requirements for electronic service delivery and is responsible for the planning, development, organization, evaluation and delivery of information services including print and electronic publishing.

## Industry and Rural Development:

The Industry and Rural Development Sector supports the agriculture industry with a focus on business and technology development, and product and process testing in order to develop and support a competitive and self-reliant industry through technology transfer and extension activities. The sector provides relevant market information, opportunity identification and networking opportunities with the goal of positioning Alberta as a preferred supplier to support targeted export growth for Alberta agriculture products and services. Through a focus on the value-added processing of agriculture commodities through laboratory development, applied research and pilot plant scale-up, the sector facilitates development of new products, and supports the development of new companies and the attraction of new food processors to Alberta. In order to successfully grow the agriculture industry in Alberta, it is necessary to create and promote Alberta as a stable, credible and profitable location for agricultural and agri-food investors, as well as support the increase of agricultural exports and business services within Alberta's agriculture and agri-food industry. The sector establishes the overall strategic framework and implements strategies necessary to generate and attract international and domestic investment to the agriculture sector in the province and advocates for the growth of Alberta agriculture and agri-food export opportunities.

The sector also builds and implements food chain traceability initiatives, links these traceability systems to the national and provincial emergency response systems and provides policy advice on Alberta and national traceability initiatives and issues. To aid the growth and sustainability of rural communities, the sector provides financial support for the development of rural gas and electric infrastructure and facilitates the delivery of governance and leadership development programs. In addition, the sector assures the effective delivery of agriculture educational training, leadership and grant programs, as well as front-line client contact services for industry clients through the Ag-Info Centre, field offices and a variety of extension activities.

## Policy and Environment:

The Policy and Environment Sector continues to address the growth of agricultural trade through monitoring and advancing international agricultural policy and agreements. It also ensures that Alberta's policy and strategic frameworks enable business opportunities and innovation and strengthen rural communities through government-wide leadership of rural development policy. Through a focus on industry, social and economic trend analysis, strategic planning, policy development, market and competitiveness intelligence and rural business and infrastructure development, the Policy and Environment Sector advances the competitive position of Alberta's agriculture industry. The sector also focuses on the provision of statistical information, data on costs and returns, as well as market analysis to support sound decision-making by government and industry.

The sector supports the development and implementation of environmental stewardship best practices. By working collaboratively with industry and rural Alberta, the Policy and Environment Sector is building industry capacity and environmental opportunities that are outcome-focused, reportable and verifiable. This also involves working with Alberta's irrigation industry in addition to agricultural producers to ensure that good quality surface and ground water supplies meet current and future agricultural, municipal, wildlife and recreational needs. This work also ensures that management practices meet acceptable water quality guidelines and that management systems assist livestock and crop producers to deal with changing climate conditions.



## **Agriculture Financial Services Corporation:**

The Agriculture Financial Services Corporation (AFSC) provides a wide variety of unique financial services, including risk management products and lending capital to fit the business needs of producers, the agriculture industry, and small businesses in Alberta. Working closely with clients and rural Albertans, many made-in-Alberta products have been developed to address existing gaps in the marketplace where similar products are not available on a consistent and reliable basis from other sources. AFSC partners with agricultural producers, agri-business and commercial entities to support and advance agricultural development, to create new opportunities for businesses, and to improve the quality of life for rural Albertans

The corporation has helped position Alberta as a leader in business risk management programs for both crops and livestock, and plays a pivotal role in the development and delivery of insurance, income stabilization, and disaster recovery programs on behalf of the Alberta and Canadian governments under statute and intergovernmental agreements. AFSC is responsible for all portions of the multilateral Growing Forward 2 Framework agreement that governs the management of agriculture risk in Alberta, including: AgriInsurance, AgriStability, AgriInvest, AgriRecovery and the Wildlife Damage Compensation Program. The corporation offers agriculture financial services such as farm loans and guarantees for new and expanding farm businesses and financing for those facing disastrous reductions in farm production or income. AFSC also provides and facilitates sourcing of financing for companies in the agri-food and value-added industry, as well as the small business sector, with an emphasis on rural Alberta.

## **Alberta Livestock and Meat Agency Ltd.:**

The Alberta Livestock and Meat Agency Ltd. (ALMA) acts as a catalyst to help transition Alberta's livestock industry into competitiveness and sustainability and ensures effective implementation of programs and initiatives directed at Alberta's livestock industry.

ALMA provides ideas, information and investment opportunities to the livestock industry and advises on public policy related to regulations, legislation, programs and issues of importance to the livestock and meat sectors. As well, ALMA identifies solutions and engages the industry to foster collaboration and alignment between industry and government priorities. ALMA's programs stimulate innovation and encourage the adoption of best practices, develop new technologies and state-of-the-art processes. The agency's priority areas increased customer access and market development, enabled product differentiation, enhanced productivity, and sustainable development.

## **Office of the Farmers' Advocate of Alberta:**

The Office of the Farmers' Advocate of Alberta works closely with rural Alberta and provides the Minister with information on issues concerning rural Albertans. The agency exists so that rural Albertans can make informed risk management decisions, operate in a balanced legal environment, and have an outlet to settle disagreements. The Office of the Farmers' Advocate of Alberta also provides advice to rural Albertans, works with the ministry to ensure fair process for rural Albertans, and informs and explains issues regarding industry policies and procedures.

## **Alberta Grains Council:**

The Alberta Grains Council is an agency within the Ministry of Agriculture and Rural Development, comprised of up to eight Alberta Grains Council (AGC) farmer members appointed by the Minister of Agriculture and Rural Development. The AGC advises and makes recommendations to the Department and the Minister on current and emerging issues and trends in the grain industry, including grain transportation, competitiveness in cereals, and sustainable farming. The AGC maintains liaison with other governments, groups, and boards within and outside Alberta.

## **Agricultural Products Marketing Council:**

The Agricultural Products Marketing Council advises the Minister on matters related to the establishment, operation, and management of the marketing boards and commissions established under the *Marketing of Agricultural Products Act*. The Council also provides strategic support to marketing boards and commissions on board governance, leadership development, strategic and business planning, and regulatory and policy matters.

## **Irrigation Council:**

The Irrigation Council supports the Government of Alberta and Irrigation Districts by providing recommendations and advice, regulatory administration and strategic funding decisions that facilitate the responsible allocation, management, and use of water delivered through irrigation infrastructure. The Council is made up of five public members and two government representatives appointed by the Minister of Agriculture and Rural Development.

Further information about ministry programs and services can be found at: [www.agric.gov.ab.ca](http://www.agric.gov.ab.ca). The Ag-Info Centre is also available for additional information by calling toll-free in Alberta 310-FARM (3276).

## Appendix B: Agriculture and Agri-Food Statistics

		2013 (r)	2014 (p)	% Change
Real Gross Domestic Product (GDP) in 2007 Dollars	<b>Total Alberta Economy (\$ Billions)</b>	\$292.59	\$305.52	4.4
	• Agri-Food Industries	\$6.58	\$6.31	-4.1
	▫ Agriculture Industries	\$4.28	\$3.91	-8.7
	▫ Food Manufacturing Industries	\$2.30	\$2.40	4.5
Employed Labour Force	<b>Agri-Food Industries (Number of Persons)</b>	90,800	86,100	-5.2
	<i>% of Total Alberta Employment</i>	4.1%	3.8%	
	• Agriculture Industries	63,400	60,600	-4.4
	• Food and Beverage Manufacturing Industries	27,400	25,500	-6.9
	<i>% of Total Manufacturing Industries</i>	19.2%	17.6%	
Farm Income	<b>Total Farm Cash Receipts (\$ Billions)</b>	\$11.78	\$12.86	9.1
	• Crops	\$6.31	\$5.92	-6.2
	<i>% of Total Cash Receipts</i>	53.5%	46.0%	
	• Livestock and Livestock Products	\$4.78	\$6.39	33.7
	<i>% of Total Cash Receipts</i>	40.6%	49.7%	
	Supply Management (Dairy, Poultry, Eggs)	\$0.86	\$0.87	0.8
	<i>% of Livestock and Livestock Products</i>	17.9%	13.5%	
	• Direct Program Payments	\$0.70	\$0.55	-21.1
	<i>% of Total Cash Receipts</i>	5.9%	4.3%	
	<b>Farm Operating Expenses After Rebates (\$ Billions)</b>	\$9.54	\$10.08	5.6
	<b>Net Cash Farm Income (\$ Billions)</b>	\$2.24	\$2.78	24.0
	<b>Realized Net Income (\$ Billions)</b>	\$0.72	\$1.19	64.3
	<b>Total Net Income (\$ Billions) <sup>(1)</sup></b>	\$2.36	\$0.02	-99.2
Food and Beverage Manufacturing Industries Value of Sales	<b>Food and Beverage Industries (\$ Billions)</b>	\$12.51	\$13.73	9.7
	<i>% of Total Alberta Manufacturing Sales</i>	17.0%	17.3%	
	<b>Top Three Largest Food Manufacturing Sales Groups in 2014:</b>			
	1. Meat Products (Includes Poultry)	\$5.67	\$7.02	23.8
	2. Grain and Oilseed Milling	\$1.69	\$1.62	-4.1
	3. Dairy Products Manufacturing	\$1.65	\$1.39	-16.0
Agri-Food Exports to All Countries	<b>Total Agri-Food Exports (\$ Billions)</b>	\$8.71	\$9.71	11.6
	• Primary Commodities (Animals and Crops)	\$5.06	\$5.48	8.2
	• Value Added Products	\$3.64	\$4.24	16.3
	<b>Top Three Markets in 2014 (% Share of Total)</b>			
	• United States (40.5%)	\$3.05	\$3.93	28.9
	• China (13.6%)	\$1.51	\$1.32	-12.4
	• Japan (12.2%)	\$1.29	\$1.19	-8.0
	<b>Exports to TPP Countries (\$ Billions)</b>	\$5.11	\$5.95	16.5
Value of Farm Capital	<b>Total Value of Farm Capital at July 1 (\$ Billions)</b>	\$116.09	\$127.70	10.0
	• Livestock and Poultry	\$5.82	\$8.52	46.4
	• Land and Buildings	\$98.14	\$106.40	8.4
	• Machinery and Equipment	\$12.13	\$12.78	5.3
Production of Top Three Major Field Crops	<b>1. All Wheat (tonnes)</b>	11,301,800	9,348,900	-17.3
	<i>% of Canadian Production</i>	30.1%	31.9%	
	<b>2. Canola (tonnes)</b>	5,998,800	5,488,500	-8.5
	<i>% of Canadian Production</i>	33.4%	35.3%	
	<b>3. Barley (tonnes)</b>	5,545,400	4,131,300	-25.5
	<i>% of Canadian Production</i>	54.2%	58.0%	
Meat Production Quantity	Beef - Western Canada <sup>(3)</sup> (tonnes)	741,086	771,461	4.1
	Pork - Alberta (tonnes)	211,115	221,995	5.2
Number of Livestock Slaughtered <sup>(2)</sup>	Cattle and Calves - Western Canada <sup>(3)</sup> (Head)	2,035,537	2,122,774	4.3
	Hogs - Alberta (Head)	2,358,033	2,509,468	6.4

<b>Livestock</b>		<b>01/01/2014</b>	<b>01/01/2015</b>	
<b>Inventory on</b>	<b>Cattle and Calves (Head)</b>	<b>5,075,000</b>	<b>4,900,000</b>	<b>-3.4</b>
<b>Farms on</b>	<i>% of Canada</i>	<i>41.5%</i>	<i>41.1%</i>	
<b>January 1st</b>	<b>Hogs (Head)</b>	<b>1,445,000</b>	<b>1,480,000</b>	<b>2.4</b>
	<i>% of Canada</i>	<i>11.2%</i>	<i>11.2%</i>	
	<b>Sheep and Lambs (Head)</b>	<b>153,000</b>	<b>150,000</b>	<b>-2.0</b>
	<i>% of Canada</i>	<i>17.5%</i>	<i>17.5%</i>	
		<b>2012</b>	<b>2013 (p)</b>	<b>% Change</b>
<b>Annual Average</b>	<b>Average Household Expenditure on Food (Dollars)</b>	<b>\$8,414</b>	<b>\$9,295</b>	<b>10.5</b>
<b>Household Food Expenditure</b>	<i>% of Total Average Household Expenditure</i>	<i>8.7%</i>	<i>9.2%</i>	
		<b>2006</b>	<b>2011</b>	<b>% Change</b>
<b>Rural Population</b>	<b>Total Population of Alberta</b>	<b>3,290,350</b>	<b>3,645,257</b>	<b>10.8</b>
	• <b>Rural Population</b>	<b>590,499</b>	<b>614,855</b>	<b>4.1</b>
	<i>% of Total Population</i>	<i>17.9%</i>	<i>16.9%</i>	
	• <b>Population Centres (Urban) Population</b>	<b>2,699,851</b>	<b>3,030,402</b>	<b>12.2</b>
<b>Number of Farms</b>	<b>Number of Farms</b>	<b>49,431</b>	<b>43,234</b>	<b>-12.5</b>
	<i>% of Total Canadian Farms</i>	<i>21.6%</i>	<i>21.0%</i>	
<b>Farmland Area</b>	<b>Total Farmland Area (Acres)</b>	<b>52,127,857</b>	<b>50,498,834</b>	<b>-3.1</b>
	<i>% of Canadian Farmland Area</i>	<i>31.2%</i>	<i>31.5%</i>	
<b>Land Area in Crops</b>	<b>Land Area in Crops (Acres)</b>	<b>23,775,509</b>	<b>24,102,289</b>	<b>1.4</b>
	<i>% of Canada</i>	<i>26.8%</i>	<i>27.6%</i>	
<b>Average Farm Size</b>	<b>Average Farm Size (Acres)</b>	<b>1,055</b>	<b>1,168</b>	<b>10.7</b>
<b>Farm Operators</b>	<b>Number of Farm Operators</b>	<b>71,660</b>	<b>62,050</b>	<b>-13.4</b>
	• <b>Average Age of Farm Operators</b>	<b>52.2 years</b>	<b>54.5 years</b>	
	<i>% Distribution By Age Group:</i>			
	▫ <i>Under 35 years</i>	<i>8.8%</i>	<i>7.3%</i>	
	▫ <i>35 to 54 years</i>	<i>50.1%</i>	<i>43.1%</i>	
	▫ <i>55 years and over</i>	<i>41.1%</i>	<i>49.6%</i>	
<b>Farms by Type</b>	<b>1. Grain and Oilseed</b>	<b>12,562</b>	<b>12,692</b>	<b>1.0</b>
<sup>(4)</sup> : <b>Top Five Farm Types (Number of Farms)</b>	<b>2. Beef Cattle (Including Feedlots)</b>	<b>20,494</b>	<b>12,022</b>	<b>-41.3</b>
	<b>3. Other Crops (Excluding Grain and Oilseed)</b>	<b>5,361</b>	<b>9,385</b>	<b>75.1</b>
	<b>4. Other Animals (Excluding Beef Cattle)</b>	<b>7,414</b>	<b>6,374</b>	<b>-14.0</b>
	<b>5. Greenhouse, Nursery, Floriculture, and Mushroom</b>	<b>910</b>	<b>826</b>	<b>-9.2</b>
<b>Farms by Sales Class<sup>(5)</sup>: % of Total Number of Farms</b>	• <b>Under \$10,000</b>	<b>19.8%</b>	<b>17.8%</b>	
	• <b>\$10,000 to \$24,999</b>	<b>17.6%</b>	<b>18.2%</b>	
	• <b>\$25,000 to \$99,999</b>	<b>29.6%</b>	<b>27.7%</b>	
	• <b>\$100,000 to \$499,999</b>	<b>26.6%</b>	<b>26.0%</b>	
	• <b>\$500,000 and Over</b>	<b>6.4%</b>	<b>10.3%</b>	
<b>Land Area Seeded Using No-Till Practices</b>	<b>Total Land Area Prepared for Seeding (Acres)</b>	<b>18,726,144</b>	<b>19,945,813</b>	<b>6.5</b>
	• <b>No-Till or Zero-Till Seeding Area</b>	<b>8,950,836</b>	<b>12,924,625</b>	<b>44.4</b>
	<i>% of Total Land Area Prepared for Seeding</i>	<i>47.8%</i>	<i>64.8%</i>	
<b>Irrigation Area</b>	<b>Irrigated Farmland (Acres)</b>	<b>1,325,929</b>	<b>1,241,411</b>	<b>-6.4</b>
	<i>% of Canadian Irrigated Area</i>	<i>63.5%</i>	<i>65.2%</i>	

r = revised; p = preliminary, subject to revision

Note: % Changes are based on unrounded data. Data shown in this table are current as of June 9, 2015.

(1) Realized net income adjusted for inventory change. This fell sharply to \$20 million from \$2.4 billion in 2013.

(2) Federally and provincially inspected slaughter irrespective of origin.

(3) Western Canada data only; breakdown for Alberta is unavailable.

(4) Farms classified by the commodity or groups of commodities that make up the majority of total receipts; based on the North American Industry Classification System (NAICS).

(5) Farms are classified by the gross farm cash receipts of the operation in the previous calendar year, or for the complete accounting (fiscal) year (2005 and 2010).

Sources: Statistics Canada; Agriculture and Rural Development; and Agriculture and Agri-Food Canada. Census data for 2006 and 2011 are from the Census of Population and Census of Agriculture.

More detailed statistical information can be found on the Statistics page on the ministry website [www.agric.gov.ab.ca](http://www.agric.gov.ab.ca).

# Appendix C: Performance Measure Methodologies

This section describes the methodology of each performance measure included in this Annual Report, including the calculation method, data source, data quality and review processes, and data limitations.

## Performance Measures 1.a and 1.b: Methodology

- Alberta's agri-food exports by market (\$ million) (United States; China; India; CETA member countries; TPP member countries, excluding the U.S.; and the Rest of the World)
- Alberta's agri-food exports by sector (\$ million) (Primary commodities; and Processed/manufactured products)
  - The results for these performance measures are derived from the monetary value of Alberta's agri-food products leaving the province through customs for a foreign destination market.
  - The total value of Alberta's agri-food exports categorized by country/region of destination is reported under Performance Measure 1.a, where the country of destination is the last known destination of the agri-food products at the time of export.
  - The total value of Alberta's agri-food exports categorized into primary commodities and processed/manufactured products components is reported under Performance Measure 1.b. Agri-food exports refer to domestic exports which exclude re-exports, and include primary commodities and processed or manufactured products. Primary commodities refer to all crops grown and livestock raised in Alberta that have not been materially transformed. Processed or manufactured products refer to processed crops and livestock products under broad groupings of food, beverages, animal feed, and inedible crude animal and plant products.
  - The CETA member countries include: Austria; Belgium; Bulgaria; Croatia; Cyprus; Czech Republic; Denmark; Estonia; Finland; France; Germany; Greece; Hungary; Republic of Ireland; Italy; Latvia; Lithuania; Luxembourg; Malta; Netherlands; Poland; Portugal; Romania; Slovakia; Slovenia; Spain; Sweden; and United Kingdom. Member countries of TPP (excluding the U.S.) are: Australia; Brunei Darussalam; Chile; Japan; Malaysia; Mexico; New Zealand; Peru; Singapore; and Vietnam. The "Rest of the World" represents all countries, excluding the U.S., China, India, and member countries of CETA and TPP.
  - The ministry purchases export statistics related to agri-food from the International Trade Division of Statistics Canada. This data set provides detailed breakdown of agri-food exports originating from Alberta and valued at "Free on Board" port of exit from Canada. Canadian international export statistics are developed from administrative files of Canada Border Services Agency and U.S. Border Protection. Information on Alberta's agri-food exports is compiled by the Statistics and Data Development Branch of Agriculture and Rural Development.
  - Statistics developed from administrative records of Customs may understate and/or incorrectly portray the destination of exports or the province of origin. Inaccuracies of exports data often result from the attribution of exports on a province of lading basis rather than by province of origin. Export statistics are subject to revisions, with revisions being conducted by Statistics Canada on a monthly basis. In this report, revisions are made only in the case when the difference in annual value of exports is greater than 5.0 per cent.

## Performance Measure 2.a: Methodology

- Average percentage of improved environmentally sustainable agriculture practices adopted by producers (biennial survey)
  - The result for this measure is derived from 41 Environmentally Sustainable Agriculture (ESA) practices that could be used to address soil conservation, water management, wildlife habitat conservation, energy management, climate change adaptation, agricultural waste management, and grazing and manure management.
  - An eligible ESA practice (or group) for the base calculation is based on farm type, farm site characteristics and operation practices. The percentage of eligible environmentally sustainable agricultural practices adopted by each respondent is multiplied by a weighting factor to generate a weighted adoption score for each respondent. The result of this measure is the average weighted adoption score of all respondents expressed as a percentage.
  - The target population for this survey is based on a list of commercial farmers in Alberta maintained by Ipsos Reid Corporation. The random and representative sample size was 501, providing a margin of error in provincial results of  $\pm 4.4$  per cent at the 95 per cent confidence level. The response rate was 14 per cent.
  - Data limitations include: producers that are not included in Ipsos Reid Corporation's database (the source of the survey list); non-contactable subscribers (due to privacy legislation compliance); unreachable samples (due to wrong telephone numbers, answering machine, busy, no answer, etc.) and non-response; and disqualification due to failure to answer a required screening question.
  - Additional information can be found in Agriculture and Rural Development's 2013 Environmentally Sustainable Agriculture Tracking Survey.

## Performance Measure 2.b: Methodology

- Percentage of active provincial licensed meat processing plants that meet provincial safe meat processing standards
  - The result for this measure is derived by dividing the number of active Alberta-licensed meat processing plants that are compliant with the *Meat Inspection Regulation* by a base value of total number of active Alberta-licensed meat processing plants.
  - All meat processing plants (poultry, red meat abattoirs, and mobile butcher facilities) licensed by the ministry receive unannounced processing inspections as part of the Processing Inspection program. Each active Alberta-licensed meat processing plant receives three unannounced inspections over the course of a calendar year. The unannounced inspections are used to determine if a meat processing facility has met provincial safe meat inspection standards for the reporting calendar year.
  - Only compliance to processing inspections under the *Meat Inspection Regulation* is reported under this measure, and processing inspection findings are rated and recorded in the Processing Inspection Checklist Report. Each active Alberta-licensed meat processing facility receives a compliance designation of: Compliant, Requires Improvement, or Non-Compliant.
  - An active facility that receives either 'Compliant' or 'Requires Improvement' is deemed as compliant to the *Meat Inspection Regulation* for the inspection period. An active facility that complies with the *Meat Inspection Regulation* at all unannounced processing inspections is deemed to have met provincial meat processing standards for the entire reporting calendar year.

- An active meat processing plant that receives a compliance designation of 'Non-Compliant' for one or more unannounced inspections is deemed not to have met the *Meat Inspection Regulation* for the entire reporting calendar year. Active plants that comply with the *Meat Inspection Regulation* for some (but not all) unannounced processing inspections are not counted as having met provincial safe meat inspection standards. As a result, the performance result likely understates the level of compliance of *Meat Inspection Regulation* among active provincial licensed meat plants.
- The data for this measure is collated from the ministry's Meat Inspection Program.

## Performance Measure 2.c: Methodology

- Percentage of eligible seeded acres for major crop categories insured under Production Insurance (Annual crops; and Perennial crops)
  - Annual crops refer to those that are seeded every year. The annual crops included in this measure are: wheat (winter wheat, spring wheat, and durum wheat); oats; barley; fall rye; mixed grain; flaxseed; canola; corn for grain; dry peas; triticale; dry coloured beans; lentils; mustard seed; chick peas; sugar beets; and fodder corn.
  - Perennial crops refer to crops that do not need to be seeded every year and last for several years. Perennial crops are made up of seeded pasture, native/natural pasture, and tame hay.
  - The total eligible seeded acres for the annual crops insured under the Crop Insurance program is divided by the corresponding total seeded acres for annual crops, as reported in Statistics Canada's November 2014 Field Crop Reporting Series (released on December 4, 2014). The result is then expressed as a percentage. The corresponding eligible seeded acres of annual crops insured under the Crop Insurance program is supplied by Agriculture Financial Services Corporation.
  - The total eligible seeded acres for the perennial crops insured under the Crop Insurance program is divided by the corresponding total for seeded and native pastures (Census of Agriculture 2011, Statistics Canada) and tame hay pasture (November 2014 Field Crop Reporting Series, Statistics Canada (released on December 4, 2014)). The result is then expressed as a percentage. The corresponding eligible acres of perennial crops insured under the Crop Insurance program is obtained from Agriculture Financial Services Corporation.
  - Estimate for land (in acres) seeded to annual crops in Alberta is taken from Statistics Canada's November 2014 Field Crop Reporting Series. This Statistics Canada publication also provides a detailed methodology to the field crop data. The November estimate provides the most recent information available on seeded acreage in Alberta.
  - The Census of Agriculture is collected every five years, so acres may change during that time.



## Performance Measure 3.a: Methodology

- Number of value-added products developed and successfully introduced into market with assistance from Agriculture and Rural Development
  - The result for this measure is the total number of written confirmations provided by industry clients for products that were developed with assistance from the ministry and successfully introduced to market. Value-added products include value-added food, beverage and bio-industrial products.
  - The ministry tracks all new value-added products of industry clients that are developed with some assistance from its staff. A product development activity encompasses projects where ministry staff assisted industry clients in one or more of the following areas: product formulation, shelf-life, packaging, sensory evaluation, marketing and commercialization.
  - At year-end, each industry client is asked to provide a written confirmation to verify the number of new products that were developed with the assistance from the ministry and successfully introduced to market. “Introduced to market” refers to a product that has obtained a listing at retail or food service, domestically or internationally, as well as products that have been sold as ingredients for further manufacturing. The number of new products confirmed by written confirmations from industry clients are aggregated and reported for this measure. The data is collated from program areas within the ministry that are engaged in project development and commercialization.

## Performance Measure 3.b: Methodology

- Research and development investment by collaborators leveraged through ministry resources (\$ million)
  - The result for this measure is the sum of expended dollars from outside sources leveraged through ministry investment in research and development in four priority areas: value-added processing; livestock development; crop diversification; and environmental stewardship. The outside sources or collaborators include: industry organizations; private companies; universities; government departments; and agencies.
  - Research and development is creative work undertaken on a systematic basis in order to increase the stock of scientific and technical knowledge and to use this knowledge in new applications. The central characteristic of research and development is an appreciable element of novelty and it involves scientific investigations resulting in new knowledge, products or processes.
  - The reported result was collated from data supplied by ministry program areas that are involved in research and development activities. The questionnaire collects information on a division’s fiscal year research and development expenditures and expended amounts received from outside sources. An expended amount is an aggregate amount of revenue that has been used to offset part or all of project expenses.
  - Data on in-kind contributions from collaborators are not included in the calculation of this measure. As a result, the performance result likely understates the true amount of leveraged resources invested by collaborators. Measures of in-kind contributions are less reliable, as they are based on estimates that can be subjective in nature.

## Performance Measure 4.a: Methodology

- Total investment leveraged in rural businesses facilitated through AFSC lending services (\$ million)
  - Farms and commercial business investments in rural areas (any area outside Calgary or Edmonton) are added together and reported as total dollar investment (all sources are included whether it is direct from AFSC, other sources of debt, business owner's equity or investment by a third party). This amount excludes all loans that were approved in the 2014-15 fiscal year and subsequently cancelled or withdrawn on or before March 31, 2015.
  - Dollar investment is any fund (i.e., debt, equity, investment) that would be used to support the growth of farming and commercial activities. Total leveraged investment is a proxy for the total dollar investment as a result of AFSC's involvement with the facilitation of capital investment in agribusiness and farm loans through its lending products, services and partnerships.
  - Total dollar investment in rural businesses is a proxy value for investment based on loans approved. Values reported are affected by timing differences between approval and disbursement of loans approved. As well, not all approved loans are disbursed. The data is collated from AFSC's lending activities.

## Performance Measure 4.b: Methodology

- Percentage of ministry-supported, agricultural-related community activities that focus on leadership development
  - The total of ministry-supported leadership development activities is divided by the total number of ministry-supported agricultural-related community activities and then expressed as a percentage.
  - Ministry-supported activities include educational workshops, sessions and rural community-initiated projects that focus on leadership development, agriculture education and agriculture-related activities such as livestock shows. The activities included in the measure address five priority areas: agriculture related activities; agri-business development; agriculture education and skill development; leadership development; and community improvements.
  - Data for this measure is collated from three program areas of the ministry: the Agricultural Society Program; the 4-H Program; and the Agricultural Initiatives Program.