

Review Engagement Report

To the Members of the Legislative Assembly

I have reviewed the performance measures identified as reviewed by the Office of the Auditor General in the Ministry of Agriculture and Rural Development's Annual Report 2013-2014. 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 2013.

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 2013-2014 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 20, 2014

Edmonton, Alberta

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

Performance Measures Summary Table

Performance Measures	Prior Year's Results				Target	Current Actual
Goal 1: A competitive self-reliant industry						
1.a: Number of value-added products developed and successfully introduced into market with assistance from Agriculture and Rural Development	71 (2009-10)	90 (2010-11)	157 (2011-12)	216 (2012-13)	140	217 (2013-14)
1.b.* Research and development investment by collaborators leveraged through ministry resources (\$ million)	11.1 (2009-10)	7.4 (2010-11)	6.2 (2011-12)	6.4 (2012-13)	6.4	4.8 (2013-14)
1.c.* Percentage of eligible seeded acres for major crop categories insured under Production Insurance:						
▪ Annual crops	71% (2009)	73% (2010)	73% (2011)	75% (2012)	77%	77% (2013)
▪ Perennial crops	24% (2009)	28% (2010)	23% (2011)	28% (2012)	27%	26% (2013)
Goal 2: Environmental stewardship						
2.a: Average percentage of improved environmentally sustainable agriculture practices adopted by producers (biennial survey)	n/a (2009-10)	n/a (2010-11)	55% (2011-12)	n/a (2012-13)	56%	56% (2013-14)
Goal 3: Farmed animal health and welfare, plant health, and safe food products						
3.a: Percentage of Alberta-licensed meat processing facilities that have added a preventative system to their existing food safety system	n/a (2009)	86% (2010)	88% (2011)	91% (2012)	89%	94% (2013)
3.b: Number of Alberta food processing facilities participating in the Alberta Hazard Analysis Critical Control Point (HACCP) Advantage Program	50 (2009-10)	53 (2010-11)	34 (2011-12)	45 (2012-13)	36	45 (2013-14)
Goal 4: A vibrant, resilient and sustainable rural Alberta						
4.a.* Total investment leveraged in rural businesses facilitated through Agriculture Financial Services Corporation (AFSC) lending services (\$ million)	565 (2009-10)	640 (2010-11)	658 (2011-12)	663 (2012-13)	647	644 (2013-14)
4.b: Percentage of ministry-supported, agricultural-related community activities that focus on leadership development	31% (2009-10)	33% (2010-11)	29% (2011-12)	35% (2012-13)	30%	34% (2013-14)
4.c: Percentage of rural youth and adults participating in ministry-supported programs that report effective learning from those programs	n/a (2009-10)	95% (2010-11)	95% (2011-12)	92% (2012-13)	95%	94% (2013-14)

* 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:

1. Enduring measures that best represent the goal,
2. Measures for which new data is available,
3. 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 B starting on page 45.

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 \$817 million, \$78 million higher than 2012-13 and \$39 million higher than budget.

Compared to 2012-13 Actual

Higher revenues from the previous year are mainly due to increases in AgrilInsurance premiums, Spring Price Endorsement premiums and federal contributions as a result of higher commodity prices. Increased participation in Livestock Insurance also contributed to the increase in 2013-14 revenues.

Compared to Budget 2013

Higher revenues compared to budget are primarily due to higher AgrilInsurance premiums, increased participation in Livestock Insurance and higher Spring Price Endorsement premiums. This is partially offset by reduced AgriStability federal contributions due to strong crop conditions and commodity prices and lower investment income as a result of unscheduled loan repayments.

Expense

Ministry expense was \$861 million. Insurance and agriculture income support accounted for \$506 million or 59 per cent of total expense.

Compared to 2012-13 Actual

Total expense was \$374 million lower than 2012-13.

- Indemnity expenses for crop, hail, and livestock insurance were \$283 million lower than the previous year due to high yields, good crop quality, fewer severe hail storms, and strong cattle prices.
- Expenses for agriculture income support were \$39 million lower than previous years mainly due to the *Growing Forward 2* AgriStability program changes.
- The Farm Fuel Distribution Allowance was discontinued in Budget 2013 which resulted in \$35 million lower expenses in the current year.
- Lending expenses also decreased by \$15 million as a result of more favourable economic conditions in 2013-14.

Compared to Budget 2013

Total expense was nearly \$100 million lower than budget.

- Expenses for agriculture income support were \$67 million lower than budget as a result of strong crop quality and higher priced commodities.
- Favorable economic conditions also contributed to \$15 million decrease in lending expenses as compared to budget.
- Debt servicing costs were \$7 million lower than budget due to lower interest rates.

GOAL 1: A competitive self-reliant industry

What this means:

An industry that maintains or grows domestic and international market share, successfully introduces new products into the market, expands value-added processing, and becomes more profitable from the market place. This goal recognizes the importance of policy, advocacy, programs, and services in creating a conducive business environment to reinforce and promote the economic competitiveness of Alberta's agriculture industry.

Why this is important:

The long-term viability and prosperity of the industry is dependent on being competitive and profitable in the market place. Fiscal constraints and rising competition for public funds will continue to put pressures on the agriculture industry to become self-reliant. A growing and prosperous agriculture industry will continue to make significant contributions to the provincial economy and well-being (GDP, employment, economic diversification, and rural development).

How we support this:

In support of this goal, we deliver targeted extension programs and services, evidence-based information and innovative business tools to encourage industry adoption of best practices. We promote the development and commercialization of new products to improve the competitiveness, profitability, and growth of the industry. We work with our clients along a continuum of growth from applied research, product development and commercialization through to helping them to become active exporters and attract investment from key sources around the world. We develop policies and administer enabling legislation and regulations aimed at creating a stable and secure business environment. We work with the federal government and other provinces to develop and implement the national *Growing Forward 2* framework. We work with the federal government and industry stakeholders to improve access to international markets for Alberta's agricultural products. Through the building of networks with international governments and industry, we increase Alberta's access to international markets and attract investment. We develop programs that encourage worker recruitment, retention, and productivity. We collaborate with partners and stakeholders to implement key actions that contribute to Alberta's economic prosperity.

Key Highlights and Considerations from 2013-14

▪ **Grain Transportation:**

The successful transportation of grain and other commodities to domestic and international markets is essential to maintain the competitiveness of Alberta's agriculture industry. Complications arose this fiscal year with one of the largest crops on record resulting in transportation delays. To address this delay, and ensure Alberta continues to meet market demand for agri-food products, we have joined with the federal government, provincial partners, and industry to engage stakeholders and recommend viable solutions in the short, medium and long-term to current commodity transportation and rail logistics issues.

▪ **Trade Advocacy:**

A targeted approach to trade advocacy was undertaken in an effort to end mandatory Country of Origin Labelling (mCOOL) in the United States and mitigate its negative impact on Alberta's meat and livestock industry. With this aim in mind, we supported a resolution calling for modifications to current legislation and met with North American meat producers to discuss the impacts of mCOOL and advocate for its repeal. The repeal of mCOOL legislation and the continuation of stable relations with the U.S. will ensure Alberta's agricultural industry remains competitive. We

will continue to advocate for changes in association with government partners and industry stakeholders.

▪ **New Export Opportunities:**

In order to enhance sustainability and increase industry competitiveness, we undertook activities to access, develop, and expand key markets and advance export opportunities. As part of these essential activities, we facilitated initial discussions between the Japanese Ministry of Health and Labour and Welfare and the Canadian Food Inspection Agency, which ultimately culminated in changed import regulations. Building on our success, we then assisted with the development of a pork sausage product created specifically for the Japanese market. The first order was shipped in June 2013 and demonstrates the Ministry's important role in exploring global export opportunities. We will continue to pursue new opportunities for Alberta products going forward.

▪ **New Product Development:**

As part of our commitment to stimulate industry growth and improve the competitiveness of Alberta's agriculture industry, we supported provincial value-added production capabilities and the development and commercialization of new crop varieties. One example is the support we provided in the creation and commercialization of a high yielding barley matched to the agronomic conditions found in Western Canada. The barley variety, termed Bentley, has been listed on the Recommended Malting Barley Varieties List for 2014-15 by the Canadian Malting Barley Technical Centre. This new barley variety has great potential in the food barley market for distilled beverages such as shochu (a Japanese beverage) because of its excellent pearling properties, starch content, glucose elution rate, and alcohol yields. The successful listing sends signals to producers and industry that Bentley is an emerging variety for the malting and brewing industry, both nationally and internationally.

Additional Results and Ongoing Contributions

Additional results and ongoing contributions of the Ministry toward achieving our goal of a competitive self-reliant industry include:

1. Continued to develop and expand international markets for Alberta's products by leading advocacy and market development activities in key markets, including the U.S., China, Mexico, Southeast Asia, the Middle East, Japan, South Korea, the European Union, Russia, India, and Kazakhstan. As a result of these activities, we were able to create and renew strategic Memoranda of Understanding that will enable collaboration opportunities and increase the value of export sales. We also undertook activities to increase interest in Alberta export capabilities and improve product awareness by profiling the diverse products and services Alberta has available. We will continue to market Alberta's products and develop markets to maintain Alberta's global competitiveness.
2. Continued to help create the environment necessary for Albertans to develop high quality products through programs offered at the Food Processing Development Centre, the Agri-value Processing Business Incubator, and the Field Crop Development Centre. Each program showcases our commitment to utilizing innovation for the development of new crops and value-added products for domestic and international markets.
3. Provided support for investment attraction activities and enabled international investment by facilitating the introduction of Alberta firms to international investors, servicing new investment leads from companies interested in establishing an Albertan presence, and partnering with stakeholders to expand existing agri-businesses. By researching market needs and consumer

trends, we will continue to tailor investment attraction activities to individual markets going forward.

4. Continued to develop and adopt innovative technology by partnering with industry, academia, and the federal government as part of a cross disciplinary team to deliver a world-leading five year cattle research project, termed “Application of next generation genomic tools in beef: Addressing the phonemic gap.” The project has resulted in a phenotype-genotype data base, the validation of commercial markers, and improved accuracy of genomically enhanced breeding values (GEBVs). The data base work completed to date has become an invaluable resource to the Canadian Cattle Genomics Project and will help the Canadian cattle industry apply genomic technology. Additionally, we are also providing \$5 million for Genome Alberta through Alberta Livestock and Meat Agency Ltd. (ALMA). Our support has fostered the completion of work to improve the accuracy of GEBVs for valued traits and improved herd selection, providing the Canadian and Alberta beef industries with a competitive advantage.
5. Continued to implement initiatives as part of the five-year *Growing Forward 2* agreement with the federal government that support the long-term growth, sustainability, and competitiveness of our agriculture sector. The Agreement provided more than \$400 million to support research and innovation, business and market development, food safety, farm safety, and environmental stewardship.
6. Continued to support the bioenergy, biomaterial, and biochemical industries in the development of business. This support has helped five commercial processing companies successfully launch or expand their commercial operations and contributed to the overall growth and success of the Alberta bio-economy. Going forward, we will continue to provide the supports required for industry to expand, improve efficiency, and remain competitive.
7. Continued to provide support for learning and education opportunities in agriculture with the creation of an Alberta Excellence in Agriculture Scholarship. Funds from the now dissolved Wheat Board Money Trust have been utilized by Alberta Scholarship Programs to administer the scholarship to two individuals each year. The fund aims to encourage academic excellence in a discipline related to agriculture and develop expertise in our next generation of agriculture leaders.
8. Continued engagement with stakeholders at the local, national, and international level through ALMA to establish new partnerships and maintain stable relationships. Healthy relationships generate value and opportunities to collaborate in Alberta’s agriculture sector. Additionally ALMA collaborated with industry, Western Economic Diversification, and post-secondary institutions to develop an animal nutrition and ingredient development program. The program will help increase the productivity and competitiveness of the Western Canadian pet food industry, develop innovative products, enhance food safety, expand both domestic and international markets, and enhance opportunities for Canadian crop and livestock industries to market their products as ingredients.
9. Continued to support initiatives, through the Agricultural Products Marketing Council, to build the leadership and governance capacity within agricultural marketing boards and commissions, and other agriculture-related organizations. Additionally, work was conducted to complete required regulatory reviews and industry initiated amendments. By ensuring regulations are current and relevant, and building leadership capacity, we are helping empower boards and commissions to support the agriculture industry in Alberta.

Performance Measure:

1a. Number of value-added products developed and successfully introduced to market with assistance from Agriculture and Rural Development.

Desired Trend in Results:

An increase in the number of value-added products developed and successfully introduced to market with assistance from Agriculture and Rural Development.

Results:

Year Ending March 31				
Actual 2009-2010	Actual 2010-2011	Actual 2011-2012	Actual 2012-2013	Actual 2013-2014
71	90	157	216	217

Source: Agriculture and Rural Development

Discussion of Results:

This measure tracks the number of value-added products developed and successfully introduced to market with support from Agriculture and Rural Development staff. Our staff facilitate new and diversified product development and commercialization and influence the development of value-added products through the provision of science, technical, and business development expertise. Our team of experts combine business knowledge with technical expertise to guide producers and agri-processors looking to market new value-added products for the first time. Value-added processing of agriculture commodities is facilitated using laboratory and pilot plant 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.

In 2013-14, a total of 217 new value-added products were developed and successfully introduced to market with our assistance. These services address industry demands and shifting consumer trends in health, nutrition, convenience, and packaging, thereby assisting with product success in a changing marketplace. The products focus on broad range niche market areas with significant growth potential, such as gluten-free bakery products and ready-to-eat healthy products, and are available to consumers across Canada through specialty retail and hotel segments. The services we provide help start-up companies reduce the risk of product development and commercialization, enabling increased investment in the agri-value processing sector in Alberta. The reported result is significant and can be attributed to the tremendous success of the Growing Forward agreement, which provided grants to develop and commercialize over 80 per cent of these new value-added products.

Results for this measure have been trending upward for the past five years, which may be due to agri-processors cutting back on reformulating existing products and leveraging our resources to develop new products for domestic and international markets. The upward trend in the 2013-14 result is also directly related to the success of the previous Growing Forward agreement, which served as an important catalyst over the past five years through the product and market development programs. Similar trends in results are anticipated due to our continued strategic programs on product development and market development. However, future performance may vary due to the length of time it takes to successfully launch new products and may take several months after new product development work is completed. It typically takes 18 months to two years for a product to develop from concept to commercialization. As such, the targets and actuals represent only our assisted product development and commercialization activities as opposed to a full picture of product development activity in Alberta.

Performance Measure:

1b. Research and development investment by collaborators leveraged through ministry resources (\$ million).

Desired Trend in Results:

Increased research and development investment by collaborators leveraged through ministry resources.

Results:

Year Ending March 31				
Actual 2009-2010	Actual 2010-2011	Actual 2011-2012	Actual 2012-2013	Actual 2013-2014
11.1	7.4	6.2	6.4	4.8

Source: Agriculture and Rural Development

Discussion of Results:

This measure tracks the amount of funds leveraged from outside sources 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 agri-food industries 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 fall into four primary areas: value-added processing, livestock development, crop diversification, and environmental sustainability. Targeted and proactive research and development projects are conducted to generate information, technology, and innovative solutions to problems that enable industry to better address production and/or processing-related issues and capitalize on market opportunities. The resources we devote to research and development projects are leveraged through financial contributions from collaborators.

In 2013-14, we collaborated with industry in conducting 83 research and development projects, leveraging \$4.8 million in finding innovative solutions to problems encountered by primary agricultural production and the value-added processing sector. The projects focused on: finding technology-based solutions to product development; improvement in production in lean manufacturing technologies; efficiency in processing plants; innovative approaches for addressing environmental issues; cost effective approaches for feeding livestock; new crop varieties; and, improvements in crop varieties yields and yield stability.

The reported result of \$4.8 million is 25 per cent below both the forecasted target and the prior year's result of \$6.4 million, which is primarily due to the completion of major external-funded projects that evaluated the environmental effectiveness of nutrient management practices in Alberta agricultural watersheds and developed an agricultural-based carbon protocol for Alberta. Projects of this magnitude are not likely to be repeated in the next three years.

We have increasingly been focusing on knowledge transfer and commercialization opportunities of our funded research projects, so future performance results will be affected by the mix of our resources that are dedicated to basic research versus knowledge transfer and commercialization efforts. While we desire incremental growth in resources from agri-industry that are dedicated to research and development, there is recognition that we have limited influence in the amount of research funding from external sources. Given continuous shifts in resource allocation to

address unforeseen circumstances and/or new priorities, the amount expended for research and development can undergo significant fluctuations.

Performance Measure:

1c. Percentage of eligible seeded acres for major crop categories insured under Production Insurance (Annual and Perennial crops).

Desired Trend in Results:

- Annual crops – Continuous increase in the percentage of eligible seeded acres of annual crops in Alberta insured under Production Insurance.
- Perennial crops – Continuous increase in the percentage of eligible seeded acres of perennial crops in Alberta insured under Production Insurance.

Results:

	Year Ending December 31				
	Actual 2009	Actual 2010	Actual 2011	Actual 2012	Last Actual 2013
Annual crops	71%	73%	73%	75%	77%
Perennial crops	24%	28%	23%	28%	26%

Source: Statistics Canada; Agricultural Financial Services Corporation (AFSC)

Discussion of Results:

This measure indicates our success in providing customized insurance products to producers, based on individual producer risk preference. The 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. AFSC delivers the federal/provincial AgriStability Program, a whole-farm program that provides compensation for the decline in farm margins relative to historical margins for eligible producers, regardless of the commodities they produce. AFSC also offers agriculture financial services such as farm loans and guarantees for new and expanding farm businesses, in addition to financing for those facing disastrous reductions in farm production or income.

Production Insurance (AgrilInsurance) mitigates the effects of unstable production for Alberta producers. In the 2013 calendar year, production insurance claims for annual crops (including hail endorsement) totalled \$257.4 million and claims for perennial crops totalled \$4.5 million.

The percentage of annual crops insured under Production Insurance has been trending upward due to the high financial risk involved in crop production, high input costs, and commodity prices. In 2013, nearly 77 per cent of all eligible perennial crops had some coverage under Production Insurance. This result is close to the maximum (80 per cent) that could be expected to be insured, because some operations (such as Hutterites) will not insure due to religious beliefs, smaller farmers and a small percentage of larger farmers self-insure, and some farmers are not eligible to insure due to outstanding premiums and fraud. Producers maintain a high coverage level of insurance for annual crops as unfavourable growing or moisture conditions may result in a total loss of crops/harvest.

The percentage of perennial crops covered under Production Insurance has been more variable over the past few years, which is likely related to good growing conditions and reduced loss experience. In 2013, nearly 26 per cent of all eligible perennial crops had some coverage under Production

Insurance. This is simply a result of having an increased hay supply in prior years. The 2012 year happened to be a good one for hay producers and resulted in an increased carry-over of hay and other feed supplies. Typically AFSC sells more insurance on perennial crops when the feed supply for producers is decreased.

Results demonstrate that production insurance continues to be viewed as an important risk management tool for Alberta producers, with 14.7 million acres and \$4.3 billion in risk insured on annual crops, and seven million acres and \$95 million in risk insured on perennial crops. We will continue to offer a variety of risk management tools to meet the diversity of individual producer risk preferences. By having a strong selection of choices, backed by sound financial management practices, Alberta producers are better protected against the risks of production, and are better able to be positioned for future success and sustainability.

GOAL 2: Environmental Stewardship

What this means:

This goal is directed at exploring and implementing environmentally responsive solutions that enable the agricultural sector to increase water use efficiency, minimize its environmental footprint, and promote competitiveness.

Why this is important:

The agriculture and food sector is influenced by environmental issues and increasing public awareness and pressure for the effective management of air, land, and water resources. The policy responses undertaken by domestic and international governments on these issues stand to impact the overall competitiveness of the agriculture sector and access to international markets.

How we support this:

We collaborate with all levels of government to develop integrated environmental policy and continue to facilitate the adoption of beneficial management practices that protect or enhance the environment and define and meet climate change, land use, air, and water objectives. Through our work with industry and government partners, we explore environmentally responsive solutions that promote competitiveness and build on opportunities that manage risks, address public concerns, and improve efficiencies. We facilitate and encourage the discovery, dissemination, and adoption of agricultural best practices and innovative research that can improve productivity while protecting Alberta's natural environment.

Key Highlights and Considerations from 2013-14

▪ **Water Quality:**

Our ongoing commitment to assess water quality for agriculture use, and to examine the effects of agriculture on water quality, has led to the initiation of the Alberta Phosphorus Watershed project. In collaboration with industry, we began to develop and test a risk based tool to minimize phosphorus losses from agriculture lands. Water quality advancements for the agriculture sector will help to maintain the quality of the province's resources, ensure industry competitiveness, and increase Alberta's social license to operate.

▪ **Alberta's Irrigation Strategy:**

The completion of Alberta's Irrigation Strategy required a collaborative approach with irrigation districts, municipal and federal governments, and individual farm operators to determine the most effective environmental policy tactics for Alberta. Going forward, we will lead the implementation of productivity, efficiency, conservation, water supply, and environmental stewardship recommendations stemming from the Irrigation Strategy as part of our support for provincial economic, environment, and conservation targets.

Additional Results and Ongoing Contributions

Additional results and ongoing contributions of the Ministry toward achieving our goal of environmental stewardship include:

1. Continued to support research projects stemming from targeted initiatives such as the On Farm Water Supply, Irrigation Efficiency, and Sustainability Call. These, along with similar initiatives, received almost \$4 million in funding to explore sustainable production practices for

the agricultural sector. The continued pursuit of improved ecological practices will preserve the environment and ensure agriculture remains a viable industry in the province.

2. Continued engagement in the Land-Use Framework (LUF) processes as mandated by provincial legislation. As one of the core ministries involved in the drafting of the South Saskatchewan Regional Plan (SSRP), we organized and conducted engagement sessions with industry stakeholder groups to distill information, gather feedback, and ensure stakeholder concerns and perspectives were incorporated into the document. We will continue to work with other ministries to ensure that agricultural perspectives, concerns, input, and opportunities are properly reflected in LUF-related policy decisions.
3. Continued to coordinate the Environmental Farm Plan (EFP) program, with an additional 173 EFPs being completed. The program's broad objectives are focused on sustaining production, managing risks, providing a healthy landscape for the next generation, and maintaining market access. This year the EFP program targeted agriculture service boards, applied research associations, and the Applied Research and Extension Council of Alberta to assist in the delivery of services to producers.
4. Continued to conduct research and demonstrate innovative techniques to improve the quality of Alberta's water supply and increase agriculture's social license to operate. Activities included the continuation of research examining the potential risks of manure management activities on groundwater quality and improving the methodology for assessing fecal contamination of surface water. This fiscal year marks the completion of the third year in a five-year evaluation project examining the quality of water in Alberta's irrigation districts for irrigation, livestock watering, recreational-use and the protection of aquatic life. Work was also conducted on the Nutrient Beneficial Management Practices Evaluation Project final report, which will be completed December 2014.
5. Continued to provide support to better understand Alberta's agri-food industry. Activities conducted to achieve this goal include utilizing the Life Cycle Assessment to create cradle-to-farm gate environmental footprints on four major commodities: canola, chicken, egg, and potato. For each commodity, we developed benchmarks with the goal of improving the documentation and reporting processes associated with assessing environmental performance. We also supported opportunities for agriculture producers to further their knowledge by participating in the Alberta Regulated Carbon Offset Market using Agriculture Greenhouse Gas (GHG) to implement environmental improvements.
6. Continued to support the research required to reduce greenhouse gas and ammonia emissions, and enable producers to enhance nutrient use while mitigating nutrient losses. Activities conducted to support this objective required collaboration with post-secondary institutions in order to complete research and demonstrate innovative techniques for managing manure land applications. We also implemented air quality extension and outreach programs to encourage the transfer of information to Alberta's livestock industry.
7. Provided support for environmental resource management and innovation initiatives under the *Growing Forward 2* agreement. These initiatives allow producers to adopt technologies and practices that improve efficiencies and the environmental performance of farms.
8. Continued to participate in collaborative efforts with industry and post-secondary institutions through ALMA to inform future policy development. This fiscal year we supported work to assess water quality, microbial risks, and water pathogens in Alberta's rural drinking water supply and an economic, social, and environmental sustainability assessment of the Canadian beef industry.

Performance Measure:

2a. Average percentage of improved environmentally sustainable agriculture practices adopted by producers (biennial survey).

Desired Trend in Results:

An increase in the percentage of improved environmentally sustainable agriculture practices adopted by producers.

Results:

Year Ending March 31				
Actual 2009-2010	Actual 2010-2011	Actual 2011-2012	Actual 2012-2013	Actual 2013-2014
n/a	n/a	55%	n/a	56%

Source: Agriculture and Rural Development (Environmentally Sustainable Agriculture Tracking Survey)

Notes: The results prior to 2011-2012 are not comparable and reported as not applicable because the number of environmental practices tracked under this measure has been revised. In addition, the result for 2012-2013 is not applicable as the survey is completed every second year.

Discussion of Results:

This measure tracks the level of adoption of eligible environmentally sustainable agriculture practices by primary producers seeking to improve environmental stewardship on their farming operations. The public continues to be 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. We play 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.

The Environmental Sustainable Agriculture Tracking survey is a unique-to-Alberta performance measurement initiative used to inform decision making related to our environmental programs on nutrient management, grazing, soil, water management, and energy use. This biennial survey was last completed in the 2013-14 fiscal year, and tracks the voluntary adoption of 41 key environmentally sustainable agriculture practices by Alberta producers within eight agri-environmental risk areas: manure management; water quality and quantity; wildlife habitat conservation; grazing management; general practices; agriculture waste management; energy and climate change; and soil conservation.

The average percentage of adoption for the 41 key environmentally sustainable agriculture practices by producers was 56 per cent, though there is variation in the level of adoption of environmental practices across the eight agri-environmental risk areas. Higher levels of adoption (75 per cent) of applicable environmentally sustainable agriculture practices were used 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 environmental risks associated with soil conservation, agricultural waste management, and energy and climate change. This is possibly due to regional variability in environmental conditions, limited rural agricultural product disposal sites, lower awareness of new energy technologies, and the still-in-development carbon trading market for producers. When averaging the eight levels of adoption together, these lower results tend to bring the overall result down, which in itself does not reflect the true environmental stewardship of producers at the farm level. These individual results in the survey provide a source of information for guiding current and future agri-environmental programming, policies, and regulations.

To help increase producer awareness of environmentally sustainable agricultural practices, we have undertaken initiatives in: delivering research and programming to increase understanding and adoption of environmentally sustainable agriculture practices; providing multiple extension resources, activities, and programs addressing those environmentally sustainable agriculture practices; collaborating with agriculture commodity associations to determine best approaches of measuring cumulative effects of agri-environmental risks and performance; providing incentive-based programming; and, exploring alternative approaches of delivering customized information to producers.

GOAL 3: Farmed animal health and welfare, plant health, and safe food products

What this means:

By facilitating excellence throughout the food production and processing system, the food industry can assure the quality and safety of Alberta products and food production practices, thereby improving market access and protecting public health.

Why this is important:

Consumers are not only concerned about where their food is coming from, but also how it is produced, the welfare and treatment of animals, and the impact of production practices on human health. In order to reduce risk and create a competitive advantage in maintaining and expanding markets, Alberta must have an impeccable reputation for excellence in food safety, plant health, and farmed animal health and welfare. The development and application of excellent systems assure the quality and safety of food produced and processed in Alberta and supports Alberta's culture of continuous improvement in farmed animal health and welfare.

How we support this:

We ensure that policies, standards, legislation, and regulations align to support farmed animal health and welfare, plant health, and safe food production. We also contribute to the development and implementation of national and provincial food safety and farmed animal health and welfare strategies and initiatives. We support industry with science-based information that demonstrates the soundness of current practices and encourages industry's adoption of internationally accepted food safety and traceability systems and standards through legislation, regulations, research, education, awareness, and demonstration projects. We collaborate and engage with other orders of government and industry to provide assurance of the effectiveness on industry's food safety system through research, inspections, audits, and ongoing surveillance.

Key Highlights and Considerations from 2013-14

▪ **Emergency Preparedness and Response:**

A successful response to the spread of animal diseases such as Porcine Epidemic Diarrhea (PED) is complex and requires a collaborative, coordinated response. Working in partnership with Alberta Pork, provincial veterinarians, and the rest of the pork industry, we developed and exercised a PED Response Plan designed to prepare the province for an effective response to this disease. To further prepare Alberta's industry, we have collaborated with Alberta Pork to conduct a PED surveillance project in the province, which utilizes the scientific expertise and recommendations of our staff, communicates with stakeholders, and continues to test samples for PED. Our province's strong biosecurity measures have, to date, been successful in safeguarding our swineherds against the occurrence of PED.

Our preparation for all animal incursions will help to reduce the impact of disasters in Alberta's agrifood industry. One example of these preparations is the three day disease simulation we hosted with partners from Alberta Pork and the Canadian Food Inspection Agency to practice our response to a major animal disease.

The federal government supported *Growing Forward 2* agreement provided funding for the livestock industry to counteract disease by developing and implementing an integrated strategy to shield against several diseases. Having a response prepared for animal health and welfare emergencies will minimize the impact of a disaster.

▪ **Integrated Food Safety Systems:**

To ensure policies align and government continues to maintain best practices and appropriate oversight in the production of safe food, we have collaborated with Alberta Health and Alberta Health Services in the development of an Integrated Food Safety Work Plan. The Work Plan outlines the coordinated activities required to enhance administrative processes in food safety by improving the integration of inspection and reporting processes across the two ministries. Additionally, the Work Plan will address the Auditor General's recommendation calling for Agriculture and Rural Development and Alberta Health to improve their integrated food safety planning and eliminate gaps in food safety coverage. We are utilizing a collaborate approach to effectively enhance safety standards in the province and strive for continuous improvement.

Additional Results and Ongoing Contributions

Additional results and ongoing contributions of the Ministry toward achieving our goal of farmed animal health and welfare, plant health, and safe food products include:

1. Provided leadership under the *Growing Forward 2* Traceability Technology Adoption Agreement by participating in the Radio Frequency Identification (RFID) Technology Adoption Program, which aims to encourage the utilization of RFID technologies in the beef industry with the goal of improving animal identification and herd management. By adopting this innovative technology, the integrity of Alberta's traceability system will be improved, leading to increased quality in the province's animal health, public health, and food safety standards.
2. Continued to provide relevant information and the support necessary to improve animal health and public safety legislation. We assisted Cabinet as they elected to change minimum containment standards for wild boars under the *Agriculture Pest Act* by working with industry stakeholders to develop containment standards and an action plan. Improved standards were necessary to address the issue of wild boars escaping captivity. As wild boars are not indigenous to Alberta, they pose a threat to property, public safety, and the ecosystem. Changed standards will safeguard the integrity of ecosystems, assure the public of their safety, and enable producers to continue their livelihood while ensuring wild boar farming does not negatively impact the surrounding environment.
3. Continued our support for innovative research projects through One Health Call. The program is designed to contribute to the increased competitiveness and profitability of Alberta's meat and livestock sector and promote environmental stewardship by supporting research that improves animal health, strengthens the foundation of animal health and food safety, and supports new technologies and on-farm food safety. This fiscal year ALMA invited proposals for projects that demonstrated a collaborative effort by researchers in different disciplines working at the local, national, and global level to advance the program's objectives and distributed over \$1.77 million for eight initiatives.
4. Continued risk management efforts in preventing and preparing for animal health emergencies to minimize the risk of disease outbreak and associated costs. Programming included: detailed plans to mobilize regional and provincial resources; emergency carcass disposal planning; assistance to industry with improving their level of emergency planning; and, providing education and training to producers and industry partners on how to prevent diseases from encroaching on their premises.
5. Continued to support the agri-food processing industry and industry associations in the development and delivery of food safety extension tools and on-farm food safety programs. Recognizing the importance of continuous improvement, we altered our extension approach by directing resources to support food processors in obtaining retail-specific Hazard Analysis Critical

Control Points Advantage based food safety certification. This modified approach targets small companies that are responsible for a large share of food consumed by Albertans.

6. Continued to provide leadership in the surveillance of bovine spongiform encephalopathy (BSE) through laboratory testing, by administering the Canada and Alberta BSE Surveillance Program, and by participating in a national multi-stakeholder group that monitors the results of BSE surveillance across Canada. BSE surveillance is essential for Alberta to maintain consumer confidence domestically and continue to expand trade options internationally. Additionally, we supported the Alberta Prion Research Institute through ALMA in determining the economic, environmental, and social consequences of prion diseases such as Chronic Wasting Disease (CWD) and BSE. Our support will ensure the Alberta agri-food industry remains robust and considers a holistic approach when meeting the challenges associated with prion diseases.
7. Continued to work with stakeholders and the Canadian Food Inspection Agency on mitigation strategies related to food safety, public health, and livestock health concerns. By creating risk mitigation strategies, we are minimizing the risks of an outbreak and minimizing the associated costs to government and industry.
8. Continued engagement with industry through ALMA to support Alberta's livestock industry. This fiscal year, ALMA collaborated with industry stakeholders to develop and implement a national feedlot animal care assessment program for Canada's feedlot industry. The program will provide industry with recommended practices, promote continuous improvement, and encourage improvements in the level of the care provided to animals.

Performance Measure:

3a. Percentage of Alberta-licensed meat processing facilities that have added a preventative system to their existing food safety system.

Desired Trend in Results:

An increase in the number of Alberta-licensed meat processing facilities that meet or exceed provincial meat processing standards.

Results:

Year Ending December 31				
Actual 2009	Actual 2010	Actual 2011	Actual 2012	Actual 2013
n/a	86%	88%	91%	94%

Source: Agriculture and Rural Development

Discussion of Results:

This measure tracks the percentage of Alberta licensed meat processing facilities that meet and/or exceed provincial safe food production 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. In order to maintain and enhance public confidence in provincially-inspected meat products, we ensure consistency and compliance through inspection, auditing, and enforcement activities under the *Meat Inspection Act* and *Meat Inspection Regulation*. In addition, we continue to enhance integrated food safety process controls by: maintaining a food safety surveillance system to validate the safety of meat products processed by provincially-licensed abattoirs; facilitating the adoption of internationally-accepted meat processing safety systems and standards; and, delivering information, training, and other programs that enhance food safety awareness and emergency responses.

In 2013, 94 per cent of provincially-licensed meat processors met or exceeded provincial safe food production standards. We licensed a total of 114 meat processing facilities at the beginning of the 2013 calendar year, with 107 being audited. All 107 audited facilities met and/or exceeded provincial safe food production standards. Four meat facilities were not audited in 2013 because they either relinquished their licences before their scheduled audit or were not operating in 2013 but retained their license. The remaining three meat facilities were not audited due to scheduling conflicts at the reporting cut-off time of December 31, 2013 due to weather-related events.

The high level of compliance of provincial safe food production standards among the meat processing facilities that were audited is due to an increased familiarity and understanding of audit requirements by processors. Still, there are many factors that can influence Alberta-licensed meat processing facilities to comply with meat processing standards, including customer expectations, facility operator’s buy-in to food safety standards, market drivers, internal competition between facilities, and the overall relationship between the facility and the department.

This performance measure has been revised to better measure the impacts of new operating procedures for the audits performed at provincially-inspected meat facilities. In the spring of 2012, we had an independent consultant review the provincial meat inspection service in Alberta, with the objective of examining ways of improving the regulatory environment for the provincial slaughter and meat processing industry, while maintaining food safety as a priority. A report with 24 recommendations was received, and we accepted all recommendations. A key component of the 24 recommendations was a change in operating procedure for the audits performed at provincially-inspected meat facilities from one scheduled annual audit to three unannounced inspections over the course of the year. This new meat inspection process provides additional rigour to the existing provincial safe meat processing procedures in terms of scope and frequency of the meat inspection processes. Adopting the new procedures will improve delivery of meat inspection services and demonstrate that we are working with stakeholders to optimize operations, while ensuring that Albertans have access to safe food. In addition, we are collaborating with Alberta Health to implement an Integrated Food Safety Work Plan, which focuses on renewing both the *Meat Inspection Regulation* and the *Food Regulation*, and consolidates reporting on food safety.

The revised focus of this measure provides clarity and ensures consistency with the reporting methodology to provide even better assurance of Alberta’s meat inspection processes. As a result, inspection results are not directly comparable to actual results from the prior calendar years.

Performance Measure:

3b. Number of Alberta food processing facilities participating in the Alberta Hazard Analysis Critical Control Point (HACCP) Advantage Program.

Desired Trend in Results:

Enhanced food safety practices through an increase in the number of Alberta food processing facilities using the HACCP system.

Results:

Year Ending March 31				
Actual 2009-2010	Actual 2010-2011	Actual 2011-2012	Actual 2012-2013	Actual 2013-2014
50	53	34	45	45

Source: Agriculture and Rural Development

Discussion of Results:

This measure is intended to capture the results of our efforts in ensuring the food safety continuum at the food processing level. We provide leadership and support for safe food production systems and global market access for Alberta's food processing industry through information, services, and legislation.

Since 2005, we have provided the Alberta HACCP Advantage (AHA!) program, a voluntary program that assists food processors to develop, improve, and implement food safety systems to meet the requirements of their current customers and gain new customers. The Hazard Analysis Critical Control Point, or HACCP, is a voluntary system that identifies, evaluates, and controls hazards that are significant for food safety.

In 2013-14, 45 food processors participated in the AHA! program. These food processors are mainly small companies that do not have sufficient expertise and infrastructure to implement a HACCP system or an equivalent risk-based food safety system. Small food businesses represent a large proportion of food enterprises and are responsible for a large share of food consumed by Albertans. Evidence suggests the AHA! program has been successful in encouraging a graduated or stepwise approach to HACCP implementation strategy.

The measure does not include the number of Alberta food processors that choose to participate in other complementary programs or retail-specific certification. Other food safety systems are growing in popularity, and are recognized by major food retailers around the world, making them a popular choice for food processors in Alberta (i.e. Global Food Safety Initiative benchmarked standards). Major food retailers in Alberta are increasingly sourcing food products from food processors that are able to demonstrate compliance to retailer-specific food safety controls and practices. The increased use of retail-specific food safety requirements as a marketing driver has led Alberta food processors to seek other food safety certification that meet the food safety requirements of their current food retailers.

The AHA! program was developed at a time when HACCP-based certification was at its infancy in Alberta and food processors needed cost-effective certifiable programs to meet their food safety certification requirements. Over the past nine years, the availability of HACCP-based certification options have improved, and the AHA! program is now just one of several options available for food processors to obtain certification for HACCP-based food systems. During the past year, we investigated the relevance of the AHA! program in facilitating increased adoption of HACCP-based food safety systems among food processors across the province. It was concluded that increased adoption can be attained by supporting food processors to implement retail-specific HACCP-based food safety certification. As the number of food safety certifiable programs increases, this measure is increasingly losing its relevance as an appropriate indicator of progress toward food safety outcomes, and has been removed as a performance measure in our 2014–17 Business Plan. This in no way reflects a weakening in the food safety requirements in Alberta, but is instead due to the maturation of control systems in the province.

GOAL 4: A vibrant, resilient and sustainable rural Alberta

What this means:

Building a resilient and sustainable rural Alberta requires policies, programs, and services that advance community capacity, infrastructure, economic opportunities, innovation, and rural stewardship.

Why this is important:

A strong rural Alberta contributes to the province's prosperity. By increasing human and business capacity, building networks, addressing challenges, and taking advantage of opportunities, rural Alberta can realize increased economic diversification, self-reliance, and an improved quality of life.

How we support this:

We collaborate with other ministries and agricultural organizations to coordinate and integrate policies and programs that encourage local innovation, creativity, and economic development in rural Alberta. We actively continue to build rural Alberta's leadership base by working with youth and rural stakeholders and partnering with educational institutions to facilitate innovative learning and skill development opportunities, as well as advance rural development initiatives. We assist with rural business diversification and facilitate the development of community infrastructure. We administer programs to reduce the costs of installing natural gas and farm electric utility services and reduce the cost of heating fuels for rural Albertans living in remote regions of the province. We also work with industry and rural Alberta to promote and enhance farm safety in Alberta.

Key Highlights and Considerations from 2013-14

▪ **Rural Economic Development Action Plan:**

This fiscal year, we began leading the development and implementation of a Rural Economic Development Action Plan that will focus on: Industry and Business Development, Financial and Capital Access, Workforce Development, Regional Coordination, and Rural Economic Infrastructure Capacity. We engaged individuals and groups who have an active role in shaping rural communities through a series of sessions across the province.

We are working with ministries across government to develop a plan for action that identifies key opportunities to improve our current suite of programs and services in response to evolving rural communities and regions, outline how government can better work together to reduce redundancy and improve the quality of service for stakeholders, and identify new and innovative approaches to address common challenges.

▪ **Southern Alberta Flood Recovery:**

As a result of the devastating floods that occurred in Southern Alberta last summer, we are supporting flood recovery and mitigating efforts by coordinating government programs including: the Alberta Flood Recovery Loan Guarantee Program, the Alberta Flood Recovery Interest Rebate Program, and the AFSC Alberta Flood Recovery Loan Program. By utilizing these programs, we were able to maintain a strong rural Alberta throughout the aftermath of the disaster and ensure rural economies continue to develop.

▪ **Farm Safety:**

In an effort to improve and promote safety on Alberta's farms, all recommendations of the Farm Safety Advisory Council have been accepted, including: Strategic, Province-wide Coordination and Awareness; Enhanced Education Resources, Training and Certification; Farm Related

Policies and Guidelines; and, Foreign Farm Workers in Alberta. To further support this important initiative, industry stakeholders took part in focus group sessions across the province to discuss methods to coordinate farm safety education, training, and certification. We partnered with the Canadian Agricultural Society Association to develop the Alberta FarmSafe Plan that will guide farm employers in developing a health and safety management system for their business and it supports the Certificate of Recognition program which allows farm businesses to qualify for Workers' Compensation rebates. We take the safety of farm workers and farm families very seriously and are committed to working with industry, stakeholders and all orders of government to address the unique and complex challenges of a farm work environment.

Additional Results and Ongoing Contributions

Additional results and ongoing contributions of the Ministry toward achieving our goal of a vibrant, resilient and sustainable rural Alberta include:

1. Provided contributions and worked with municipalities to complete the Final Mile Rural Connectivity Initiative. We partnered with Service Alberta to close service gaps in rural Alberta and ensure reliable, high-speed internet is available to at least 98 per cent of Albertans. One component of this initiative was our Final Mile Rural Community Program, which has provided \$5.5 million to 24 local government-led projects since it began. Projects associated with this program helped cover the infrastructure costs associated with addressing service gaps in rural Alberta.
2. Provided essential financial lending services through Agriculture Financial Services Corporation (AFSC) to create a sustainable rural economy. As a result of our continued financing, producers and small businesses were able to access a stable, competitive source of funding and ensure their success by expanding, improving and stabilizing their operations. The Commercial Loan Program provides loans for rural Alberta when conventional lenders cannot provide financing on reasonable terms and conditions. Our support for these rural business enterprises and agriculture producers ensures they can access the capital necessary to grow the rural economy.
3. Provided recognition through the Century Farm and Ranch Award to 73 families across the province. The award is presented to families who have farmed or ranched the same land for 100 years or more and have helped build our rural area into the resilient and sustainable economy of today.
4. Continued to engage and collaborate with stakeholders to develop programs and practices that acknowledge the importance of farm safety, promote awareness, and provide farm businesses with the tools needed to ensure and maintain safety standards. As an example we partnered with the Temporary Foreign Worker Advisory Office for better access to farm safety resources for foreign workers and with the Alberta Centre for Injury Control and Research to develop specific farm safety messaging and awareness campaigns.
5. Provided support through insight and guidance for Rural Alberta's Development Fund (RADF). We have worked to align RADF activities with government goals and ensure the Fund contributes to the growth, prosperity, and quality of life in Alberta. Our continued support will encourage Albertans to invest in their own communities, resulting in new business, higher employment, and strengthened regional economies.
6. Continued to provide support for major fairs and exhibitions across the province, including the Calgary Exhibition and Stampede, Edmonton Northlands, Camrose Regional Exhibition & Agricultural Society, Grand Prairie Regional Agricultural & Exhibition Society, Lethbridge and District Exhibition, Lloydminster Agricultural Exhibition Association, Medicine Hat Exhibition and

Stampede Company, Olds Agricultural Society, and the Westerner Exposition Association. This support, through capital development and program initiatives, helps to increase the exposure of our rural areas and promote rural areas as lively communities.

7. Continued to provide contributions to Alberta's Agricultural Societies, which support agricultural programs, services, and facilities. Through our support, we aim to enhance the quality of life for rural communities and those contributing to the agriculture industry.
8. Continued to support provincial and regional rural program opportunities, which increase the knowledge, skill, and leadership ability of those residing, and operating businesses, in our rural communities. During this fiscal year, the majority of participants found significant value in programs offered through our Ministry.
9. Continued to support the Remote Area Heating Allowance program. The program was established under the Rebate Authorization Amendment Regulation and provides Albertans living or working where natural gas services are unavailable with rebates for the purchase of heating oil or propane. The rebate can be applied when expenses are incurred for primary residential, commercial, or industrial heating purposes.

Performance Measure:

4a. Total investment leveraged in rural businesses facilitated through Agriculture Financial Services (AFSC) lending services (\$ million).

Desired Trend in Results:

A continuous increase in investment leveraged in rural businesses.

Results:

Year Ending March 31				
Actual 2009-2010	Actual 2010-2011	Actual 2011-2012	Actual 2012-2013	Actual 2013-2014
565	640	658	663	644

Source: Agriculture Financial Services Corporation (AFSC)

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

Discussion of Results:

Without access to capital, rural businesses would not be provided an opportunity to prosper, or continue to sustain a vibrant agriculture and commercial business sector in many rural communities in Alberta. Agriculture Financial Services Corporation (AFSC) lending services ensure that primary agriculture producers and rural business enterprises can access the capital necessary to foster and grow the rural economy in Alberta. This measure highlights the successes of AFSC's direct contribution, partnership, and collaboration with other stakeholders in providing funding to support the growth of farming and commercial activities.

AFSC lending services are demand-driven by the agriculture and rural business community. Total dollar investment (which includes debt, equity, and investment) in agri-business and farm loans is a proxy value for investment based on loans approved that would be used to support the growth of farming and commercial activities. The \$644 million in investments leveraged in rural businesses in 2013-14 is a slight decrease from the previous two years, even though the mix of farm lending and commercial lending changed. The leverage of funds lent to primary producers is substantially lower than those lent to commercial enterprises, resulting in lower-than-expected results for the year. The

higher level of demand from primary producers, where AFSC plays a primary lender role, was driven by producers looking to expand their land base. Demand from commercial enterprises, where AFSC serves as an alternative lender, was lower due to increased activity from other lenders.

AFSC continues to support the growth and development of the Alberta economy by providing loans to producers, agri-businesses, and commercial ventures at a time when many financial institutions continue to restrict lending to certain industries. As a mainstay in rural Alberta, AFSC's programs continue to exist and provide capital access regardless of the economic cycles that often create difficulties in accessing capital for businesses, especially in rural Alberta.

Performance Measure:

4b. Percentage of ministry-supported agricultural-related community activities that focus on leadership development.

Desired Trend in Results:

Increased leadership development capacity in rural communities through ministry-supported agricultural-related community activities.

Results:

Year Ending March 31				
Actual 2009-2010	Actual 2010-2011	Actual 2011-2012	Actual 2012-2013	Last Actual 2013-2014
31%	33%	29%	35%	34%

Source: Agriculture and Rural Development

Discussion of Results:

This measure highlights 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 development activities helps to nurture those who wish to contribute to their communities. Leadership development activities encompass learning opportunities for both youth and adults in rural communities. The 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.

We provide both block funding and project-specific funding to agricultural societies and community groups to initiate projects that address community-specific needs. The funding arrangement provides flexibility on how rural communities use program funds, and funding is provided for eligible activities completed by community groups. During the past year, we provided funding for 3,061 agricultural-related community activities, of which 34 per cent, or 1,048 activities, focused on leadership development. The remainder of activities focused on agri-business development, agriculture education, community improvement, fairs, and livestock show activities, which all contribute to improvements in agriculture, rural development, and the quality of life in rural Alberta.

Reported results for leadership development were expected to decrease, as one-time increases in program grants were provided in 2012 that targeted leadership development and farm safety ended. The one-time funding was a major factor behind the increase in the 2012-13 result, which built upon our commitment to support the development of the next generation of leaders in rural Alberta.

For 2013-14, both the non-leadership development and leadership activities decreased. However, the decrease in non-leadership development activities far surpasses the decrease in leadership development activities, causing the overall decrease in the reported result. This decrease is not statistically different from the previous reduction in 2011-12.

Performance Measure:

4c. Percentage of rural youth and adults participating in ministry-supported programs that report effective learning from those programs.

Desired trend in Results:

Maintain or increase the level of satisfaction from rural youth and adults participating in ministry-supported programs.

Results:

Year Ending March 31				
Actual 2009-2010	Actual 2010-2011	Actual 2011-2012	Actual 2012-2013	Actual 2013-2014
n/a	95%	95%	92%	94%

Source: Agriculture and Rural Development

Discussion of Results:

This measure reflects the quality of learning opportunities under 4-H programming for both youth and adults in rural communities, which nurture and improve skill sets needed to strengthen rural communities. We support 4-H programming, which includes: regional and provincial livestock workshops; judging clinics and competitions; leadership and personal development conferences and seminars; communication and presentation workshops; and, technical skill development programs and opportunities. These 4-H programs enhance the capacity of rural communities to nurture, retain, and enhance critical skills related to leadership, managerial, public speaking, economic development, and environmental sustainability.

This performance measure provides a continuous measurement tool for assessing the effectiveness of learning opportunities provided for rural youth and adults under our supported programs through an annual survey. The 2013-14 result of 94 per cent remains similar to previous years, which reflects a consistently high quality of learning opportunities. During the year, we supported 92 learning opportunities for 5,862 youth and 2,092 leaders in 361 clubs across Alberta, and provided technical resources to youth and adults involved in over 30 specific project areas.

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, as well as still gauging progress toward their related goals. During the development of the 2014-17 Business Plan, it was discovered that the leadership development programs used to calculate results for this measure are also reported under the performance measure on leadership development. To reduce redundancy among the performance measures, this measure has been discontinued in our future business plans, though results are still being monitored within the organization to ensure the quality of 4-H programming will continue to remain high.

Results Based Budgeting

Agriculture and Rural Development led the review of Economic Development programs during Cycle 2 of the Results-based Budgeting process. In total, 43 programs representing approximately \$2.7B in gross expenses and spanning four ministries were evaluated for their relevance, effectiveness, and efficiency.

Our leadership and cross-ministry collaboration resulted in the approval and implementation of all 67 recommendations by Treasury Board Committee in February 2014. Included in those recommendations were suggestions for significant legislative changes, the development of new policies, programs and tools to address identified needs, transferring responsibility of programs and services to more suitable providers, and reducing unnecessary red tape and regulations. The success of this initiative further demonstrates our commitment to work in coordination with ministries across government for the continuous improvement of Ministry 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 through: facilitating the adoption of internationally-accepted food safety systems and standards; maintaining a surveillance system for food safety and animal health; minimizing the impact of animal diseases on public health; providing essential non-routine animal disease investigation services; and planning for and responding to food safety and animal health emergencies. The sector also validates the safe processing of meat and meat products through provincially-licensed meat facilities and dairy through provincially-licensed dairy processors, as well as ensures compliance with assigned 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 Agriculture Boards and Commissions, rural gas, electric and water associations and other regulatory tools that support rural communities. 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. 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 is dedicated to establishing an overall strategic framework and implementing strategies necessary to generate and attract international and domestic investment to the agriculture sector in the province and advocating the growth of Alberta agriculture and agri-food export opportunities.

In addition, the sector enables industry and supports the development of Alberta's rural economy by encouraging innovation in the agriculture industry, supporting the development of youth and future leaders in rural Alberta, providing information and knowledge to agriculture entrepreneurs, and providing oversight and financial support for rural utilities. By focusing on communication with a variety of clients, and meeting local and domestic market demands, the sector is able to influence the creation and maintenance of a strong rural economy.

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. 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, and exploring international market access opportunities. 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.

As public awareness drives the need for the agriculture industry to earn and demonstrate a social license to operate, development and implementation of environmental stewardship best practices is becoming increasingly important. 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 risk management products and financial services to fit the business needs of farmers, the agriculture industry, and small businesses in Alberta.

The corporation provides insurance products to mitigate risks related to both livestock and crop production, including hay and pasture, and offers waterfowl and wildlife damage compensation to help Alberta farmers protect against production losses on their farms. AFSC delivers the federal/provincial AgriStability Program, a whole-farm program that provides compensation for decline in farm margin relative to historical margin for eligible producers, regardless of the commodities they produce. 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 are market access, streamlining the regulatory burden, synergistic growth, domestic positioning and information flow.

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 provides strategic and tactical advice to the Minister and appropriate groups who are able to impact the long-term profitability and sustainability of the grains and oilseeds industry. The Council also provides advice to the Minister on other matters pertaining to the grain industry (such as transportation issues and investment needs in grains research and innovation), conducts ongoing examination of all facets of the industry, and maintains liaison with other governments, groups, or 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.

Appendix B: Performance Measure Methodologies

Performance Measure:

1a. Number of value-added products developed and successfully introduced into market with assistance from Agriculture and Rural Development.

Methodology:

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 in fiscal year 2013-14. 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. The term also includes 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:

1b. Research and development investment by collaborators leveraged through ministry resources (\$ million).

Methodology:

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. The performance result for this measure is the sum of expended amounts of outside funds.

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. The data is collated from program areas within the Ministry that are engaged in research and development activities.

Performance Measure:

1c. Percentage of eligible seeded acres for major crop categories insured under Production Insurance (Annual and Perennial crops).

Methodology:

Annual Crops

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 2013 Field Crop Reporting Series (released on December 4, 2013). The result is then expressed as a percentage.

Annual crops refer to those that are seeded every year. The annual crops included in this measure are wheat (winter wheat; spring wheat; 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.

Estimate for land (in acres) seeded to annual crops in Alberta is taken from Statistics Canada's November 2013 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 corresponding eligible seeded acres of annual crops insured under the Crop Insurance program is supplied by Agriculture Financial Services Corporation.

Perennial Crops

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 2013 Field Crop Reporting Series, Statistics Canada (released on December 4, 2013)). The result is then expressed as a percentage.

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 corresponding eligible acres of perennial crops insured under the Crop Insurance program is obtained from Agriculture Financial Services Corporation.

The Census of Agriculture is collected every five years, so acres may change during that time.

Performance Measure:

2a. Average percentage of improved environmentally sustainable agriculture practices adopted by producers (biennial survey).

Methodology:

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.

This survey assesses adoption of environmentally sustainable agriculture (ESA) practices. 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 ± 4.4 per cent at the 95 per cent confidence level. The response rate was 14 per cent. Additional information can be found in Agriculture and Rural Development's 2013 Environmentally Sustainable Agriculture Tracking Survey.

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 sample (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. The source data for this measure is Agriculture and Rural Development's 2013 Environmentally Sustainable Agriculture Tracking Survey.

Performance Measure:

3a. Percentage of Alberta licensed meat processing facilities that have added a preventative system to their existing food safety system.

Methodology:

The result for this measure is derived by dividing the number of Alberta-licensed meat processing facilities that have implemented appropriate food safety process control systems as of December 31, 2013 by the total number of Alberta-licensed meat processing facilities as of January 8, 2013.

All meat processing facilities (poultry and red meat abattoirs) licensed by the Ministry receive an annual Meat Facility Standards (MFS) audit, once per calendar year as part of the Meat Safety Audit Program. This audit is a full systems audit against the entire MFS. The full system audit is used to determine if a meat processing facility has added a preventative system to their existing food safety system. For the purpose of this measure, a preventative system is defined as compliance with MFS as determined by a scored full annual audit.

Only full system audits are reported under this measure. Audit findings are scored and recorded in the MFS Annual Audit Report. Each abattoir receives a Level 1-6 rating with Levels 1-3 receiving a certificate (Gold, Silver, or Bronze) indicating that they have added a preventative system to their existing system.

Meat processing facilities that either relinquished their licenses before their scheduled audit date or were not operating but retained their license are included in the base figure total number of Alberta-licensed meat processing facilities as of January 8, 2013. The findings of these meat processing facilities can have significant impact on the reported result. The data for this measure is collated from the Ministry's Meat Safety Audit Program.

Performance Measure:

3b. Number of Alberta food processing facilities participating in the Alberta Hazard Analysis Critical Control Point (HACCP) Advantage Program.

Methodology:

This performance measure reports the total number of Alberta's provincially-licensed food processing plants that implemented appropriate food safety process control systems in fiscal year 2013-14, as reported under the Alberta HACCP Advantage (AHA!) program.

This measure tracks the success of the Ministry in encouraging Alberta food processors to adopt HACCP-based food safety systems and/or improve existing food safety systems. HACCP is the acronym for Hazard Analysis Critical Control Point. HACCP systems provide a systematic and preventative approach for the identification and control of food safety hazards. HACCP is an internationally recognized, science-based food safety system based on preventing, eliminating and reducing hazards.

Food processors that participate in the AHA! program are considered the baseline/starting point from which incremental improvements to activities listed in the work plan can be measured against. Each work plan is then validated by Ministry Food Safety Specialists. The work plan validation confirms that the completion of the activities listed in the work plan will result in an incremental improvement in food safety in the processing plant. Food processors then implement the activities documented on their work plan and subsequently validated by Ministry Food Safety Specialists through on-site closing assessments. Incremental improvements to a processing facility's food safety system are assessed by comparing the results of a closing assessment to a validated work plan. Food processing facilities that are able to demonstrate an incremental improvement to their food safety systems are considered to have participated in the Alberta HACCP Advantage program and are included in the result for this measure. The data is collated from the Ministry's AHA! Program.

Performance Measure:

4a. Total investment leveraged in rural businesses facilitated through Agriculture Financial Services Corporation (AFSC) lending services (\$ million).

Methodology:

Farms and commercial business investments in rural areas (all sources are included whether it is direct from AFSC, other sources of debt, business owner's equity or investment by a third party) are added and reported as total dollar investment. This amount excludes all loans that were approved in fiscal year 2013-14 and subsequently cancelled or withdrawn on or before March 31, 2014.

The measure highlights the successes of AFSC's direct contribution, partnership and collaboration with other stakeholders in providing funding to rural businesses for farming and/or commercial activities located outside Edmonton and Calgary.

Dollar investment is any fund (i.e., debt, equity, investment) that would be used to support the growth of farming and commercial activities. Total investment leveraged is a proxy for the total dollar investment as a result of AFSC's involvement with the facilitation of capital investment in agri-

business and farm loans through its lending products, services, and partnerships. Access to loans is critical in developing and expanding rural businesses, which positively contribute to strengthening rural communities.

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:

4b. Percentage of ministry-supported, agricultural-related community activities that focus on leadership development.

Methodology:

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.

This measure focuses on leadership capacity in rural communities, including the provision of diverse initiatives under Ministry agricultural community programming. The breadth and diversity of agricultural-related community activities held at various events throughout the year enhance the capacity of rural communities to nurture, retain, and enhance critical skills in leadership.

Leadership development activities encompass learning opportunities for both youth and adults in rural communities that nurture and improve skill sets needed to strengthen rural communities, such as management, public speaking, economic development, and environmental sustainability. These skills are important in supporting vibrant and sustainable rural communities.

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. Activities held at Ministry-supported events fall under three program areas: Agricultural Society Program, 4-H Program, and Agricultural Initiatives Programs. The activities included in the measure address the Ministry's five priority areas:

- **Agriculture-related activities** — refer to activities such as rodeos, fairs and livestock shows.
- **Agri-business development** — includes any activities that promote agricultural business development and the development of the agriculture industry.
- **Agriculture education and skill development** — includes programs or projects that foster awareness of agriculture or improve/develop skills within the community.
- **Leadership development** — includes training for volunteer staff, providing funding for conferences, workshops, or seminars, and sponsoring youth leadership development.
- **Community improvements** — includes any capital funding for infrastructure development, renovations, repairs and maintenance, and operating costs of facilities, as well as all capital projects from the Agricultural Initiatives Program grant program.

Data for this measure is collated from three program areas of the Ministry; Agricultural Society Program, 4-H Program, and Agricultural Initiatives Program.

Performance Measure:

4c. Percentage of rural youth and adults participating in ministry-supported programs that report effective learning from those programs.

Methodology:

The data for this measure is obtained through the use of written evaluations from a rotating sample of eight random and representative Ministry-supported programs. Fifty per cent of the programs evaluated in the prior fiscal year (2012-13) were replaced with a new sample of equal size in the current fiscal year (2013-14). The complete set of programs in the 2012-13 survey sample is thus replaced every two years, ensuring that 50 per cent of the programs are common from year to year.

The target audience and individual program objectives determine the type of questions that are selected from a standardized menu. For each question, the respondent may choose “Yes” to indicate a positive change (effective learning) or “No” to indicate no positive change. Questions that are not answered or have multiple answers selected are coded “No Response” and excluded from the analysis.

To assess effective learning from Ministry-supported programs, respondents are asked questions on knowledge learned, attitudes affected in a positive way, skills acquired, and aspirations developed through their participation in those programs. The aggregate weighted percentage of respondents who reported effective learning from Ministry-supported programs is calculated and reported.

A total of 685 rural youth and adults were surveyed. Results are reliable within ± 4.7 per cent at the 95 per cent confidence level. The response rate was 78 per cent. The data is collated from 4-H programs and Agriculture and Rural Development.