

Appendix C: Performance Measure Methodologies

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

Performance Measures 1.a and 1.b: Methodology

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

Performance Measure 2.a: Methodology

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

Performance Measure 2.b: Methodology

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

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

Performance Measure 2.c: Methodology

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

Performance Measure 3.a: Methodology

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

Performance Measure 3.b: Methodology

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

Performance Measure 4.a: Methodology

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

Performance Measure 4.b: Methodology

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