Agriculture and Agri-Food Canada
Agriculture et Agroalimentaire Canada

Evaluation of Income Stability Tools – AgriStability and AgriInvest

Office of Audit and Evaluation

Report

June 2012

Canada

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TABLE OF CONTENTS

Page

EXECUTIVE SUMMARY

This evaluation examines the relevance and performance of Agriculture and Agri-Food Canada's (AAFC) Income Stability Tools – AgriStability and AgriInvest. These programs are offered under the Business Risk Management (BRM) suite of programs as part of AAFC's national agricultural policy framework, Growing Forward.

The evaluation was conducted by the Office of Audit and Evaluation (OAE) in accordance with the Treasury Board Policy, Directives and Standards on Evaluation (2009). The results are intended to inform planning for the next phase of policy and program development.

Background and Profile

The BRM suite is designed to support Growing Forward strategic outcomes by providing producers with effective tools to manage business risks that are largely beyond their control, thereby helping them to reduce income losses.

Within the BRM suite, AgriStability and AgriInvest are intended to help producers to stabilize their farm income. AgriStability is a margin-based program that covers declines in a producer's farm income relative to previous years. AgriInvest is a self-managed savings account into which a producer deposits funds and receives matching government contributions. AgriStability and AgriInvest are delivered through a mix of federal and provincial/territorial administrations.

Government contributions and costs to administer AgriStability and AgriInvest are shared between the federal government and the provinces and Yukon Territory on a 60:40 basis. As the programs are demand-driven, program expenditures fluctuate from year to year. Since the programs' implementation, federal expenditures have totalled $1.3 billion for AgriStability and $1.3 billion for AgriInvest (including the AgriInvest Kickstart Initiative).

Methodology

The evaluation gathered quantitative and qualitative data using the following lines of evidence: a document and literature review (including AAFC studies/papers prepared for the FPT BRM Policy ADMs Working Group in support of Growing Forward 2); analysis of a BRM survey previously undertaken by AAFC in 2010; a review of program performance and financial data; statistical analysis and modeling; interviews with internal and external stakeholders; focus groups with producers, accountants and financial representatives; and case studies of program participants.

Key Findings

Government support for the agricultural sector has been important in helping producers manage business risk and income variability. Income variability affects producer well-being and investment decisions, and production levels will normally decrease as risk and uncertainty increase. Producers view government BRM programs as important in addressing the gaps in available private sector BRM tools.

AgriStability and AgriInvest conceptually are aligned with federal roles and departmental strategic outcomes. Programs within the BRM suite are designed to work in a complementary manner and there is no duplication of payments to producers.

AgriStability and AgriInvest are generally performing well in terms of coverage and participation. Furthermore, AgriStability payments provide effective stabilization of producer margins over the medium-term.

The evaluation identifies several areas requiring attention:

- AgriStability and AgriInvest cover all levels of risk and there is overlap within the BRM suite of programs. This may be crowding out the development of producer-led or private sector initiatives that could complement current BRM tools. A recent thematic review on agricultural risk management in Canada undertaken by the Organization for Economic Co-operation and Development (OECD) arrived at similar findings.

- Producers want the program to be tailored to their individual operations; however there is an inherent trade-off in the AgriStability design between individualization of payments for producers and payment predictability, timeliness and bankability. Individualized payments target program funding to producers in need, but require complex calculations to determine producer eligibility and payment amounts.

- AgriInvest was designed to provide producers with the flexibility to use funds to protect their margins from small declines, or to provide funds for investment to reduce risks or improve profitability. There are no comprehensive data on how AgriInvest funds are being used, and producers can withdraw their funds at any time. There is no direct relationship in the program design between monies withdrawn and income decline.

- The total value of AgriStability payments per year has increased over the lifespan of the program. Increasing farm incomes in recent years suggest this trend may continue in the future, as rising reference margins may increase the size of producer payments when payments are triggered in the event of income declines. Under current program parameters, this will create an increased financial obligation for federal-provincial-territorial (FPT) governments.

- Overpayments have been a considerable issue for interim, Targeted Advance Payments (TAPs) and final AgriStability payments. The use of interim payments and TAPs has been decreasing, likely as a result of producer concerns with overpayments. However, overpayments are a result of the complex calculations inherent in the AgriStability design and the fact that the financial situation of the farm changes over the production cycle (due to changes in inventory valuations, for example). Concerns were cited with respect to how far back in time that payments can be re-assessed by administrations.

- There is a lack of integrated micro (participant-level) data (including revenues, expenses, inventory, assets and liabilities) to assess the interaction of BRM programs and the programs' impact on producer behaviour. Modeling based on a comprehensive micro-database that includes all BRM program payments would support empirical examination of these issues.

The devolution of AgriStability has resulted in a loss of economies of scale in terms of AAFC program delivery. Federal, provincial and territorial governments should assess whether more cost-efficient options can be found for the delivery of AgriStability where the Government of Canada currently delivers.

- AgriStability and AgriInvest are not meeting their application processing service standards.

Recommendations

The evaluation report identifies the following seven recommendations:

<u>Recommendation #1:</u>

AAFC should work with the provinces and territories to:

- Define the level and nature of risks that governments should cover for the agricultural sector through the BRM suite of programs; refocus the AgriStability and AgriInvest programs to target these risks; and streamline the various Tiers to reduce programming complexity.

<u>Recommendation #2:</u>

The Strategic Policy Branch should:

- Examine fully the potential impacts of forecasted economic trends on the long-term affordability of the AgriStability program, paying particular attention to scenarios in which continued high prices followed by small income declines (shocks), trigger large payments to producers.

Recommendation #3:

AAFC should work with the provinces and territories to:

- Improve stakeholders' understanding of AgriStability's objectives and the trade-offs between predictability/timeliness and the individualization of payments, and communicate that the program addresses income variation over the medium-term (e.g., two to three years).

- Improve producer education and communication about the level of coverage to be provided and the intent of the AgriStability and AgriInvest programs as part of a renewed BRM suite.

Recommendation #4:

AAFC should work with the provinces and territories to:

- Examine the feasibility and desirability of limiting the period in which an AgriStability payment file can be re-opened for assessment to three years (similar to the *Income Tax Act*).

Recommendation #5:

AAFC should work with the provinces and territories to:

- Develop an integrated micro-database of all BRM program participants that could support longitudinal analysis of program interactions, and contribute to improved program management and policy development.

Recommendation #6:

AAFC should work with the provinces and territories to:

- Determine the most appropriate, cost-efficient delivery model for the AgriStability program for the remaining four provinces and one territory in which AAFC delivers, including the consideration of non-AAFC delivery models.

Recommendation #7:

The Farm Financial Programs Branch should:

- Report back to AAFC senior management by March 2013 on its costs for administering the AgriStability and AgriInvest programs where Canada delivers; and on its progress in meeting the AgriStability and AgriInvest processing service standards. If required, the Farm Financial Programs Branch would investigate further action that could be taken to improve application processing times or to adjust service standards to reflect program capacity.

LIST OF ACRONYMS

AAFC	Agriculture and Agri-Food Canada
ADM	Assistant Deputy Minister
ANS	Allowable Net Sales
APF	Agricultural Policy Framework
APP	Advance Payments Program
BRM	Business Risk Management
BSE	Bovine spongiform encephalopathy
CADMS	Canadian Agriculture Dynamic Micro-Simulation Model
CAIS	Canadian Agricultural Income Stabilization
CCB	Communications and Consultations Branch
CRA	Canada Revenue Agency
EBP	Employee Benefit Plan
EU	European Union
FIPA	*Farm Income Protection Act*
FIPD	Farm Income Programs Directorate
FFPB	Farm Financial Programs Branch
FFS	Farm Financial Survey
FPT	Federal-Provincial-Territorial
FTE	Full Time Equivalent
G&C	Grant and Contribution
MRAP	Management Response and Action Plan
NISA	Net Income Stabilization Account
NPAC	National Program Advisory Committee
NPO	Non-Pay Operating
OAE	Office of Audit and Evaluation
OAG	Office of the Auditor General
OECD	Organisation for Economic Co-operation and Development
PAA	Program Activity Architecture
PPP	Price Pooling Program
RAD	Research and Analysis Directorate
SPB	Strategic Policy Branch
TAP	Targeted Advance Payment

1.0 INTRODUCTION

The Office of Audit and Evaluation (OAE) of Agriculture and Agri-Food Canada (AAFC) conducted an evaluation of AgriStability and AgriInvest. These programs are offered under the Business Risk Management (BRM) suite of programs as part of AAFC's national agricultural policy framework, Growing Forward. This evaluation was a requirement under AAFC's Five-Year Departmental Evaluation Plan. Given the complexity of income stability programs, the evaluation was launched in the fall of 2010 after receiving approval of its Terms of Reference by AAFC's Departmental Evaluation Committee (DEC). Income stability programs are funded on a 60:40 (Federal:Provincial) basis. As a result, the Provinces and Territories were updated on the status of the evaluation throughout the project. With Growing Forward expiring at the end of 2012/13, the evaluation will help to inform planning for the next phase of policy and program development.

During 2011, updates were provided to the FPT Policy ADMs and the FPT BRM Working Group on the status of the evaluation. Various provinces provided assistance in the conduct of the evaluation by providing information and DEC received updates on the findings.

As AgriStability and AgriInvest are both designed as income stability tools, the two programs were evaluated together. Other BRM programs are subject to separate evaluations:

- AgriRecovery was evaluated in 2011;
- The Advance Payments Program (APP) and the Price Pooling Program (PPP) were evaluated in 2011; and
- The evaluation of AgriInsurance is targeted for completion by August 2012.

1.1 EVALUATION SCOPE

As per the Treasury Board Directive on the Evaluation Function, the evaluation examined the programs' relevance and performance. Specifically, the evaluation examined: continued need for the programs; alignment with government priorities, departmental strategic outcomes, and federal roles and responsibilities; achievement of intended outcomes; and the extent to which the programs demonstrate efficiency and economy.

The evaluation was national in scope, covering the period from the programs' implementation in 2007/08 to 2011/12.

1.2 EVALUATION APPROACH

The evaluation was completed by OAE based on research and analysis conducted by PRA Inc. (an independent consulting firm) and AAFC's Research and Analysis Directorate (RAD). Employing a summative non-experimental design and incorporating both primary and secondary data, the evaluation used multiple lines of evidence to address the evaluation issues and questions.

The evaluation was conducted with the advice and feedback of a BRM Evaluation Working Group. This intradepartmental working group is comprised of representatives from OAE, Farm Financial Programs Branch (FFPB), Strategic Policy Branch (SPB), Communications and Consultations Branch (CCB), as well as external experts on agricultural policy.

1.3 METHODOLOGY

The evaluation included several lines of evidence.

- A **document / literature review** was completed to gain a comprehensive understanding of the programs and their forerunners, and to gather information relevant to the evaluation questions. The review examined foundational documents and other program documents, as well as peer-reviewed articles and other literature of relevance. Previous reviews of the BRM suite of programs were key documents, and included a Strategic Review undertaken by AAFC and an Organisation for Economic Co-operation and Development (OECD) thematic review of agricultural risk management in Canada. In addition, studies prepared by AAFC for the FPT BRM Policy ADMs Working Group in support of Growing Forward 2 were also examined.

- Analysis was undertaken of **BRM survey data**. This survey was previously conducted for AAFC by the Strategic Counsel in March and April 2010, and included data on 2,100 producers from across Canada which was obtained through a random sampling of Canadian producers.

- **Program administrative and financial data** from Farm Income Programs Directorate (FIPD) were examined to determine program costs and administrative activities, over time. These data included information on program payments, interim payments, and the number of applications processed.

- **Statistical analysis** was undertaken by AAFC's Research and Analysis Directorate to examine different issues relevant to the evaluation. This analysis included simulation modeling using the Canadian Agriculture Dynamic Micro-Simulation Model (CADMS), which includes data from the years 2003 to 2008. Data sets used for this analysis included program data, Statistics Canada's Farm Financial Survey (FFS) and others. In addition separate analysis was conducted using FFS data.

- **Interviews** were undertaken in 23 interview sessions with a total of 37 key informants, in order to gather perspectives on the programs from key stakeholder groups. Interviewees included eight AAFC managers, 13 provincial program representatives, 13 representatives of commodity groups, and three representatives from financial institutions. Interviewees were selected to include government officials familiar with program delivery and management at both AAFC and each of the provincial governments, as well as representatives from major commodity group associations and financial organizations.

- **Focus groups** were undertaken with a sample of producers from different commodity groups, in order to collect the perspectives of AgriStability and AgriInvest program participants. Focus group locations were selected to allow for a broad representation of regions, and included producers from the main production centres of four major commodity groups. Participants were recruited through a random sampling from lists of producers who derived at least 51% of their farm income from the identified commodity (supplied by the provincial administrations). Four focus groups were undertaken with 37 producers in total, which included:

    - Grains and oilseed producers in Manitoba (11 participants);
    - Beef producers in Alberta (10 participants);
    - Ontario horticultural producers (10 participants); and
    - Quebec hog producers (6 participants).

  In addition to producers, focus groups were undertaken with financial representatives from major banks (5 participants) and accountants who had clients in the agricultural sector and who were familiar with the programs (8 participants).

- **Case studies** were completed to illustrate specific examples of producers' experiences as participants in AgriStability and AgriInvest. A case study was undertaken with a producer from each of the five major commodity groups, in the main production region of each group. Case studies included:

    - A poultry producer in British Columbia;
    - A beef producer in Alberta;
    - A hog producer in Manitoba;
    - A grains and oil seeds producer in Manitoba; and
    - A potato producer in Prince Edward Island.

  Case studies included site visits (where possible), interviews and a review of program administrative and financial data for the participants. Participants were recruited from the commodity lists provided by the provincial administrations for the focus groups, with a further screening to choose only producers that had significant sales of the targeted commodity.

1.4 METHODOLOGICAL CONSIDERATIONS

There are several considerations or limitations to note when reading the evaluation:

- The evaluation sought to avoid duplication of work previously done. The methodology was designed to build on pre-existing research, surveys, reviews, economic analysis and consultations and to utilize the large volume of administrative and statistical data within AAFC. The additional analysis of the quantitative data included examining the income stabilization effect of BRM programs, among other elements.

  The new data collected for the evaluation is qualitative in nature, and included focus groups, interviews, and case studies. The qualitative information on producers from focus groups and case studies is not intended to be representative of the broader agricultural sector. Instead, it provides useful examples of how the programs have actually functioned for a sample of producers. The qualitative data also gathers the informed perspectives of various stakeholders (including AAFC and provincial managers, representatives of commodity groups, members of financial organizations, accountants) on the programs' design and results.

- Due to the nature of program administration and the timing of program payments, there were limited application and payment data for the 2010 and 2011 program years.

- It should also be noted that data from the early years of the programs (e.g., 2007) would reflect the after-effects of a particularly challenging period for the agricultural sector, which included bovine spongiform encephalopathy (BSE), drought, a decline in demand in the hog market in 2007 and 2008, and weak grain markets. The situation is now rapidly improving for much of the agricultural sector, especially for grains and oilseeds.

2.0 PROFILE OF THE PROGRAMS

2.1 BACKGROUND

Growing Forward is the current federal-provincial-territorial (FPT) agricultural policy framework for the 2008/09 to 2012/13 period. Under Growing Forward, governments agreed to work together to achieve three strategic outcomes:

- A competitive and innovative sector;
- A sector that contributes to society's priorities; and
- A sector that is proactive in managing risk.

The BRM suite is intended to support Growing Forward strategic outcomes by providing producers with effective tools to manage business risks that are largely beyond their control, thereby helping them to reduce income losses stemming from low commodity prices, or reduced production caused by natural disasters or market conditions.

Growing Forward includes four core BRM programs:

- **AgriStability** covers declines of more than 15% in a producer's average production margin from previous years.

- **AgriInvest** is a self-managed savings account into which both producers and governments deposit funds that can be used to cover small income declines or to make investments to help improve market income.

- **AgriInsurance** provides insurance against production losses for specified perils (e.g. weather, pests, and disease).

- **AgriRecovery** is a disaster-relief framework that provides a coordinated process for FPT governments to respond rapidly when disasters strike, assisting with extraordinary costs not covered by existing programs.

Other BRM programs outside the core suite include loan guarantees under the Canadian Agricultural Loans Act, the Advance Payment Program (APP) delivered under the authority of the Agricultural Marketing Programs Act and supply-management for a number of commodities (e.g. dairy, poultry and eggs).

Together, AgriInvest and AgriStability were designed to replace the Canadian Agricultural Income Stabilization (CAIS) program, which operated from 2003/04 to 2006/07 under the predecessor to Growing Forward, the Agricultural Policy Framework (APF).

CAIS was intended to stabilize farming income in response to both small and large declines in income. CAIS was based on the concept of a whole-farm production margin, and payments were calculated based on the difference between the current-year production margin and the average production margin for the recent historical period.

Stakeholders identified several concerns with CAIS throughout the life of the program:

- Payments were not sufficiently timely;
- The program was not predictable or bankable;
- Producers did not receive payments that were reflective of their loss when they experienced negative margins or as a result of the inventory valuation methodology; and
- CAIS proved ineffective in dealing with severe disasters resulting in significant ad-hoc assistance being required.

At the end of the APF, AgriStability was implemented in 2007 to replace CAIS and to address these concerns. (A list of major design changes from CAIS to AgriStability can be found in Annex A.) AgriInvest was also implemented at this time to complement AgriStability and address small financial losses to meet the needs of the sector. By providing producers with greater flexibility and responsibility in managing their savings accounts to mitigate business risks and income declines, it was expected that AgriInvest would enhance the predictability and timeliness of BRM programs.

As part of the GF2 consultations, stakeholders have expressed ongoing concerns regarding the lack of transparency in the calculations of program payments; as well as the predictability, timeliness and bankability of the program.

AgriStability and AgriInvest are governed by the provisions of section 4(1) of the *Farm Income Protection Act* (FIPA), which authorizes the Minister to establish programming with the provinces to stabilize net income.

2.2 DESIGN AND DELIVERY – AGRISTABILITY

AgriStability is a margin-based program that provides support when producers experience farm income losses. Payments are issued when an eligible producer's program margin falls below 85% of their reference margin.

A program margin is defined as a producer's allowable income minus allowable expenses in a given year, with adjustments for changes in receivables, payables and inventory. The reference margin is calculated from the producer's margins by averaging over the five preceding fiscal years after eliminating the highest and lowest values from the calculation (i.e., taking the "Olympic" average).

Support from AgriStability is calculated based on different levels of program margin decline:

- No program payments are made for program margin declines of 15% or less relative to the producer's reference margin (Tier 1).
- For declines of 15% to 30% (Tier 2), the producer is eligible to receive a payment equivalent to 70% of the loss.
- For declines of 30% to 100% (Tier 3), the producer is eligible to receive a payment equivalent to 80% of the portion of the loss falling within Tier 3.
- If the producer experiences a negative margin referred to as Tier 4 (i.e., allowable expenses plus value of inventory change exceed allowable income) in the program years, the producer is eligible for 60% of that portion of the loss.

The maximum AgriStability payment for a producer is the lesser of $3 million or 66.5% of the margin decline in Tiers 2 and 3 in the program year margin.

An AgriInvest/AgriStability Harmonized Form for each program year is available from Canada Revenue Agency (CRA) near the end of the calendar year. Farmers have until September to submit their form for the previous year to avoid late filing penalty (except in Ontario where the deadline is June). Eligible producers pay an annual fee to participate in the program, which is based on the value of a producer's protected reference margin.

Additional details on AgriStability's design and delivery can be found in Annex B.

Interim Payments and Targeted Advance Payments

An interim payment option allows eligible producers to access a portion of their AgriStability payments earlier than would otherwise be the case. Interim payments are made based on the participant's projected AgriStability payment, as calculated at the time of the interim. Interim payments are normally issued at a rate not greater than 50% of the total estimated AgriStability payment.

Targeted Advanced Payments (TAPs) are similar to interim payments, but are used only in circumstances of unusual events affecting specific groups of producers. If agreed to between the federal government and a province or territory, a TAP may be established for participants in a designated sector or region in cases where production or market disruption has a significant negative impact.

2.3 DESIGN AND DELIVERY – AGRIINVEST

AgriInvest is a self-managed savings account for producers, supported by government, which provides coverage for small income declines and support for investments to mitigate risks or improve market income. AgriInvest is intended to be a first-line support mechanism within the BRM program suite when producers face declines in Tier 1.

Producers deposit money into an AgriInvest account and receive matching government contributions. Producers can deposit up to 1.5% of their Allowable Net Sales (ANS)[1], which cannot exceed $1.5 million per participant (i.e., the maximum government contribution in any given year is $22,500 per producer). Accounts have maximum balance limits of 25% of a participant's ANS for the current and preceding two years. Producers can withdraw funds from their account at any time.

While initially held by the federal government, starting with the 2009 program year AgriInvest accounts have been held by financial institutions in all provinces except Quebec. Once deposits are made by producers, financial institutions notify AAFC, and matching contributions are credited to the producer account. In Quebec, the program is delivered by La Financière agricole du Québec.

Additional details on AgriInvest's design and delivery can be found in Annex B.

2.4 PROGRAM RESOURCES

As part of Growing Forward, government contributions and costs to administer the AgriStability and AgriInvest programs are cost-shared between the federal government and the provinces and Yukon territory on a 60:40 basis.

Table 1 presents the AAFC expenditures for AgriStability for the fiscal years of 2008/09 to 2010/11. AAFC costs totaled $1.3 billion, which included both Vote 1 costs of $91 million and Grants and Contribution costs of $1.2 billion. Vote 1 costs included AAFC's net expenditure to deliver, and to support the delivery of provincial delivery agents. The Grants and Contribution costs included AAFC's contribution to both program payments and administrative costs for provincial delivery agents.

[1] The ANS is the revenue from sales of agricultural commodities, plus eligible payments, less purchases of eligible commodities.

Table 1: AAFC AgriStability expenditures for 2008/09 to 2010/11 ($ millions)			
	2008/09	**2009/10**	**2010/11**
Vote 1 (Salary, Non-pay Operating (NPO) and Employee Benefit Plan (EBP))	42.3	28.8	20.0
G&Cs	340.5	524.7	371.5
Total	**382.8**	**553.5**	**391.5**

Source: AAFC

Table 2 presents AAFC expenditures for AgriInvest for 2007/08 to 2010/11. Vote 1 costs totaled $25 million, while Grants and Contributions totaled $698 million during the period.

The federal government implemented a one-time AgriInvest Kickstart Initiative, which provided seed funding to AgriInvest accounts totalling $560.2 million.

Table 2: AAFC AgriInvest expenditures for 2007/08 to 2010/11 ($ millions)				
	2007/08	**2008/09**	**2009/10**	**2010/11**
AgriInvest				
Vote 1 (Salary, NPO, EBP)	1.5	4.5	6.8	12.2
Statutory G&Cs	167.3	193.4	140.3	196.6
Total	168.8	197.9	147.1	208.8
AgriInvest Kickstart				
Operating	4.5	n/a	n/a	n/a
G&C	580.1	(9.1)*	(12.5) *	(2.8)*
Total	584.6	(9.1) *	(12.5) *	(2.8)*
Total for AgriInvest and AgriInvest Kickstart	**753.4**	**188.8**	**134.6**	**206.0**

Source: AAFC
* negative amounts for AgriInvest Kickstart reflect overpayment recoveries and/or write downs of funds previously committed.

As both AgriStability and AgriInvest are demand-driven programs, expenditures cannot be precisely forecasted and fluctuate from year to year. As a result, the approval of BRM program funding includes a provision to allow an additional 10% of the program target expenditure to be spent without seeking further authority. This 10% flexibility is referred to as the “funding sleeve”. Should the anticipated or actual expenditure exceed the target by more than the “funding sleeve”, the Minister is required to seek further authorities to negotiate program adjustments to subsequent years. AAFC is required to report to Cabinet on the BRM anticipated and actual spending against the funding target every year.

Table 3 shows the number of AAFC staff involved in delivering each program, in full time equivalents (FTEs). As shown, there was a significant decrease in AAFC AgriStability staff numbers between 2009/10 and 2010/11, which reflected the period of transition of AgriStability delivery to the provinces for British Columbia and Saskatchewan.

Table 3: AgriStability and AgriInvest, AAFC full time equivalents (FTEs), for where Canada delivers, 2008/09 to 2010/11

	AgriStability FTEs	AgriInvest FTEs
2008/09	590.0	43.3
2009/10	466.4	150.2
2010/11	268.7	152.4

Source: AAFC

2.5 GOVERNANCE

The governance structure for all BRM programs includes the FPT BRM Policy Working Group and the FPT Administrators Working Group, both co-chaired by AAFC and a provincial representative. There is also the National Program Advisory Committee (NPAC), which includes FPT and industry representatives. These three groups examine BRM policy and program issues and, as requested, develop options to be brought forward to senior management, including FPT Assistant Deputy Ministers (ADMs), Deputy Ministers and Ministers. NPAC provides advice through FPT ADMs. The FPT Working Groups are responsible for program administrative and policy issues.

FFPB provides overall program management and coordination, and ensures due diligence. Within FFPB, FIPD is responsible for preparing national guidelines, and for developing program applications, handbooks and other materials. FIPD reports on program results, service standards and financial information, and monitors program risks where Canada delivers (Newfoundland, New Brunswick, Nova Scotia and Manitoba).

AgriStability was first delivered by provincial governments in Alberta, Ontario, Quebec and Prince Edward Island and by AAFC (FIPD) in all other provinces. Saskatchewan and British Columbia assumed responsibility for administering AgriStability to their producers beginning with the 2009 program year. The Program's devolution began at the request of the provinces who wished to deliver AgriStability in conjunction with AgriInsurance to obtain operational efficiencies.

Responsibilities of federal and provincial/territorial administrators in their respective areas of delivery include:

- Making AgriStability applications available to producers;

- Processing AgriStability applications and issuing Enrolment Notices, Confirmation of Benefits Notices and tax slips;
- Making and recording all payments to eligible recipients;
- Responding to producer enquiries;
- Administering application appeals;
- Recovering overpayments;
- Financial monitoring and reporting on AgriStability progress / results;
- Ensuring effective program delivery, resources management and due diligence; and
- Performing producer audits.

For the AgriInvest program, overall management and coordination is undertaken by FFPB for all provinces except Quebec. Program administration is undertaken within FFPB by FIPD, which is responsible for the following AgriInvest activities:

- Processing AgriInvest applications and issuing deposit notices and tax slips;
- Negotiating financial institution agreements;
- Maintaining the interface with participating financial institutions to perform the matching of producer deposits;
- Recovering overpayments;
- Responding to producer enquiries;
- Tracking financial budgets and commitments;
- Performing producer audits; and
- Administering application appeals.

In Quebec, La Financière agricole du Québec administers the program and manages producer accounts directly (i.e., accounts are not held at financial institutions as is the case in the rest of Canada).

3.0 EVALUATION FINDINGS

3.1 RELEVANCE

3.1.1 Government support for the agricultural sector has been important in helping producers manage business risk and income variability.

This section discusses the continued need for BRM programs given the risks and income variability faced by producers, and the impact of this income variability on producer production levels and stability in the agricultural sector.

Risks in Agriculture

The agriculture sector faces a wide range of risks from a variety of sources[2]. Production risks include unfavourable weather conditions, such as drought, unseasonably cold or hot weather, and heavy moisture. All of these can prevent planting, negatively impact farm yields and the quality of crops, and delay harvest. Production can also be affected by crop pests and diseases.

Market risks are related to both inputs and outputs. Farmers face fluctuating fuel, fertilizer and feed costs. Prices for crops are determined in large part by global commodity markets and are outside producers' control. The export-orientation of much of the sector also places farmers at risk from the variability of transportation costs and exchange rates, as well as from tariff and non-tariff barriers. Competition from international markets and changing consumer preferences are further risks.

Other risks for farmers include the business risks related to the management of revenue and cash flow to pay bills, labour employment, and interest rates. Farmers also face the risks associated with changing government policies and programs, tax rates, and the impacts of international trade agreements.

In 2010, producers identified market risks as having the most significant financial impact on their farm business[3].

The Alberta beef case study producer noted that the main risks to his farm income were livestock prices, input costs, and weather.

The producer said: "The calf price is so much lower than the input costs compared to 30 years ago. Back then, we got $1.25 per pound for calves and were paying 25 cents per gallon for fuel. Now, the calf price is the same but the fuel is $5 a gallon."

[2] OECD, 2011, *Thematic Review on Risk Management: Canada*, p. 9.
[3] AAFC Business Risk Management Survey 2010.

Interviewed stakeholders believe that the types of risks facing producers have not changed since AgriStability and AgriInvest were first implemented in 2007. Some noted that the severity of certain risks could increase in the future, due to the impacts of climate change on weather and pests, increased globalization resulting in competition from emerging economies, and other factors.

Income Variability

As a result of this wide range of risks, farm businesses can face significant income variability. Evidence shows that some farm types have experienced more income variation than others. As shown in Table 4, the variability of producer margins for cattle farms and for hog farms was much higher than for farms in the grains and oilseeds, and fruits and vegetables sectors.

Table 4: Average producer margins and standard deviations, across commodities, 2006 ($/unit of production)

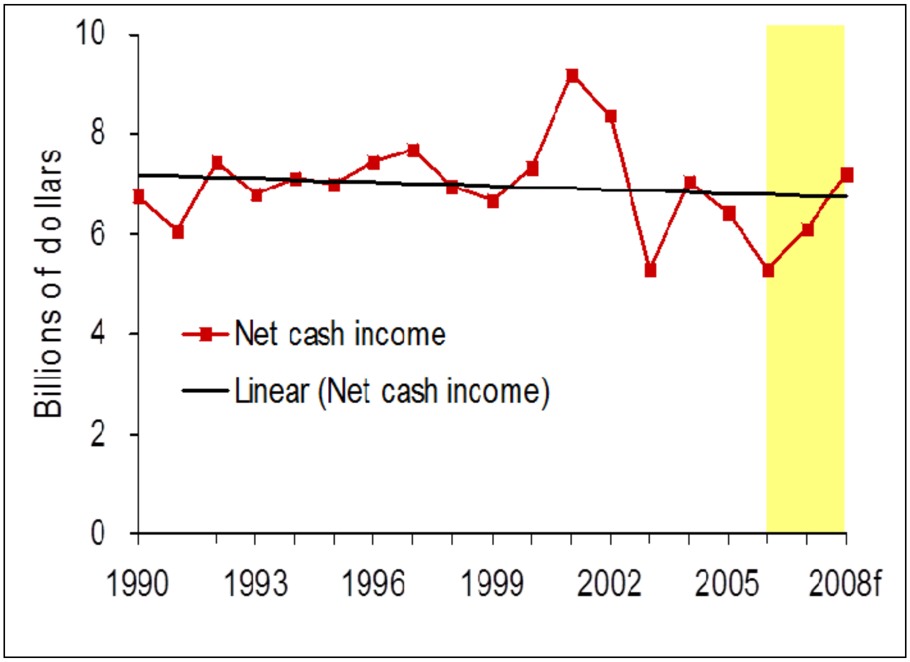
Commodity	Average	Standard deviation
Cattle	44,794	262,994
Supply Managed	205,505	347,787
Fruits & Vegetable	164,236	472,429
Hogs	236,414	1,096,371
Grains & Oilseeds	87,827	193,156
Other	151,062	993,236

Source: AAFC

On an aggregate level, the agriculture sector's net cash income demonstrated increasing variability in the period examined in a 2009 AAFC report[4]. Figure 1 shows the aggregate net cash income from 1990 to 2008. The sharp decline in income between 2002 and 2003 was mainly due to drought in the Prairies and the impacts of BSE. Rising grain and oilseed prices in 2007 and 2008 led to an increase in net cash income for those years.

[4] AAFC Farm Data Analysis Unit, 2009, *Financial Situation and Performance of Canadian Farms*, 2009.

Figure 1: Aggregate Net Cash Income, Canada, 1990 to 2008 (2006$)



Source: Statistics Canada, Value Added Account.
Note: 1990 to 2006 are in constant 2006$.
"f" denotes that 2007 and 2008 numbers are based on AAFC forecasted estimates.

Some regions in Canada had experienced much more income variation than others. The AAFC report noted large variability in year-over-year real net income in the Atlantic provinces, with less variability in Western Canada and relatively stable income in Ontario and Quebec[5].

The diversity of the agricultural sector means that the income variability in one sub-sector can offset gains and losses in another. Partly this is because agricultural sub-sectors are subject to different stresses and because price advance in one sub-sector can affect net incomes in another. For example, increased grain prices have a positive impact on revenues for grains and oilseeds producers but a negative impact for livestock producers who will need to pay more for feed.

Impact of Income Variability on Farm Businesses

The literature demonstrates that income variability is an important challenge for the agricultural sector due to its potential impact on producers' well-being, and production and investment decisions.

[5] The differences are likely due to the higher share of grains and oilseeds in Western Canada and the preponderance of supply-managed operations in Ontario and Quebec.

The negative effects of risk and uncertainty explain why insurance markets develop in the first place—many people willingly pay regular premiums to protect themselves from the small risk of incurring large losses, fully realizing that the event that triggers payment from the latter may never occur[6]. A risk-averse individual's well-being is expected to be higher when he or she has opportunities to lower the premiums (in effect sharing his or her risk with others). Conversely, his or her well-being is lower when no such opportunities exist[7].

The literature has argued that risk-averse businesses will also generally reduce investments during business downturns and then accelerate spending on capital during the upturn. Economic theory and practice has shown this is sub-optimal for business in general, lowering long-term production and profitability. In other words, production levels will normally decrease as risk increases[8]. In some cases, highly risk-averse producers may actually increase supply to avoid catastrophic outcomes[9], but stock-piling as a form of self-insurance can be costly and can have negative consequences for a producer if prices fall resulting in a lower value of inventory.

Additionally, the OECD points out that without private instruments for managing risks (both self-insurance and third-party insurance) and government intervention, risk and uncertainty may result in lower than profit-maximising levels of production[10]. In other words, market failure may lead to outputs below a socially optimal level. The importance of private sector instruments cannot be understated. They provide producers with a number of customized options for managing business risks. For example, single price forward contracts to average price contracts provide farmers with a range of price protection depending upon when they choose to sell their products. Together, private and public instruments provide producers with a full range of business risk management tools to address market failures.

Rationale for Whole Farm Approach

BRM programs have been evolving since the 1940's. In the early period, programming focussed on commodity specific price support. If the price of a commodity fell below a predetermined support price, payments were made to compensate for the decline regardless of the potential positive effects on income of increased production of the commodity or prices in other commodities. By the 1990's, Governments were experiencing significant challenges with this approach. It was costly, not administratively feasible for all commodities, distorted producer's production decisions and resulted in

[6] Skees, J. R., 1999, Agricultural Risk Management or Income Enhancement? *REGULATION-WASHINGTON-, 22,* p.36.
[7] Ahsan, S.M., Ali, A.A.G., & Kurian, N.J., 1982, Toward a Theory of Agricultural Insurance. *American Journal of Agricultural Economics*, *64*(3), doi:10.2307/1240644.
[8] Moschini, G., & Hennessy, D.A., 2001, Uncertainty, risk aversion, and risk management for agricultural producers. *Handbook of agricultural economics* (Vol.1 pp.88-153). Elsevier Science B.V. p. 114.
[9] Subervie, J., 2007, The Variable Response of Agricultural Supply to World Price Instability in Developing Countries. *Journal of Agricultural Economics*, *0*, 071003055534005-??? doi:10.1111/j.1477-9552.2007.00136.x. p. 75.
[10] OECD (Ed.), 2000, *Income risk management in agriculture*. OECD Publishing. Retrieved from http://www.oecd.org/dataoecd/46/54/42750750.pdf. p. 12.

payments being capitalized into assets. In addition, commodity specific payments were extremely vulnerable to countervail action.

In the 1990's, the direction shifted toward more whole farm approaches involving savings accounts and margin based programs. These programs focused on assisting producers in managing risk at the farm level rather than on a commodity by commodity basis. The whole farm approach of these programs neutralized the impacts on producers' production decisions, allowed for the participation of all commodities and reduced the risk of countervail.

While there is a strong policy rationale for operating subsidized programs on a whole farm basis, producers managing diversified operations often argue that they are not treated equitably under the AgriStability program due to the diversification in their operations which limits margin volatility and therefore program payments. They further suggest that AgriStability provides a competitive advantage to their monoculture neighbours when competing for land resources, by ensuring viability during downturns and allowing for full realization of profits during the peak price periods. Other programs, like AgriInvest, while still whole farm, are not as contentious as the margin based programming that provides compensation based on income volatility.

Rationale for Government Support for BRM Programs

A key rationale for government BRM programs is that the tools available to producers through the private sector (again, self-insurance and third-party opportunities) are not sufficient on their own to help producers to manage business risks and income variability. Private tools and approaches for business risk mitigation available to producers include:

- Producers can seek out opportunities for business growth, innovation and business efficiency, as well as incorporation of the farm business.

- Producers can seek to mitigate their risk through diversification in terms of product. A challenge with diversification, especially for smaller farms, is that farming is becoming more capital intensive, which, combined with the economies of scale in modern farming, makes diversification into more than one commodity increasingly expensive.

- Risks can also be mitigated through purchasing available forms of private insurance (such as hail or fire insurance). The range of these private insurance products in agriculture is limited as a result of well-documented market failures.

- Producers can manage risks through tax planning, market practices like hedging, futures or forward contracts, and marketing contacts. While many farmers still use cash accounting to help manage cash flow and taxes, increasing numbers are shifting to accrual accounting, which provides a more accurate picture of the true financial status of the business. Finally, farmers can form cooperatives to negotiate better prices for their inputs and their farm outputs.

- Cash flow can be managed through savings, lines of credits and loans.

- The value of farm land has been increasing in many parts of Canada. This asset can be used as collateral against credit lines from private lenders.[11]

- Some producers indicated that they used off-farm employment income, but this is seen as a way to assist with household cash flow rather than as a business strategy. In many cases, this off-farm income reflects the income of a second adult in the household, which is no different than how many Canadian households manage their personal finances.

- Some producers can access government programs that directly or indirectly mitigate risks in the long and short-term. Annex C provides a list of federal and provincial BRM programs in Canada. It should be noted that there is also a wide range of non-BRM programs offered by governments to producers.

The province of Alberta has recently introduced Livestock Price Insurance for cattle and hogs as a simplified means to protect against unexpected price declines within the production cycle (with no cost sharing of premiums by the Alberta government). Livestock price insurance is expected to offer timely and predictable payments in the event of an unexpected price decline but is not intended to offer a profit guarantee. Currently, the program is in its infancy and participation is low.

Producers in focus groups noted that there was a need for government programs to complement other available business risk management tools. Stakeholders noted that the private sector's role in providing business risk management tools will naturally be dictated by considerations of profitability, which will lead to gaps in assistance. As a result, there is a need for government to play a complementary role.

In conclusion, government support has been important in helping producers to manage the considerable risk and income variability they face. Government BRM tools have complemented other available producer-led and private sector options to provide stability in the sector in order to maintain production levels.

[11] Statistics Canada (2012a) *Balance Sheet of the Agricultural Sector*, Agriculture Economic Statistics, January Vol. 10, No. 1, 21-016-X.

3.1.2 AgriStability and AgriInvest are aligned with the historic federal role of supporting the agricultural sector, and with the Growing Forward policy framework and AAFC strategic outcomes.

The evaluation assessed the alignment of the programs with federal roles, responsibilities and priorities, and with AAFC strategic outcomes.

Alignment with Federal Roles and Responsibilities

There is a long history of federal involvement in assisting with business risk management. Federal support has evolved since Confederation, when agricultural policy was closely linked with immigration policy to ensure a sufficient labour pool for Canada's growing agricultural sector. More recently, federal support to agriculture has concentrated on support for farm families and affording some degree of protection against international corporate power and competitive threats. Over the last two decades, agricultural policy has increasingly aimed at fostering the competitiveness of the sector.

At the same time, Canada's agricultural policy instruments and programs have also evolved. From the 1940's to the 1980's, programs tended to focus on commodity-specific supports. During the 1980's, the Canadian government responded to significant farm price and revenue instability through the active use of emergency ad hoc payments to help farmers manage deficits. Starting in the 1990's, programming shifted from "safety net" programs that were commodity-specific, to programs that emphasized business risk management and a "whole-farm" approach, which are consistent with trade agreements that limit subsidies.

Federal policies directed specifically at farm income stabilization in Canada date back to the introduction of the *Agriculture Stabilization Act in 1958*. Since that time, there has always been at least one national program aimed at stabilizing farm income.

Stakeholders widely believe that while producers have the ultimate responsibility for managing their business risks, the federal government also has important roles and responsibilities. These include:

- Assisting producers with large and unpredictable losses;
- Supporting a level playing field for producers across the country; and
- Helping to place Canada's sector on a level playing field with competitor countries that provide government support to their producers.

It was also recognized that government BRM programs are designed to treat farmers equitably regardless of region, size or farm type.

Alignment with the Growing Forward Policy Framework and AAFC Strategic Outcomes

AAFC has signalled the importance of business risk management and income stabilization within the Growing Forward policy framework. The BRM programs contribute to Growing Forward's strategic outcome of "a sector that is proactive in managing risk". Key policy outcomes under Growing Forward include greater stability of producers' incomes, and BRM programs that are "timely, responsive and predictable"[12].

AgriStability and AgriInvest are also aligned with departmental strategic outcomes in AAFC's Program Activity Architecture (PAA), though this alignment has changed since the programs were first introduced. The current (2009/10) PAA links BRM programs to the strategic outcome of "a competitive agriculture, agri-food and agri-based products sector that proactively manages risk". Previously, AgriStability and AgriInvest were linked to AAFC's strategic outcome of "security of the food system" in the department's 2006/07 PAA.

The successor to Growing Forward is currently being developed by AAFC and provincial/territorial governments. While its outcomes have yet to be finalized, the Saint Andrews Statement, an early statement that laid out the essential elements that Ministers will look for in the next policy framework, noted the continued importance of effective business risk management in supporting the adaptability and sustainability of the agricultural sector[13].

The programs are aligned with the department's legislated mandate. AgriStability and AgriInvest are statutory programs governed by the provisions of section 4(1) of FIPA. Section 4(1) authorizes the Minister to enter into agreement with one or more provinces for the establishment of programming for, among other purposes, income stabilization.

Some of the wording in FIPA is, however, outdated. FIPA states that BRM programs should encourage the long-term social and economic sustainability of farm families and communities. While support for rural communities and farm families may be a positive unintended impact of the programs, it is not a stated program objective. Furthermore, FIPA's wording makes reference to previous BRM programs, such as the Net Income Stabilization Account (NISA). When FIPA is next reviewed the wording should be updated to reflect the current BRM suite and its objectives.

In conclusion, AgriStability and AgriInvest are aligned with historic federal roles, the Growing Forward policy framework, and AAFC strategic outcomes.

[12] AAFC, *Growing Forward: A Federal – Provincial – Territorial Framework Agreement on Agriculture, Agri-Food and Agri-Based Products Policy*, p.15.
[13] AAFC, 2011, *Saint Andrews Statement*.

3.1.3 BRM programs are designed to work in a complementary manner.

The evaluation examined how the programs of the BRM suite interact, as well as the potential for duplication of payments.

Complementarity of BRM Programs

BRM programs are designed to work in complementary ways, reflecting the different triggers and timing of program funding. Specifically:

- AgriStability provides payments for whole farm coverage based on reference margin calculations.

- AgriInvest is a savings account into which both producers and governments deposit funds that can be used to cover small income declines or to make investments to help improve market income.

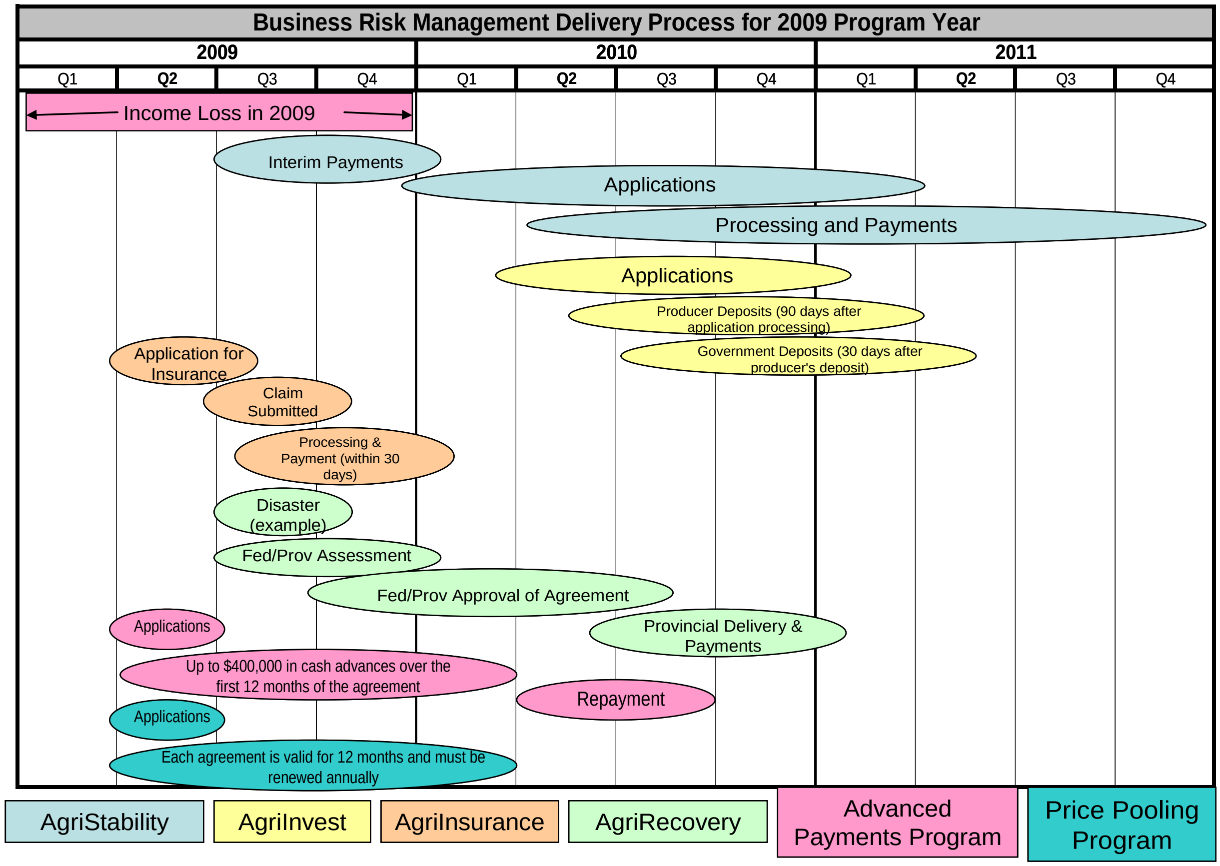
- AgriInsurance provides insurance against production losses for specified perils (e.g., weather, pests, and disease).

- AgriRecovery is a disaster-relief framework that provides a coordinated process for FPT governments to respond rapidly when disasters strike, filling gaps not covered by existing programs.

- APP provides loans to assist with short-term credit and marketing issues.

Figure 2 illustrates the delivery process for the BRM programs.

Figure 2: BRM Program Mapping



Duplication of Payments

In addition, the BRM program suite is designed to prevent forms of payment "stacking", where more than one payment is received for the same loss:

- AgriInsurance premiums and indemnities are included in AgriStability payment calculations.
- AgriStability and AgriInsurance coverage is included in AgriRecovery calculations.
- AgriRecovery payments are included in AgriStability calculations (where there is some overlap in purpose and where agreed to by federal and provincial governments).

In conclusion, BRM Programs are designed to work in a complementary manner.

3.1.4 AgriStability and AgriInvest cover all levels of risk and there is overlap within the BRM suite of programs.

This section discusses the levels of risk covered by AgriStability and AgriInvest and the degree of overlap within the BRM suite of programs.

Risk Coverage

Interviews, consultations undertaken for the development of the successor to Growing Forward, and a recent OECD review of Canada's BRM programs emphasized that government should not cover all levels of business risk for producers. Most importantly, government should not cover the risk associated with normal, day-to-day farm management, (i.e., risks that occur relatively frequently but which should lie within the scope of any business to manage). Several industry stakeholders expressed the opinion that governments should not cover 100% of business risk. Most agreed that this created a disincentive for effective business risk management by producers. It was also seen as hindering the development and adoption of private risk management tools. Some producers questioned whether covering up to 85% through AgriStability may be considered overcompensation.

> As part of the focus groups, some producers expressed the opinion that AgriStability enables them to take on more risk. For example, grains and oilseeds producers can diversify into new crops (even though new crops pose greater production risks), knowing they have the AgriStability program to assist them in years when crops do not produce a return. Conversely, other producers noted that AgriStability can also discourage diversification given that the level of coverage negates the need to adopt other producer-led and private sector risk management strategies.

AgriStability and AgriInvest are intended, together, to assist producers who suffer any degree of income loss, and cover 100% of a producer's reference margin with varying levels of compensation based on the severity of loss. Some interviewed stakeholders stated that the Tier 1 of income decline (i.e., a decline of up to 15% of the program margin relative to the reference margin) that is linked to AgriInvest would constitute a level of risk that should be covered by producers alone. It was also suggested that the current level of income decline that triggers an AgriStability payment (i.e., when the program margin falls below 85% of the reference margin) also covers some of the level of risk that should be managed by producers.

These concerns were echoed by the OECD in its review of agricultural BRM programs in Canada. The review stated that "the Canadian set of policies does not leave a clear layer of "normal" risk out of the government responsibility and, therefore, it reduces the responsibility of farmers for the management of normal farming risk"[14].

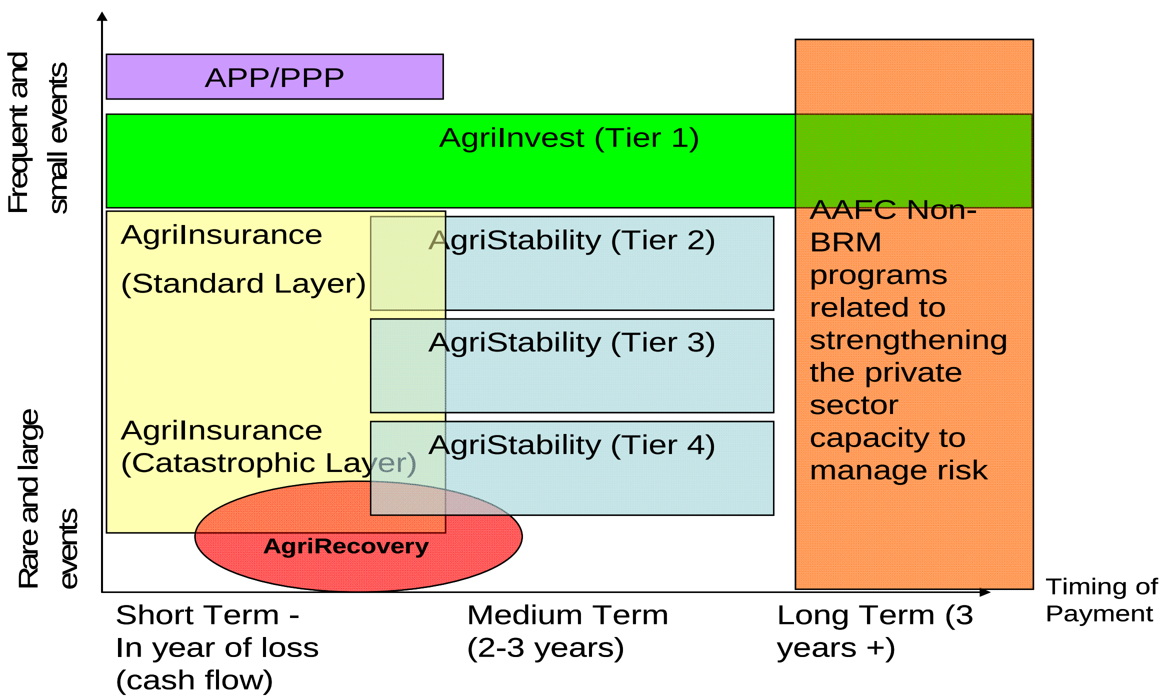
Overlap of Risk Layers

In addition to covering all layers of risk, the programs of the BRM suite overlap risk layers:

- AgrInvest contributes to a portion of the Tier 1 or top 15% of program margin loss to assist producers to handle small risks.
- AgriStability is designed to help producers manage the middle range to catastrophic risk layers. These are the same risk layers covered by AgriInsurance. It should be noted, however, that some commodities (such as livestock and some horticultural producers) do not have an insurance plan under AgriInsurance.
- AgriStability, AgriRecovery, and AgriInsurance are all covering the catastrophic risk layer (Tier 3).

The BRM programs' interactions are illustrated in Figure 3 below.

Figure 3: Overlap in risk coverage of BRM programs



[14] Organisation for Economic Co-operation and Development, 2011, *Thematic Review on Risk Management: Canada*, p. 50.

Overlap is a result of the BRM programs' different payment triggers, which include declines in program margins (AgriStability), reductions in yields (AgriInsurance), and disaster events (AgriRecovery). As argued in the OECD's review of Canada's BRM programs, the overlap between the BRM programs results in a program suite that is overcrowded[15].

Complexity of Payment Calculations

The calculation of payments under the AgriStability program is extremely complex. The three tiers that make up AgriStability coverage (Tier 2, Tier 3 and Tier 4) each provide different levels of coverage to the producer based on the size of the income decline.
Tier 2 provides 70% coverage for declines of 15% to 30% of their program margins;
Tier 3 provides 80% coverage for declines of 30% to 100%; and
Tier 4 provides 60% coverage for declines where a producer experiences a negative margin.

Adding to this complexity are the adjustments that have to be made to the calculation of producers' income margins for structural and inventory changes throughout the year (e.g. change in ownership, size of farm, increase/decrease of stocks). The calculation variables also differ by province and territory based on regional prices. Through focus groups and interviews, producers have raised concerns about the lack of transparency in how payments are calculated.

Flexibility in Managing Small Financial Risks

3.1.5 There is no direct relationship in the AgriInvest program design between monies withdrawn and income decline (Tier 1).

AgriInvest was designed to provide producers with the flexibility to use funds to protect their margins from small declines, or to provide funds for investment to reduce risks or improve profitability. Program foundational documents link AgriInvest to covering program margin declines of up to 15% relative to reference margins (Tier 1). Producers can withdraw the funds at any time for business risk management or for other reasons. Unlike the other core programs of the BRM suite, there are no triggers for payment / withdrawal.

[15] Organisation for Economic Co-operation and Development, 2011, *Thematic Review on Risk Management: Canada*.

There are no comprehensive data being collected on how AgriInvest funds are being used. There are some related data available from the BRM Survey (2010). Respondents who were AgriInvest participants who had withdrawn funds from their AgriInvest accounts were asked if they had used their AgriInvest money for specific purposes. The vast majority (90%) indicated that they had used the money to address income declines. About two-thirds (67%) indicated they used the money for other purposes, while 30% indicated they had used the funds for on-farm investments such as land, equipment or buildings. These findings were reflected in the producer focus groups, where some producers indicated that they were withdrawing AgriInvest funds to cover income declines, while others indicated that they were using the funds to address cash flow issues or to make small investments such as in equipment. While producers appreciated the program, they sometimes emphasized that the program amounts were relatively small.

The Alberta beef case study producer stated that AgriInvest "just fills in the cracks a little bit. It was nice, but it was not a significant amount of money to make a great difference." The funds he withdrew from AgriInvest were used to supplement the farm's cash flow.

Overall, producer focus group participants found AgriInvest to be easy to understand. They noted that the lack of triggers allows producers to have complete freedom in their use of the funds to address income declines, to make farm investments or to take steps to further reduce risks.

In 2008, 40% of AgriInvest participants triggering AgriStability payments did not make withdrawals from their AgriInvest account[16]. This suggests that the program is not consistently being used for covering income declines within Tier 1. There is no direct relationship in the AgriInvest program design between monies withdrawn and income decline. Monies can be used to address a variety of producer needs, and there are no data on how monies are contributing to producers' business risk management.

In conclusion, AgriStability and AgriInvest operate within a crowded program environment. There is overlap within the BRM suite of programs, and there is no clear risk layer which producers are expected to manage without government support. There is an opportunity for AAFC to clarify government risk coverage, streamline the various Tiers and more appropriately share the mitigation of farm business risk between producers and taxpayers.

Recommendation #1:

AAFC should work with the provinces and territories to:

- Define the level and nature of risks that governments should cover for the agricultural sector through the BRM suite of programs; refocus the AgriStability and AgriInvest programs to target these risks; and streamline the various Tiers to reduce programming complexity.

[16] AAFC, 2011, Business Risk Management Programs – January 2011 Performance Indicators Preliminary Detailed Report, p. 61.

Management Response and Action Plan:

Agree. Work is underway with provinces/territories and with industry representatives to examine the risks that the agricultural industry faces and the roles that governments, private sector and individual producers could play in mitigating the impacts of risk. The Department is also informing this work through industry engagement including NPAC, national producer organizations as well as two rounds of broad industry consultations. Sessions have focused on the appropriate roles of governments, industry and producers in managing risk, as well as the intended objectives and performance of current programs in managing risk. As part of this work, government officials are examining possible adjustments to AgriStability and AgriInvest and other BRM programs that could form part of the new FPT Multilateral Framework Agreement (MFA). The level and nature of risks that governments would cover and any adjustments to AgriStability and/or AgriInvest will be reflected in the MFA.

(Target: December 31, 2012; Responsibility: ADM SPB and ADM FFPB)

3.2 PERFORMANCE – EFFECTIVENESS

3.2.1 AgriStability and AgriInvest are generally performing well in terms of coverage and participation.

The existing Performance Measurement Strategy for the BRM suite (which includes AgriStability, AgriInvest, AgriInsurance and AgriRecovery) measures success based on participation, coverage levels and the downward variability in income. Discussions regarding Growing Forward 2 have positioned BRM programs under the outcome of adaptability and sustainability (under the new Multilateral Framework Agreement for Agriculture). Program officials advise that this should lead to the development of indicators, particularly dealing with adaptability, that will be more meaningful in assessing the programs' longer term impacts on the competitiveness of the sector.

AgriStability Participation

Although not a very large percentage of Canadian producers, AgriStability participation represents a significant proportion of total Canadian farm revenues. Specifically:

- There were 95,086 producers participating in AgriStability in 2008, which was 51% of all producers in Canada[17]. (The target is 55%.)

[17] AAFC, 2011, Business Risk Management Programs – January 2011 Performance Indicators Preliminary Detailed Report, p. 12. Includes only participants with revenue greater than $10,000.

- AgriStability participants represented 68% of the total market revenue for Canadian farms in 2008. (The target is 75%.)

- As shown in Table 5, there was considerable variance between different farm types. Producer participation rates in 2008 were higher than average for the hog (85%), grains and oilseeds (65%) and fruit, vegetable and potato sectors (52%), and lower than average for cattle (48%), supply managed (39%) and other (27%) producers.

Table 5: AgriStability producer participation rates, by farm type, 2008

Farm Type	Estimated Producer Participation Rates*
Hogs	85%
Grains & Oilseeds	65%
Fruit, Vegetable and Potato	52%
Cattle	48%
Supply Managed**	39%
Other	27%
All	51%

Source: AAFC, 2011, Business Risk Management Programs – January 2011 Performance Indicators Preliminary Detailed Report, p.13.
* Participants with gross operating revenues of less than $10,000 have been excluded to allow for comparisons against Statistics Canada taxfiler information (ESAS)

**Supply-managed commodities are eligible once a producer's margin decline is greater than 30% (Tier 3).

In the 2010 BRM Survey, producers not participating in AgriStability most commonly selected the following reasons:

- the complexity of the application process;

- the producer did not expect a payment; and

- the cost to participate.

Program stakeholders also noted that many producers choose to participate in AgriStability based on their perception of the likelihood of triggering a payment.

AgriInvest Participation

The majority of farmers are participating in AgriInvest, and participants constitute a significant proportion of total allowable market sales in Canada. Specifically:

- About three-quarters (73%) of all producers participated in AgriInvest in 2008[18]. (The target is 65%.)

- Participants represented 71% of total allowable market sales for all farm taxfilers in 2008. (The target is 70%.)

As with AgriStability, AgriInvest participation rates varied significantly by farm type. As shown in Table 6, nearly all grains and oilseed producers participated in the program in 2008 (approximately 100%). Hog farmers (75%) had the next highest rate of participation, followed by fruit, vegetable and potato (67%), cattle (66%), supply managed (56%), and other (32%) farm types.

Table 6: AgriInvest participation rates, by farm type, 2008

Farm Type	Estimated Producer Participation Rates*
Grains & Oilseeds	100%
Hogs	75%
Fruit, Vegetable and Potato	67%
Cattle	66%
Supply Managed	56%
Other	32%
All	73%

Source: AAFC, 2011, Business Risk Management Programs – January 2011 Performance Indicators Preliminary Detailed Report, p.47.
* Participants with gross operating revenues of less than $10,000 have been excluded to allow for comparisons against Statistics Canada taxfiler information (ESAS)

The high participation of the grains and oilseeds sector in AgriInvest may be related to this group's previous participation in the NISA program, which existed from 1990 to 2002. NISA, which was replaced by CAIS, was heavily used by the grains and oilseeds sector as they were facing depressed prices.

[18] AAFC, 2011, Business Risk Management Programs – January 2011 Performance Indicators Preliminary Detailed Report, p. 47. Includes only participants with revenue greater than $10,000.

In the 2010 BRM Survey, producers who had never participated in AgriInvest were asked why they had not participated. Producers most commonly stated that they had not participated because they had to make a deposit to receive a matching government contribution or because they did not have sufficient money for a deposit. In interviews, some stakeholders similarly identified financial difficulties as a barrier to participation for some producers. It was also suggested that some producers may decide not to participate in AgriInvest if they perceive the amount they are eligible to receive in a matching contribution to be low. It is possible that program awareness may also be a factor in the rate of non-participation.

In conclusion, both programs are performing well in terms of the level of coverage and participation.

3.2.2 Given the current design of the AgriStability program, the trend in increasing farm income could lead to increasing financial obligations for FPT governments over time.

Value of AgriStability Program Payments

AgriStability payments provided producers with over $3.3 billion in support during the program years of 2007 to 2010[19]. As shown in Table 7, the total value of AgriStability payments rose for each of the program years, for a total increase of 41% over the period.

Table 7: AgriStability program payments, 2007 to 2010

Program Year	Total Value of Payments to Producers ($ millions)
2007	703
2008	749
2009	892
2010	992 (estimated)
Total	3,336

Source: AAFC Administrative data
Note: As of January 18, 2012

Data from Statistics Canada have demonstrated that overall Canadian farm incomes increased in three of the four most recent years examined (2007, 2008, 2010)[20]. During the period, total farm cash income increased from $9.0 billion in 2007 to $11.5 billion in 2010, an increase of 28%. Farm equity has increased every year since 1987, and rose

[19] 2010 applications were still being processed at the time of this evaluation.
[20] Statistics Canada, 2012, Farm Business Cash Flows. Catalogue no. 21-018-X, p.5.

16% between 2007 and 2010, from $252 billion to $291 billion. While payment levels are expected to ease in 2011 and 2012, increasing farm revenues are building a liability through higher reference margins. This suggests, under the current program parameters, rising producer reference levels, overall, would likely result in further increases in the total cost of AgriStability payments, should a significant number of producers experience a loss.

In conclusion, the total value of AgriStability payments per year has grown in recent years, and may continue to grow in the future given recent increases in farm income. The department, working with the provinces and territories should take action to ensure that the program remains financially sustainable over time.

Recommendation #2:

The Strategic Policy Branch should:

- Examine fully the potential impacts of forecasted economic trends on the long-term affordability of the AgriStability program, paying particular attention to scenarios in which continued high prices followed by small income declines (shocks), trigger large payments to producers.

Management Response and Action Plan:

Agree. Analysis was undertaken to understand potential program liabilities of AgriStability in the event of a significant decrease in crop revenues. This analysis was reported to the FPT BRM Policy Working Group March 1, 2012.

The analysis demonstrates that, due to rising revenues, reference margins are increasing and a drop in commodity prices could result in significant AgriStability payments. The analysis provided a scenario whereby the Grains & Oilseed sector would face a 25% drop in revenue for the 2015 crop year, resulting in AgriStability payments more than doubling. It also concluded that, in some instances, producers could still be generating revenue while being eligible for program payments because, although they are still making a profit, their margin would be lower than their historical.

This information has been shared with Federal/Provincial/Territorial Ministers such that it can be considered in the context of the role of AgriStability and the fiscal situation faced by governments during discussions on the next agricultural policy framework (Growing Forward 2).

On an ongoing basis, SPB will continue to forecast economic trends and their impact on the AgriStability expenditures on a semi-annual basis. The results will be presented to the ADM SPB. In addition, FPT BRM Forecasting Methodology Working Group is working on a medium term (5 years) farm level income and AgriStability expenditure forecast. Overview of the medium term forecast will be provided to the FPT BRM Policy Working Group in September 2012.

(Target: September 30, 2012; Responsibility: DG, RAD)

3.2.3 There is an inherent trade-off in the AgriStability design between individualized payments for producers and payment predictability, timeliness and bankability.

The evaluation examined the design of AgriStability and its impact on payment predictability, timeliness and bankability.

Complexity of AgriStability Design

Producers and other stakeholders have repeatedly expressed the preference for income stabilization programs that tailor program payments to individual producers. This ensures that funding targets producers in need.

The core issue for AgriStability is that tailoring program payments to each producer's unique situation requires a complex calculation that is not predictable or timely relative to the period of income decline. Timing is dependent on the application submission date, the producer's fiscal year end and producer timeliness in submitting additional information requested.

Payment calculations also require significant data and data verification:

- Calculations require five years of producer income data in order to calculate reference margins;
- Cash accounting must be adjusted to reflect accrual accounting;
- Adjustments are made to reflect structural changes on the farm; and
- Applications are subject to verification testing and are sampled for further testing before payments are finalized.

Predictability of AgriStability

Many producers, and more than a few accountants who do not specialize in farm accounting, do not understand in detail how payment amounts are calculated. In a national survey of agri-business members undertaken by the Canadian Federation of Independent Business in 2009/10, only 11% of respondents rated their understanding of the program as “high”, while an additional 55% and 34% of respondents rated their understanding as “moderate” or “low”, respectively[21]. Accountants interviewed for the evaluation noted the program was sometimes difficult to understand for accountants who do not specialize in farm business.

Some producers in the evaluation focus groups indicated that they were not clear why government payment calculations were different from their own, and some producers did not understand why substantial income losses had not triggered a payment. In the 2010 BRM Survey, only 25% of respondents who had received an AgriStability payment indicated that the payment amount was the amount that they expected, with 56% saying it was lower and 10% saying it was higher than expected. Even accountants specializing in farm management expressed the view that they have sometimes been surprised at the results of government calculations.

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The complexity of the calculation formula is sometimes perceived as a lack of transparency. Producers in the focus groups indicated that they would like more detail on how payments are calculated, in some cases to allow them to verify government calculations. Some accountants and producers noted that they feel that the complexity has led to errors in calculation on the part of administrations. This was a perception; the evaluation did not examine evidence on this issue.

The British Columbia case study poultry producer indicated that AgriStability had been unpredictable for him because the program uses provincial averages for its inventory valuations. This did not reflect the producer’s own value for his inventory, which he uses for accounting purposes. For example, AgriStability administrators will use the same value for chickens regardless of their age, although younger birds are worth more as layers than older birds.

The lack of predictability in the amount of AgriStability payments undermines the “bankability”. Producers noted that banks will not consider anticipated payments from AgriStability when deciding whether to lend them money.

AgriStability Timeliness

While the lack of predictability of payment amounts was the primary concern expressed by producers consulted for this evaluation, many also expressed dissatisfaction with the timing of payments. Furthermore, in the BRM Survey, less than half (45%) of producers who received an AgriStability payment said the payment arrived in a timely manner to help recover their income losses. The Office of the Auditor General in its Fall 2011 report to the House of Commons (Chapter 3, Payments to Producers) questioned whether producers understood the trade-off between a program’s ability to target a specific situation and the timeliness of the payment.

The often considerable length of time between producers’ income declines and their receipt of program payments means that producers frequently need to find other means to

[21] Labbie, V., 2010, *AgriStability or Aggravation?*, Canadian Federation of Independent Business, p.8.

cover income losses in the short-term. Evaluation interviews and focus groups indicated that some producers are using a variety of methods, including loans or lines of credit.

Different program structures could improve the timeliness of payments. For example, a payment based on industry averages could result in payments immediately after year-end and would not require as much information from producers (e.g., inventories, accounts receivable and payable). However, using industry averages would not permit the program to address the situations that are unique to an individual farm and not reflected in the average. Through focus groups, producers continue to express a preference for the individualization of program payments because they capture unique farm situations.

In conclusion, in order to make the AgriStability program more predictable, timely and bankable, changes would be required to the way in which the program payments are calculated.

3.2.4 AgriStability payments provide effective margin stabilization over the medium-term, and producers view AgriStability as an important business risk management tool.

Margin Stabilization

Program payments are expected to mitigate the short-term impacts of large income losses. The measure used for this outcome is the difference between producers' program margins with program payments and their reference margins. The program calculates to what extent, on average, program payment amounts would return producers' incomes in their year of decline to their average income levels (i.e., their reference margins).

The evaluation found that program amounts are sufficient to provide effective margin stabilization for eligible producers who have experienced margin declines. In 2008, program margins for producers triggering a payment were raised on average from 24% to 63% of reference margins as a result of AgriStability payments, an increase of 39 percentage points.

As shown in Table 8, the difference that AgriStability payments made to producer margins, relative to their reference margins, varied by farm type. For all farm types except hogs, margins were raised to above 60% of reference margins. Hog producers' margins were raised to 41% of reference margins, the lowest level of all farm types. This was, however, affected by the unusually difficult economic factors that the hog sector was facing at that time, which had resulted in an average producer margin of -13% of reference margins, before payments. The relatively small difference made by program payments (six percentage points) shown in supply-managed recipients reflects the lower level of income variability in that sector.

Table 8: AgriStability participants' margins without and with payments, compared to the value of reference margins, by farm type, 2008

Farm Type	% Without / With Payments	Difference (percentage points)
Hogs	-13% / 41%	+ 54
Cattle	20% / 66%	+ 46
Fruit, Vegetable and Potato	48% / 76%	+ 28
Grains & Oilseeds	49% / 74%	+ 25
Other	44% / 75%	+ 31
Supply Managed	74% / 80%	+ 6
Total	24% / 63%	+ 39

Source: AAFC, 2011, Business Risk Management Programs –January 2011 Performance Indicators Preliminary Detailed Report, p.20.

Annex D provides an illustration of the average program and reference margins of the agriculture sector, with and without CAIS/AgriStability payments, for the years 2003 to 2012 (projected).

Further simulation modeling undertaken by AAFC's RAD showed that BRM program payments reduced the year-over-year variability in margins by 26%, compared to no payments, for the period 2003 to 2009[22] . This analysis was based on calculations that assumed payments were received by producers during their year of income decline.

About one in five participating producers have triggered an AgriStability payment each program year. For the 2008 program year, 18,495 farms, or 19% of all AgriStability participants, received a program payment. In 2007, the percentage of participants was 22%, or 24,613 farms[23].

[22] BRM programs included in this analysis were CAIS from 2003 to 2007 and both AgriStability and AgriInvest for 2008 and 2009.
[23] AAFC, 2011, Business Risk Management Programs – January 2011 Performance Indicators Preliminary Detailed Report, p. 29.

Other Benefits of AgriStability

Producers and stakeholders view AgriStability as an important risk management tool. Producers in the focus groups and case studies reported that AgriStability has helped them in a variety of ways:

- AgriStability has provided needed cash to address the financial hardships that occur after difficult years.
- Some producers indicated that AgriStability has reduced the amount of debt that they have had to incur during periods of income decline.
- Some producers spoke of using the payments for making payments on inputs and operating loans.

In the case study of a Manitoba hog producer, AgriStability was felt to be critical to keeping the farm business in operation through lean years. The producer described the importance of the program in his decision-making:

"In 2008 and 2009, when I had to decide if we were going to continue, I took into account what I expected to get out of AgriStability and that was what made me decide to stay in it. Without AgriStability, I would have shut down the farm."

In conclusion, AgriStability provides effective margin stabilization over the medium-term. Producers reported a variety of ways in which the program has been beneficial to their farm businesses.

AgriInvest Producers' Account Activity

3.2.5 Producers are actively making use of their AgriInvest accounts and are satisfied with the program.

An examination of program administrative data showed that producers are actively depositing and withdrawing from their AgriInvest accounts, as intended:

- Almost $304 million in producer deposits were made in 2009, which represented 87% of the total maximum contributions that could have been made by participating producers in that year[24]. This exceeded the program's target of 70%.
- Twenty-three percent (23%) of participants withdrew some or all of the funds in their AgriInvest accounts in 2008[25].
- The average AgriInvest account balance in 2008 was $5,088.

[24] Based on FIPD administrative data.
[25] AAFC, 2011, Business Risk Management Programs – January 2011 Performance Indicators Preliminary Detailed Report, p. 58.

Producers in the focus groups were generally satisfied with AgriInvest. They expressed the opinion that the program design was straightforward, and they appreciated the matching government funding.

A few criticisms were expressed by some producers and stakeholders related to contribution limits; some felt that the limits were too small to allow the program to have a significant impact in addressing either business risk management or income declines. It was also noted that the program is not well-suited to help producers who are experiencing serious, longer-term financial problems, as these producers would be least able to afford to make AgriInvest deposits.

In conclusion, AgriInvest participants are making active use of their accounts based on deposits and withdrawals and are satisfied with the program overall.

Recommendation #3:

AAFC should work with the provinces and territories to:

- Improve stakeholders' understanding of AgriStability's objectives and the trade-offs between predictability/timeliness and the individualization of payments, and communicate that the program addresses income variation over the medium-term (e.g., two to three years).

- Improve producer education and communication about the level of coverage to be provided and the intent of the AgriStability and AgriInvest programs as part of a renewed BRM suite.

Management Response and Action Plan:

Agree. In the short term, and in collaboration with provinces/territories, AAFC will continue to use every opportunity to raise awareness of AgriStability's objectives, timeliness/predictability and trade-offs of targeted program payments through information sessions and consultation with producer groups and NPAC. In February and March 2012, presentations that included this subject matter were made to a number of producer groups.

Upon the FPT approval of a MFA, any changes to existing BRM programs will be explained to producers via a comprehensive communication plan, which will include new messaging in program and promotional material, both in print and online, and in outreach material, public notices and earned media. Along with these explanations, FPT governments will explain to producers and Canadians the objectives, methods and procedures of each program. The publication and distribution of program materials, engagement sessions with industry and any subsequent queries by stakeholders will indicate the degree by which this recommendation is achieved. The communication plan will be developed in concert with provincial and territorial governments and will be an integral part of the role out of the new MFA. Aspects of the plan concerning cost shared programs, such as AgriStability and AgriInvest, will be approved by the FPT management committee. The degree to which this recommendation is achieved will be measured through producer and industry feedback obtained during engagement sessions and producer queries to federal/provincial delivery agencies.

(Target: April 1, 2013; Responsibility: ADM FFPB and ADM CCB)

3.2.6 The use of interim and TAP payments has been decreasing, likely due to the issue of overpayments.

Funds from AgriStability payments can be requested in advance in the form of interim payments and TAPs in order to provide timely income support following income decline. The evaluation examined producer uptake of these options, and their perceived efficacy. The issue of overpayments was also examined.

Interim Payments and Targeted Advance Payments

Where AgriStability is delivered federally, interim payments have not been widely used, and usage has declined. (No data were available for areas where AgriStability is delivered by provinces.) As shown in Table 9, the number of interim payment applications has declined significantly since 2004, from 3,992 to 176 applications.

TAPs were offered in 2007, 2008 and 2009. TAPs were available for hog farmers in 2007 and 2009, and to hog farmers and livestock farmers in 2008. There were no TAPs available in 2010. As shown in Table 9, in the years 2007 to 2009, a total of 1,611 TAPs were provided to producers.

Table 9: Use of interim payments and TAPs, where Canada delivers AgriStability, 2003-2010

Year	# of Interim Payments	# of TAPs
2003	1,824	
2004	3,992	
2005	3,404	
2006	1,164	
2007	420	455
2008	223	770
2009	264	386
2010*	176	--

Source: AAFC administrative data
* Note that 2010 numbers do not include British Columbia and Saskatchewan, both of which began provincial delivery in that year.

Stakeholder opinions of TAPs were mixed. Some interviewees noted that TAPs have been effective in providing needed support for sectors / geographic regions in times of need, such as hog producers in 2007. Some stakeholders indicated that there should be consistent criteria for triggering TAPs, as leaving it to governments' discretion may disadvantage producers in provinces deciding not to use TAPs.

A TAP or interim payment provides a producer with an advance up to an amount determined based on a regional average of expected income declines, or up to 50% of their estimated final payment, respectively. The calculations for interims or TAPS are made at the time the application is made based on current product prices and inventory levels. These factors could change during the course of the year, thereby affecting the final payment. Should the value of product prices and inventories increase by the end of the year, the producer could experience an overpayment. The potential for overpayments adds to the complexity of AgriStability's program design.

Overpayments

Frequent overpayments were widely seen as a factor that was limiting the use of interim payments and TAPs. Producers and other stakeholders noted that overpayments have been so common that some producers are refusing to consider interim payments, and some accountants are not recommending them for the same reason. (Alternatively, one accountant said he told producers to view interim payments as "interest-free loans".) Repayments of the overpayments (i.e., "clawbacks") were noted to be an irritant for producers.

Table 10: AgriStability overpayments, 2007 to 2009

Year	2007		2008		2009 (as of Sept 2011)	
Overpayments of…	$ millions	# of Participants	$ millions	# of Participants	$ millions	# of Participants
Interims	4.6	259	2.1	86	4.3	81
TAPs	25.4	269	12.5	484	26.9	168
Final Payments	13.5	937	6.6	493	1.0	94
Total	**43.6**	**1,465**	**21.1**	**1,063**	**32.2**	**343**

Source: FIPD weekly updates. Numbers may not add due to rounding.

In fact, for the years 2007 to 2009 (as of September 2011) there were 483 overpayments of interim payments and 864 TAP overpayments. This represented 53% of the number of interim payments and 54% of the TAPs for these years.

The BC poultry case study producer stated that he does not use interim payments because he does not want to be in an overpayment situation. He said that in the event of an income loss, he has sufficient credit and income from other farm operations to rely on in the short term. For one of his farm operations, the producer had to repay $100,000 as a result of an overpayment for a final AgriStability payment.

The large number of overpayments of interim payments and TAPs is a consequence of the nature of these payments. In order for payments to be timely, payments are based on estimates of AgriStability final payments using early or incomplete information. Changes throughout the year to commodity prices or to farm businesses can change a producer's eligibility for a final AgriStability payment or the amount they will receive.

Concerns were raised by stakeholders and producers over the length of time that AAFC or a province can re-assess a final AgriStability application and make adjustments that can result in a portion or all of the payment being clawed back. Accountants noted that, except in cases of fraud, there should be a statute of limitations on AgriStability clawbacks similar to that outlined in the *Income Tax Act*: three years.

In conclusion, interim payments and TAPs have been available to provide eligible producers with timely access to a portion of their AgriStability payments. However, the nature of interim payments and TAPs has meant more complexity. Overpayments are very common and have been a disincentive to the usage of these options. In addition, a concern was identified with respect to the period of time during which payments can be re-assessed.

Recommendation #4:

AAFC should work with the provinces and territories to:

- Examine the feasibility and desirability of limiting the period in which an AgriStability payment file can be re-opened for assessment to three years (similar to the *Income Tax Act*).

Management Response and Action Plan:

Agree. This proposal is included in ongoing discussions at the FPT BRM Policy Working Group along with other proposals for program change. However, the multi-year nature of reference margins and other program requirements, such as CRA and provincial laws, rules and regulations will influence the adoption of this recommendation. The FPT Administrators Working Group is reviewing account receivables and other factors that can influence historical assessments and will be making a recommendation on this matter to FPT ADM's for approval.

(Target: April 1, 2013; Responsibility: DG, BRMPDD)

Interaction of BRM Programs and Impact on Producer Behaviour

3.2.7 There is a lack of integrated micro (participant-level) data to assess the interaction of BRM programs at the producer level.

AgriStability was designed to avoid masking market signals and altering how producers respond to the need for industry adjustment based on changing market conditions. There are currently no integrated longitudinal micro-data (including revenues, expenses, inventory, assets and liabilities) that would allow an empirical examination of whether AgriStability is altering producer behaviour in unintended ways, such as through encouraging risk-taking or masking market signals. Furthermore, data do not allow for a complete understanding of how the different BRM programs are interacting at the individual producer level. As a result, findings on the impact of the program on producer decision-making rely on producer/stakeholder opinion and simulation modeling.

There was no consensus among producers or stakeholders as to whether AgriStability was encouraging producer risk-taking. Some felt that AgriStability enabled producers to take on more risk, or reduced the need for producers to develop other business risk management approaches, such as diversification. Others said the program did not influence how producers are farming, noting that the program would have to be more predictable to have a strong effect on producer decision-making.

Some financial representatives noted that the information requirements involved in participating in AgriStability have encouraged some producers to improve their business management, including through promoting the use of accrual accounting. Compared with cash accounting, accrual accounting provides benefits to the enterprise in terms of planning and managing resources and requirements.

Simulation modeling was undertaken by RAD to examine the issue of capitalization of government program payments. The analysis (which included all government payments, not just AgriStability and AgriInvest) found that government program payments had a positive impact on the probability of capital investments. However, it is unlikely that producers will invest during period of income loss, such as when they are receiving AgriStability payments.

In conclusion, an integrated, longitudinal micro-database of all BRM participants would help to further examine whether the program has resulted in any unintended impacts and how BRM programs are interacting at the producer level.

Recommendation #5:

AAFC should work with the provinces and territories to:

- Develop an integrated micro-database of all BRM program participants that could support longitudinal analysis of program interactions, and contribute to improved program management and policy development.

Management Response and Action Plan:

Agree. The Department will work with the provinces to increase the data available for policy analysis on the impact of BRM programs, including investigating the feasibility of developing a micro level data base that would allow for a better understanding of the interactions of programs. Discussions with the administrations will be held in the summer of 2012 on the data required and technical and legal aspects of the transfer. The intent of these discussions would be to strengthen the commitment to improve analytical capacity in the MFA and a recommendation on developing an integrated database by April 2013.

(Target: April 2013; Responsibility: DG, BRMPDD)

3.3 PERFORMANCE – EFFICIENCY AND ECONOMY

3.3.*1 The devolution of AgriStability has resulted in a loss of economies of scale in terms of AAFC program delivery*.

The administration of both AgriStability and AgriInvest was in a state of transition during the period examined for this evaluation due to the devolution of the AgriStability program. The Program's devolution began at the request of the provinces who wished to deliver AgriStability in conjunction with AgriInsurance to obtain operational efficiencies. Prince Edward Island, Quebec, Ontario, and Alberta were the first provinces to begin to deliver the program beginning in 2007. In January 2010, the delivery of AgriStability was devolved to British Columbia and Saskatchewan. That same calendar year the responsibility for holding producers' AgriInvest accounts was transferred from AAFC to participating financial institutions starting with the 2009 program year to provide producers easier and more timely access to their AgriInvest accounts[26].

The changes in delivery for both programs required the implementation of new data systems, and significant changes to staffing. The administrative costs of the programs demonstrated in the evaluation data reflect this unique period of program transition.

[26] Except in Quebec, where producer accounts are managed by the province.

AgriStability Administrative Costs

Table 11 shows the calculated cost per AgriStability application, and administrative costs as a percentage of total program costs, for where AgriStability is delivered by AAFC. The increase in costs reflects the loss of the economies of scale in processing applications with the devolution of the program.

Table 11: AgriStability administrative costs, where Canada delivers, 2007/08 to 2010/11		
Fiscal Year	**Cost per Application $**	**Administrative Costs as a % of Total Costs**
2007/08	1,012 (CAIS)	8%
2008/09	1,140	17%
2009/10	1,090	16%
2010/11	1,976	12%

Source: AAFC administrative data

The differences across the years are at least partly a result of the fact that AgriStability is a demand-driven program, and administrative costs will fluctuate by year due to changing market conditions and application numbers. According to the program, the cost per file for AAFC delivery is expected to stabilize at about $1,750 per file, an increase of $660 or 61% per file from 2009/10.

According to a recent study of AgriStability administrative costs by Meyers Norris Penny, the transition to provincial delivery in British Columbia and Saskatchewan has resulted in a loss of economies of scale for AAFC and the provinces. Producers in British Columbia and Saskatchewan accounted for approximately 70% of the program applications processed by AAFC prior to 2010[27].

The Meyers Norris Penny report identified three options available for the remaining four provinces and one territory for which AAFC delivers the AgriStability program (i.e., Manitoba, New Brunswick, Nova Scotia, and Newfoundland and Labrador, and Yukon). The report's options included:

a) Continuing to have AAFC deliver the AgriStability program, as is currently the case;

b) The remaining provinces could each assume responsibility for delivery of AgriStability to their producers;

c) Alternative options for the delivery of AgriStability could be considered. This could include inter-provincial partnerships, which may facilitate leveraging existing program infrastructure and/or result in economies of scale.

[27] Meyers Norris Penny LLP, 2011, *Evaluation of the 2010/2011 AAFC AgriStability administration costs and cost allocation methodology.*

In conclusion, the devolution of the AgriStability program to British Columbia and Saskatchewan has resulted in a loss of economies of scale in terms of AAFC program delivery. Federal, Provincial and Territorial governments should assess whether more cost-efficient options can be found for the delivery of AgriStability where Canada currently delivers.

Recommendation #6:

AAFC should work with the provinces and territories to:

- Determine the most appropriate, cost-efficient delivery model for the AgriStability program for the remaining four provinces and one territory in which AAFC delivers, including the consideration of non-AAFC delivery models.

Management Response and Action Plan:

Agree. In collaboration with the provinces and territory where Canada delivers the AgriStability program, AAFC will complete an assessment of cost-effective delivery model alternatives and report its assessment to the ADM FFPB and her provincial/territorial counterparts.

(Target: March 31, 2013; Responsibility: DG, FIPD)

AgriInvest Administrative Costs

Table 12 shows the calculated cost per AgriInvest application, as well as administrative costs as a percentage of total AgriInvest program costs. Administrative costs incurred in 2007/08 were primarily related to planning and program set-up. The significant increase in administrative costs in 2009/10 was the result of changes to the delivery including transfer of the responsibility for holding producer accounts from AAFC to financial institutions for the 2009 program year.

Table 12: AgriInvest administrative costs, where Canada delivers, 2007/08 to 2009/10

Fiscal Year	Cost per Application $	Administrative Costs as a % of Total Costs
2007/08	--	1%
2008/09	32	3%
2009/10	110	6%
2010/11	117	5%

Source for cost per application: AAFC administrative data and AAFC, 2011, Business Risk Management Programs – January 2011 Performance Indicators Preliminary Detailed Report, p. 64.
Source for administrative costs as a % of total costs: AAFC administrative data

Administration costs for the AgriInvest program appear to be stabilizing. However, AAFC should continue to monitor these costs.

3.3.2 AgriStability and AgriInvest are not meeting their processing service standards.

Application processing times have consistently been below service standard targets for both AgriStability and AgriInvest. Table 13 shows that the percentage of completed applications processed within 75 days varied from 10% in 2009 to 65% and 67% in 2008 and 2010, respectively. The target of 75% of applications processed within 75 days was not met in any of the three years.

Table 13: AgriStability application processing times compared to service standard, where Canada delivers, 2008-2010

Year	% of Completed Applications within 75 days Target = 75%
2008	65%
2009	10%
2010	67% (forecast)

Source: AAFC administrative data

AgriStability processing time was affected by the implementation of new data business systems and the data transition from the old to the new system, particularly during 2009. Program officials noted that the performance has improved for 2010, while at the same time catching up on the 2009 shortfall. As a result, they indicated that prospects are looking positive for 2011 processing.

AgriInvest application processing times were also consistently below service standards. As shown in Table 14, the percentage of completed applications processed within 45 days varied between 37% and 44% across the 2008 to 2010 program years, significantly below the target of 80%.

Table 14: AgriInvest application processing times compared to service standards, where Canada delivers, 2008-2010

Year	% of Completed Applications within 45 days Target = 80%
2008	37%
2009	44%
2010	37%

Source: AAFC administrative data

AgriInvest program officials cited a postal strike in 2011 as a factor that influenced service standard achievement for 2010 processing times. According to the program, while processing times were within 45 days for over 70% of AgriInvest applications, Canada Post delays in issuing Deposit Notices prevented many files from actually meeting the service standard. The postal strike and internal system readiness both contributed to this situation.

AAFC program officials maintain that the processing service standards for both AgriStability and AgriInvest can be achieved for the 2011 program year, as the new data system is operational, staff are in place, and a readiness process has been developed for 2011 applications.

In conclusion, application processing times for both programs have consistently been below program service standard targets, but AAFC program officials have indicated that service standards can be achieved for the 2011 program year.

Recommendation #7:

The Farm Financial Program Branch should:

- Report back to AAFC senior management by March 2013 on its costs for administering the AgriStability and AgriInvest programs where Canada delivers; and on its progress in meeting the AgriStability and AgriInvest processing service standards. If required, the Farm Financial Programs Branch would investigate further action that could be taken to improve application processing times or to adjust service standards to reflect program capacity.

Management Response and Action Plan:

- Agree. FFPB will prepare a report for the Horizontal Management Committee by March 31, 2013 on AAFC's costs of administration and performance against 2011 delivery service standards for the AgriStability and AgriInvest programs. Based on performance against the delivery service standards, recommendations and action plans will be provided to address timeliness issues in application processing (noting that these will be influenced by, and linked to the review of AgriStability delivery models).

  (Target: March 31, 2013; Responsibility DG, FIPD)

4.0 CONCLUSIONS AND RECOMMENDATIONS

4.1 CONCLUSIONS

Government support for the agricultural sector has been important in helping producers manage business risk and income variability. The agriculture sector faces a wide range of risks that result in significant income variability. Income variability and risk affect producers' well-being, and production and investment decisions. Government BRM tools have complemented other available producer-led and private sector options to provide stability in the sector in order to maintain production levels.

AgriStability and AgriInvest are aligned with the historic federal role of supporting the agricultural sector, and with the Growing Forward policy framework and AAFC strategic outcomes. Federal policies directed at farm income stabilization in Canada date back to the Agriculture Stabilization Act of 1958. Stakeholders widely believe that while producers have the ultimate responsibility for managing their business risk, government also has important roles, including assisting producers with large and unpredictable losses, and supporting a level competitive playing field for producers.

BRM programs are designed to work in complementary manner. The BRM programs are designed to eliminate "stacking" amongst the programs and work in complementary ways, reflecting the different triggers and timing of program funding.

AgriStability and AgriInvest cover all levels of risk and there is overlap within the BRM suite of programs. Canadian BRM programs cover all levels of risk, including those considered lower level risks (i.e., risks that occur relatively frequently but which should lie within the scope of any business to manage). Together, AgriStability and AgriInvest cover 100% of a producer's reference margin. AgriStability overlaps coverage with both AgriInsurance and AgriRecovery. The existing level of coverage may crowd out the development of producer-led or private sector initiatives that could complement the current government BRM tools.

There is no direct relationship in the AgriInvest program design between monies withdrawn and income decline (Tier 1). AgriInvest was designed to provide producers with the flexibility to use funds to protect their margins from small declines or to provide funds for investment to reduce risks or improve profitability. However, there is no comprehensive data on how AgriInvest funds are being used, and producers can withdraw funds at any time.

AgriStability and AgriInvest are generally performing well in terms of coverage and participation. Although not a large percentage of producers (51% of all eligible producers), AgriStability participation represented 68% of total Canadian farm revenues (based on the 2008 program year). AgriInvest participation represents 71% of total allowable market sales in Canada.

The total value of AgriStability payments per year has grown in recent years, and may continue to grow in the future given recent increases in farm income. The department should work with the provinces and territories to take action to ensure that the program remains financially sustainable over time.

There is an inherent trade-off in the design of the AgriStability program between individualization of payments to producers and payment predictability, timeliness and bankability. In order to make the AgriStability program more predictable, timely and bankable, changes would be required to the way in which program payments are calculated.

AgriStability payments provide effective margin stabilization over the medium-term, and producers view AgriStability as an important business risk management tool. Evidence shows that AgriStability does have a stabilization effect on producer reference margins over the medium-term. Producers also commented on the fact that AgriStability has helped them in a variety of ways, for example in making payments on inputs and operating loans, and reducing the amount of debt they incur.

Producers are actively making use of their AgriInvest accounts and are satisfied with the program. Almost $304 million in producer deposits were made in 2009, which represented 87% of the maximum contributions that could have been made by participating producers in that year. Twenty-three percent (23%) of participants withdrew some or all of the funds in their AgriInvest accounts in 2008. Producers are satisfied with the program overall.

The use of interim and TAP payments has been decreasing, likely due to the issue of overpayments. Overpayments have been so common that some producers are refusing to consider interim payments and TAPs as options in managing short-term income variations. Concerns were also cited over the length of time that AAFC or a province can re-assess a final application and make adjustments that can result in an overpayment.

There is a lack of integrated micro (participant-level) data to assess the interaction of BRM programs at the producer level. An integrated, longitudinal micro-database of all BRM participants (containing revenues, expenses, inventory, assets and liabilities) would allow an empirical examination of how BRM programs interact at the producer level and of the programs' impact on producer behaviour.

The devolution of AgriStability to British Columbia and Saskatchewan has resulted in a loss of economies of scale in terms of AAFC program delivery. Federal, provincial and territorial governments should examine whether there are more cost-efficient ways to deliver the AgriStability program in the remaining jurisdictions where Canada currently delivers.

AgriStability and AgriInvest are not meeting their processing service standards. Program officials cited a number of internal and external factors that have negatively affected application processing times; including the implementation of new data business systems, but believe that application processing service standards for both programs can be reached by the 2011 program year.

4.2 RECOMMENDATIONS

The evaluation identifies the following seven recommendations:

Recommendation #1:

AAFC should work with the provinces and territories to:

- Define the level and nature of risks that governments should cover for the agricultural sector through the BRM suite of programs; refocus the AgriStability and AgriInvest programs to target these risks; and streamline the various Tiers to reduce programming complexity.

Recommendation #2:

The Strategic Policy Branch should:

- Examine fully the potential impacts of forecasted economic trends on the long-term affordability of the AgriStability program, paying particular attention to scenarios in which continued high prices followed by income declines (shocks), trigger large payments to producers.

Recommendation #3:

AAFC should work with the provinces and territories to:

- Improve stakeholders' understanding of AgriStability's objectives and the trade-offs between predictability/timeliness and the individualization of payments, and communicate that the program addresses income variation over the medium-term (e.g., two to three years).

- Improve producer education and communication about the level of coverage to be provided and the intent of the AgriStability and AgriInvest programs as part of a renewed BRM suite.

Recommendation #4:

AAFC should work with the provinces and territories to:

- Examine the feasibility and desirability of limiting the period in which an AgriStability payment file can be re-opened for assessment to three years (similar to the *Income Tax Act*).

Recommendation #5:

AAFC should work with the provinces and territories to:

- Develop an integrated micro-database of all BRM program participants that could support longitudinal analysis of program interactions, and contribute to improved program management and policy development.

Recommendation #6:

AAFC should work with the provinces and territories to:

- Determine the most appropriate, cost-efficient delivery model for the AgriStability program for the remaining four provinces and one territory in which AAFC delivers, including the consideration of non-AAFC delivery models.

Recommendation #7:

The Farm Financial Programs Branch should:

- Report back to AAFC senior management by March 2013 on its costs for administering the AgriStability and AgriInvest programs where Canada delivers; and on its progress in meeting the AgriStability and AgriInvest processing service standards. If required, the Farm Financial Programs Branch would investigate further action that could be taken to improve application processing times or to adjust service standards to reflect program capacity.

Annex A: Differences between AgriStability and the Canadian Agricultural Income Stabilization (CAIS) Program

Program Change	2003 CAIS	AgriStability	Expected Benefit to Producers
Inventory valuation	End of year price used to value inventory.	Both opening and end of year prices used to value inventory.	More accurate assessment of losses.
Negative margin coverage expanded	Producers with negative reference margins not eligible. Limit on number of negative margin payments a producer could receive.	Producers with negative reference margins eligible. No limit on number of negative margin payments.	Better protection for those faced with back-to-back disasters.
Easier participation requirements	Producers had to make a deposit equal to 22% of their reference margin.	Producers pay $4.50 per $1,000 of reference margin protected.	Cash is not tied up in deposit.
Targeted advances available	Target advances not available.	Targeted Advance Payment in place to provide assistance in times of serious income declines.	Faster payments in times of serious income declines.
Easier sign-up	Producers had to select and mail in level of protection annually.	Automatic sign up for producers who participated previously.	Simpler sign up process.
Deadline flexibility	Missed deadline meant producers were ineligible.	Late filing provisions with penalties now in place.	More flexibility in meeting program requirements.
Online calculators	No way to accurately estimate payments	More accurate online calculators available in most provinces.	Tools to estimate payments more accurately.
Shorter form	Six page application.	In federal delivery provinces, a one-page form is included in the Canada Revenue Agency harmonized form.	Shorter forms.
Electronic filing	Information could not be submitted electronically.	Secure e-filing is available in most provinces.	Faster, more efficient filing.
Clearer program statements	Program statements arrived long after payments and did not include all calculations	Program statements are more informative and arrive sooner.	More detailed information on how benefits are calculated.

Source: Adapted from AAFC Fact Sheet retrieved at http://www4.agr.gc.ca/AAFC-AAC/display-afficher.do?id=1296665663129&lang=eng

Annex B: Further Detail on AgriStability and AgriInvest Design and Delivery

AgriStability

The maximum AgriStability payment for a producer in any given year is the lesser of $3 million or 66.5% of the margin decline in Tiers 2 and 3 in the program year margin.

In each program year, participating producers receive enrolment notices containing the information required to pay the program fee, including the deadline for payment. The fee is currently calculated at a rate of $3.825 for every $1,000 of the producer's protected reference margin. Producers are also charged an annual Administrative Cost Share amount of $55.

Producers of supply-managed commodities are eligible under AgriStability, but only once a producer's margin declines into Tier 3. This recognizes the fact that supply management is, in itself, a form of risk management.

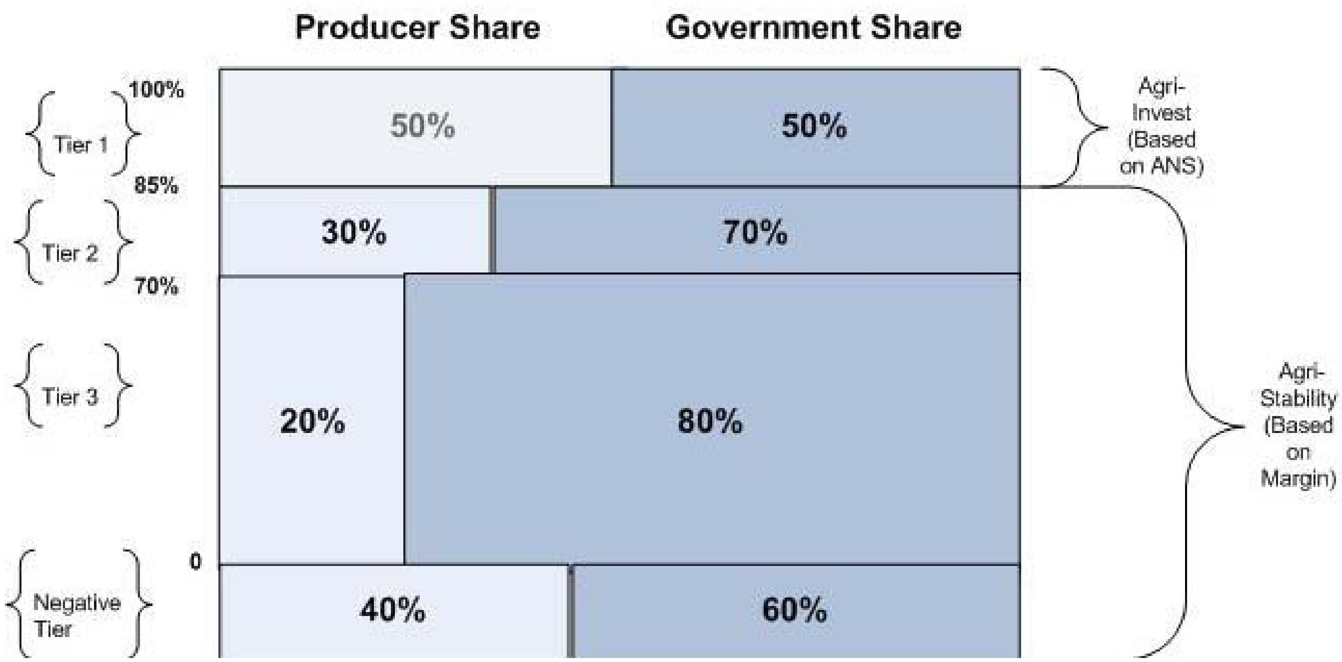
AgriInvest

AgriInvest accounts are split into two components: Fund 1 holds producer deposits, and Fund 2 holds matching government contributions. Any withdrawals by producers are drawn from Fund 2 first, unless it is empty. Interest paid on the balance in a producer's account is credited to Fund 2. Accounts have maximum balance limits of 25% of a participant's ANS for the current year and the preceding two years. Producers can withdraw funds from their account at any time, notwithstanding the tax implications.

In order to make a program payment, participants submit a program year application and receive a Deposit Notice outlining their maximum deposit eligible for a matching government contribution. Producers have 90 days from the issue date on the Deposit Notice to make a deposit to their account.

Supply-managed commodities are not allowable commodities under AgriInvest. Producers of supply-managed commodities who also produce allowable commodities may be eligible for AgriInvest based on the non-supply-managed portion of their farming operation.

Please see the following figure, which illustrates the intended share of farm margin declines borne by producers and governments, respectively, through AgriStability and AgriInvest.


Producer Share
Government Share
100%
Tier 1
85%
Tier 2
70%
Tier 3
0
Negative Tier
50%
50%
30%
70%
20%
80%
40%
60%
Agri-Invest (Based on ANS)
Agri-Stability (Based on Margin)

Annex C: Government BRM Programs in Canada

P Provincially delivered program
F Federally delivered program

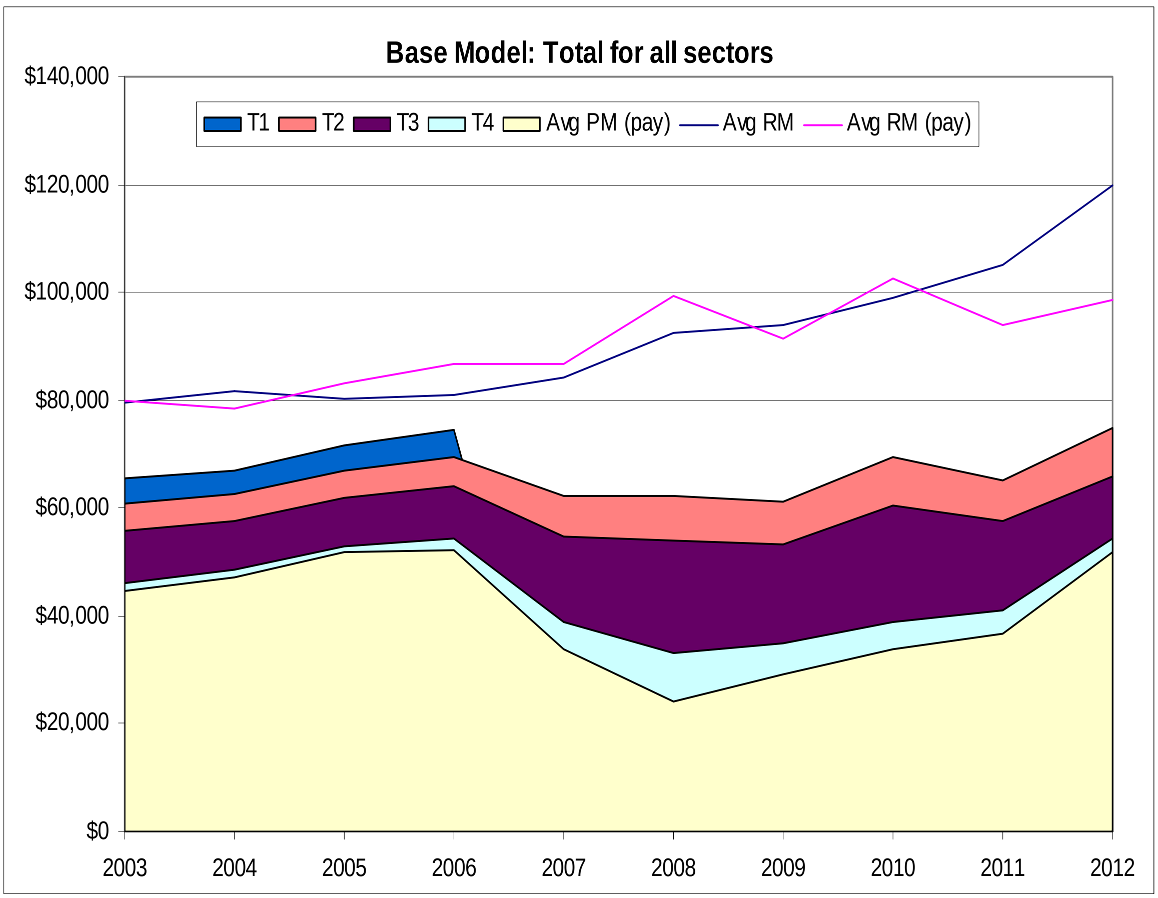
Category	Program	British Columbia	Alberta	SK	Manitoba	Ontario	Quebec	Nova Scotia	NFLD	NB	PEI	Yukon	NWT	Nunavut
BRM	AgriStability	P	P	P	F	P	P	F	F	F	P	F		
BRM	AgriInvest	F	F	F	F	F	P	F	F	F	F	F		
BRM	AgriInsurance	P	P	P	P	P	P	P	P	P	P			
BRM	AgriRecovery (2010 Initiatives)	P	P	P	P	P	P			P	P			
Other FPT	Wildlife Damage Compensation (GF program)	P	P	P				P		P		P		
Other FPT	OYTP					P		P		P				
Other FPT	Plum Pox Eradication					P								
Provincial Programs	Alberta Farm Loan Program (AB)		X											
Provincial Programs	Cattle Price Insurance Program (AB)		X											
Provincial Programs	Livestock Loan Guarantee (LLG) (SK)			X										
Provincial Programs	SK Feed and Forage Program (SK)			X										
Provincial Programs	MASC Insurance (MB)				X									
Provincial Programs	Risk Management Program (RMP) (ON)					X								
Provincial Programs	Grain Financial Protection Program (ON)					X								
Provincial Programs	Commodity Loan Program (CLP) (ON)					X								
Provincial Programs	Ontario Beef Breeder Loan Program (ON)					X								
Provincial Programs	Ontario Feeder Cattle Loan Guarantee Program (ON)					X								
Provincial Programs	Agri-Quebec (QC)						X							
Provincial Programs	Farm Income Stabilization Insurance (ASRA) (QC)						X							
Provincial Programs	Honeycrisp Orchard Renewal (NS)							X						
Provincial Programs	Beef Interest Pay-Down Program (NS)							X						
Provincial Programs	Livestock Incentive Loan Program (NB)									X				
Provincial Programs	Business Development Program (NB)									X				
Provincial Programs	Perennial Crop Establishment Loan Program (NB)									X				
Provincial Programs	New Entrant Farmer Loan Program (NB)									X				
Provincial Programs	Loan Guarantees - Agriculture (NB)									X				
Provincial Programs	Agriculture Direct Loans (NB)									X				
Federal	Advance Payments Program (APP)	[illegible]												
Federal	Price Pooling Program													
Federal	Canadian Agricultural Loans Act (CALA)													

Annex D: CAIS/AgriStability Program Margin Protection

The following figure shows program margins and reference margins for the years 2003 to 2012 (forecasted).

In this figure, Tiers 1 to 4 are represented, as well as:

- the average program margin of those receiving CAIS / AgriStability payments (Avg PM (pay));
- the average reference margin (RM) of those not receiving a payment (Avg RM); and
- the average reference margin of those receiving CAIS / AgriStability payments (Avg RM (pay)).



Source: AAFC Program Administration and AAFC Forecast

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