



Agriculture and  
Agri-Food Canada

Agriculture et  
Agroalimentaire Canada



# EVALUATION OF THE ADVANCING CANADIAN AGRICULTURE AND AGRI-FOOD (ACAAF) PROGRAM

**OFFICE OF AUDIT AND EVALUATION**

**SEPTEMBER 15, 2009**

Canada 

Approved at the Departmental Management Committee meeting convened as the Departmental Evaluation Committee on September 15, 2009.

To obtain more information on the Office of Audit and Evaluation, please visit:  
[http://www.agr.gc.ca/aud\\_eval](http://www.agr.gc.ca/aud_eval)

Permission to reproduce.  
Select and insert appropriate permission to reproduce.

© Her Majesty the Queen in Right of Canada, 2009

Cat. No. A22-496/2009E-PDF  
ISBN 978-1-100-13214-3  
AAFC No. 10990E

Aussi offert en français sous le titre: *Évaluation du Programme pour l'avancement du secteur canadien de l'agriculture et de l'agroalimentaire (PASCAA)*.

## **TABLE OF CONTENTS**

<b>EXECUTIVE SUMMARY.....</b>	<b>V</b>
Program Background.....	v
Evaluation Scope and Objectives .....	vi
Evaluation Findings .....	vi
Recommendations.....	ix
<b>1.0 INTRODUCTION.....</b>	<b>10</b>
1.1 Evaluation Context.....	10
1.1.1 Study Background .....	10
1.1.2 Study Objectives.....	10
1.2 ACAAF Program Profile .....	10
1.2.1 Background.....	10
1.2.2 Key Objectives.....	10
1.2.3 Program Design and Delivery .....	11
1.2.4 Beneficiaries and Stakeholders .....	12
1.2.5 Resources.....	13
1.3 Logic Model and Expected Results .....	13
<b>2.0 METHODOLOGY .....</b>	<b>15</b>
2.1 Evaluation Issues.....	15
2.2 Methodology Overview .....	15
2.3 Challenges and Limitations .....	17
<b>3.0 EVALUATION FINDINGS.....</b>	<b>18</b>
3.1 Relevance and Rationale .....	18
3.2 Program Activities and Outputs.....	22
3.2.1 ACAAF Coverage: Regions and Value-Chain.....	22
3.2.2 Short-Term Outcomes .....	25
3.2.3 Long-Term Outcomes.....	32
3.2.4 Effectiveness of Partnerships with Industry Councils.....	38
3.3 Cost Effectiveness .....	40
<b>4.0 CONCLUSIONS AND RECOMMENDATIONS .....</b>	<b>44</b>
4.1 Conclusions .....	44
4.1.1 Relevance and Rationale.....	44
4.1.2 Program Performance: Activities and Outputs .....	45
4.1.3 Program Performance: Short-Term outcomes .....	45
4.1.4 Program Performance: Long-Term Outcomes.....	46
4.1.5 Program Performance: Partnership with Industry Councils.....	47
4.1.6 Cost- Effectiveness.....	47
4.2 Recommendations .....	48
<b>APPENDIX A: EVALUATION QUESTIONS .....</b>	<b>50</b>

**LIST OF TABLES**

<b>TABLE 1: DISTRIBUTION OF ACAAF PROJECTS BY PILLAR .....</b>	<b>11</b>
<b>TABLE 2: ACAAF EXPENDITURES BY YEAR (AS OF AUGUST 10, 2009).....</b>	<b>13</b>
<b>TABLE 3: PLACEMENT OF AAFC INNOVATION PROGRAM FUNDING .....</b>	<b>21</b>
<b>TABLE 4: OUTCOME REPORTING BY COMPLETED REGIONAL AND NATIONAL PROJECTS .....</b>	<b>26</b>
<b>TABLE 5: TOTAL APPROVED COLLECTIVE OUTCOME PROJECTS BY YEAR .....</b>	<b>32</b>
<b>TABLE 6: LONGER-TERM PROJECT TRACKING RESULTS TO DATE .....</b>	<b>34</b>

**LIST OF FIGURES**

<b>FIGURE 1: PERCENTAGE OF ACAAF FUNDING AND PROJECTS BY REGION.....</b>	<b>23</b>
<b>FIGURE 2: DISTRIBUTION OF ACAAF FUNDING AND PROJECTS BY INDUSTRY SECTOR .....</b>	<b>24</b>
<b>FIGURE 3: COMPLETED ACAAF PROJECTS REPORTING SHORT-TERM OUTCOMES.....</b>	<b>25</b>
<b>FIGURE 4: BREAKDOWN OF ISSUES ADDRESSED IN PROJECTS.....</b>	<b>27</b>
<b>FIGURE 5: DISTRIBUTION OF PROJECTS BY CATEGORY .....</b>	<b>28</b>
<b>FIGURE 6: TOTAL ALLOCATED VS. ACTUAL DOLLARS SPENT BY FISCAL YEAR .....</b>	<b>41</b>
<b>FIGURE 7: SOURCES OF FUNDING BY ACAAF PILLAR .....</b>	<b>43</b>

**LIST OF ACRONYMS**

AAFC	Agriculture and Agri-Food Canada
ACAAF	Advancing Canadian Agriculture and Agri-Food Program
APF	Agriculture Policy Framework
CARD	Canadian Adaptation and Rural Development
ERC	Expenditure Review Committee
FTE	Full-time Equivalent
FPT	Federal/Provincial/Territorial
FY	Fiscal Year
GF	Growing Forward
KII	Key Informant Interviews
LTT	Long-Term Tracking
MC	Memorandum to Cabinet
OAE	Office of Audit and Evaluation
RMAF	Results-Based Management Accountability Framework
SPR	Sample Project Review
TBS	Treasury Board of Canada Secretariat
TB Submission	Treasury Board Submission

## **EXECUTIVE SUMMARY**

This report presents the results of an evaluation of the Department of Agriculture and Agri-food Canada's (AAFC) Advancing Canadian Agriculture and Agri-Food (ACAAF) Program. The evaluation examines the years 2004 to 2008 and was conducted between July 2008 and March 2009.

### **Program Background**

The Advancing Canadian Agriculture and Agri-Food (ACAAF) Program was developed as a successor to the Canadian Adaptation and Rural Development (CARD) Program. According to foundation documents, it is designed to assist Canada's agriculture and agri-food industry to adapt to major changes.

ACAAF was designed as a five-year, \$240M funding program. Its key objectives are to:

- Expand the agricultural sector's capacity to respond to current and emerging issues;
- Position the sector to capture market opportunities;
- Engage the sector actively and continuously to contribute to future agriculture and agri-food policy directions; and
- Integrate sector-led projects tested and piloted under ACAA, into future federal, provincial/territorial government or industry initiatives.

ACAAF is designed to achieve its key objectives through funding of projects under the following three funding pillars:

**Industry-Led Solutions to Emerging Issues:** To expand the agriculture and agri-food sector's capacity to respond to current and emerging issues and to seize new opportunities.

**Capturing Market Opportunities by Advancing Research Results:** Supports initiatives that transfer research results from governments, industry, and educational institutions into future market opportunities.

**Sharing Information to Advance the Sector:** Supports timely and effective information dissemination, including strengthening the agriculture and agri-food sector's ability to participate in and help shape policy development.

## **Evaluation Scope and Objectives**

This evaluation was carried out to help inform the renewal of AAFC's adaptation programming. It also addresses a Treasury Board requirement. Its focus is on the program's performance and continued need.

Tools used to conduct the evaluation include literature and document reviews, a review of sample project files, analysis of the ACAAF project database, key informant interviews and case studies.

## **Evaluation Findings**

### *Continued Relevance*

ACAAF is aligned with government and AAFC priorities for science and innovation. Research carried out as part of the evaluation confirms the significance of several barriers to innovation in Canada's agricultural sector.

However, the need for the ACAAF Program and the specific market failures it is intended to address are not well elaborated in the Program's foundation documents. Consequently, ACAAF objectives are broadly stated and the link between ACAAF program objectives and some funded activities is unclear.

ACAAF is situated in the pre-adoption/pre-commercialization phase of the innovation continuum and is well positioned with respect to existing AAFC programming which, for the most part, is focused on either the discovery or the commercialization phases. There is some potential, however, for overlap with the *Growing Forward* suite of innovation programs and, in some provinces, with provincial innovation programs.

### *Program Performance*

AAFC's partnership with regional industry councils for delivery of regional projects was reviewed as part of the evaluation. Industry councils have contributed to the successful delivery of the program: they are representative of key producer and other groups; are knowledgeable of regional issues; and, actively promote collaboration and information-sharing among key stakeholders.

However, there are at times significant delays on the part of industry councils in the uploading of regional project information to the Department's ACAAF "extranet". There are also concerns that, although the industry councils are responsible for making selection decisions with regard to regional and CO projects, under the current funding mechanism they are not accountable for achievement of Program results.

Underlying the two concerns above is a more fundamental issue – the use of grants as the mechanism to fund regional industry councils who, in turn, fund others.



While “grants” or unconditional transfer payments may provide certain advantages for this type of program – most notably, flexibility and timeliness of decision-making, 2008 changes to the Government of Canada’s Transfer Payment Policy require that funding to third-party delivery agents be made in the form of contributions, using a funding agreement that stipulates among other things, program expected outcomes, performance expectations, and performance and financial reporting requirements.

ACAAF funding is widely and equitably dispersed across Canada’s regions. Program documentation suggests that it is meant to be representative of the entire value chain. It was found, however, that processors are not well-represented on industry councils in most regions and that they participate at a rate not reflective of their share of the agricultural sector’s contribution to GDP.

Reporting on Program short- and longer-term project outcomes is incomplete and, in some cases, inadequate. Less than two-thirds (64%) of ACAAf project files on the Program’s database contain reports on project short-term outcomes and these are of uneven quality and utility. Nevertheless, a review of a sample of project files revealed that the majority of ACAAf projects (76%) have made some progress towards achieving their short-term outcomes, that is, that they were implemented as intended. AAFC’s Long-term Tracking initiative for the ACAAf Program has not been fully implemented.

Program short-term outcomes achieved include the testing of improved varieties of horticultural products; improved harvesting methods; identification of optimal fertilizer application for food crops; research into diseases and pests affecting various commodities; and training of individuals in areas such as tracking and tracing and administration of new vaccines.

ACAAF funding has also supported the development and testing of a number of new, value-added products, technologies and processes, in support of both commercial and non-commercial applications, including grape and grapevine tracking and tracing technologies; a commercially viable advanced technology for processing of canola seeds; and, development of value-added Angus beef products.

ACAAF has supported collaboration and information-sharing among industry participants, especially under its 3<sup>rd</sup> Pillar (Sharing Information to Advance the Sector), and its Collective Outcomes projects, which necessitated collaboration among commodity groups and industry councils in different regions.

Assessment of long-term Program impacts was limited, in part, because the Program was evaluated in its fourth year of implementation when project long-term impacts will not be manifest for a number of years and, in part, because of gaps in Program performance information

Overall, the evaluation found that, while the ACAAf Program has contributed to the development of new or innovative products, process or technologies, there are only a few cases to date where this has been translated into the intended results of

commercialization of products, expansion into new markets or wide-spread adoption by the industry of non-commercial innovations.

Some ACAAF projects have the potential for significant returns on investment. For example, potential increased annual revenue from co-cultivation of blueberries with woodlots could amount to \$8.5 M annually. It is estimated that an innovative canola seed processing technology will increase processing revenue from \$370/MT to \$600/MT (2007 prices). This project has already led to the establishment of a commercial-scale pilot processing plant and licensing of the technology in two foreign markets.

A number of other projects have significant potential for integration into industry or government initiatives or in the long-term. For example, several projects involve the design and implementation of pilot tracking and tracing initiatives for a commodity (e.g., grapes & grapevines).

While it is too early yet to determine whether these projects will form the basis for industry-wide or government-led tracking and traceability programs, several look promising and project proponents report they are confident of their success.

The program has been less successful in engaging the sector in the public policy dialogue, a program objective. Few ACAAF projects were aimed at this type of outcome and there are other fora through which industry contributes to policy development.

ACAAF likely has had a positive net economic benefit. A 2008 study of the economic impacts of Saskatchewan ACAAF projects revealed that, based on impacts on provincial and national GDP, an ACAAF investment of \$4.3M in Saskatchewan resulted in a gross impact of \$5.4M and a net positive impact of \$1.1M.

The evaluation identified a number of projects whose alignment with ACAAF's objectives is questionable. As well, numerous projects were not classified under the proper ACAAF pillar.

### *Cost Effectiveness*

Expenditures lagged significantly behind projections for the first year of the Program due to a delay in funding approval and the redesign of the Program in its early stages.

Cost efficiency across regions is variable; ACAAF guidelines did not impose a ceiling on the amount of funds that can be allocated to administration costs by industry councils. While overall, the Program is within an acceptable range for administrative costs (5% to 15%), administrative costs exceeded this range in several provinces.

ACAAF has been successful at leveraging contributions from industry and other federal, provincial, territorial, and municipal governments. This leveraging was noted as a key characteristic for successful projects.

## Recommendations

1. The ADM, Farm Financial Programs Branch, should:
  - a. Clarify objectives and expected outcomes for the new adaptation programming; and
  - b. Ensure that the program focuses on areas of need that are not addressed by other Growing Forward innovation programming.
2. In keeping with the 2008 Treasury Board *Policy on Transfer Payments*, the ADM, Farm Financial Programs Branch, should ensure contribution agreements, not grants, are used for delivery of the new adaptation programming funding by both the Department and its delivery agents.
3. The ADM, Farm Financial Programs Branch, should ensure that contribution agreements with delivery agents also clearly articulate:
  - a. Principles that delivery agents are expected to adhere to and eligibility criteria that they are expected to follow in the selection and management of ACAAf projects; and
  - b. Performance information, i.e., results and financial information, they must collect and provide to AAFC, and the timelines for its provision.
4. The ADM, Farm Financial Programs Branch, should ensure that all Adaptation programming contribution agreements with funding recipients clearly articulate the purpose and expected results of AAFC's funding and the performance, financial and other information that must be provided by recipients and timelines for its provision.

## **1.0 INTRODUCTION**

### **1.1 Evaluation Context**

#### **1.1.1 Study Background**

This report presents the results of an evaluation of the Advancing Canadian Agriculture and Agri-Food (ACAAF) Program.

ACAAF is a five year, \$240 million program launched in April 2004 aimed at helping position Canada's agriculture and agri-food to seize new opportunities to enhance its competitiveness. The evaluation covers the years 2004 to 2008 and was conducted between July 2008 and March 2009.

#### **1.1.2 Study Objectives**

The evaluation was carried out to help inform the renewal of ACAAf adaptation programming. Its focus is on the continued need for the program and on program performance.

### **1.2 ACAAf Program Profile**

#### **1.2.1 Background**

ACAAF was developed as a successor to the Canadian Adaptation and Rural Development (CARD) program and was designed to assist the agriculture and agri-food industry within Canada to adapt to major changes in the agricultural sector.

Over the past decade, the agriculture and agri-food industry within Canada has faced changes in technology, growing concerns about the environment and consumer health, a more competitive global market, and a decline in Canada's rural population.

#### **1.2.2 Key Objectives**

ACAAF is designed to work with the agricultural and agri-food industry and with stakeholders to identify and address key emerging issues. It is also designed to broaden collaboration across regional industry councils and among industry groups.

According to ACAAf foundation documents, there is "recognition of the need for flexibility to respond to emerging issues while advancing progress toward AAFC's 2003-04 to 2008-09 Agriculture Policy Framework (APF) objectives, since regions are at different stages of development and require the capacity to respond to specific provincial and territorial needs.

Key strategic objectives of the ACAAf Program are to:

- expand the agricultural sector's capacity to respond to current and emerging issues;
- position the sector well to capture market opportunities;

- engage the sector actively and continuously to contribute to future agriculture and agri-food policy directions; and
- integrate sector-led projects tested and piloted under ACAAF into future federal, provincial, or territorial government or industry initiatives.

### 1.2.3 Program Design and Delivery

ACAAF is designed to achieve its key objectives through funding of projects under the following three pillars:<sup>1,2,3</sup>

**Industry-Led Solutions to Emerging Issues**, which supports activities designed to expand the agriculture and agri-food sector's capacity to respond to current and emerging issues and to seize new opportunities through the implementation of national, multi-regional and regional projects that test new ideas and approaches. This pillar also supports development of new and/or value-added products, processes and technologies that enhance the sustainability of the agriculture and agri-food sector.

**Capturing Market Opportunities by Advancing Research Results**, which supports initiatives that transfer research results from governments, industry, and educational institutions into future market opportunities. This pillar is also aimed at leveraging research results into market opportunities, strengthening the capacity of the sector to commercialize research results, encouraging business growth and improving the sector's competitiveness.

**Sharing Information to Advance the Sector** which supports projects that are designed to disseminate timely and effective information throughout the agricultural and agri-food sector including strengthening the sector's ability to participate in the policy dialogue and shape the future of the sector. This pillar also focuses on enabling the sector to gather, analyze, and share information.

Table 1, below, shows ACAAF funded projects under each of these pillars over the years 2003 to 2008.

**Table 1: Distribution of ACAAF Projects by Pillar<sup>4</sup>**

Pillar 1	Pillar 2	Pillar 3
613	136	394

---

1 ACAAF Mid Point Assessment Report May 2007.

2 ACAAF Impact Evaluation Planning Study April 2008

3 Data re from the ACAAF database as of June 30, 2008

4 ACAAF website <http://www4.agr.gc.ca/AAFC-AAC/display-afficher.do?id=1182434406559&lang=eng>

ACAAF programming is delivered in one of three ways:

- a component directly delivered by AAFC's Adaptation Division for "national projects";
- regional delivery by fourteen industry councils (one in each of nine provinces, two in Québec and three in the territories); and
- "Collective Outcome" projects where two or more regional industry councils work in collaboration to administer and deliver the projects.

The Adaptation Division of the Farm Financial Programs Branch of AAFC manages projects that are of national scope. Staff from other AAFC branches with expertise in relevant areas assess project proposals for possible overlap or duplication with existing APF or other government programs. A Review Committee reviews and recommends national projects for funding approval

Fourteen industry councils are supported to deliver funding to regional project recipients. Each is governed by a Board of Directors comprised of members of the agriculture value-chain, from producer organizations to marketing and consumer agencies. In most regions, board members are nominated by their commodity group or association. The number of board members varies from one council to another, with appointed terms that vary in length, depending on the by-laws of each council. ACAAF Program guidelines require councils to have a youth member (between the age of 18 and 39) on the Board of Directors. Councils also include non-voting federal government and provincial government representatives as *ex-officio* members.

Industry councils also manage and deliver multi-regional or "Collective Outcome" (CO) projects. COs are projects that are led by an industry council in one region with one or more other industry councils contributing funding. CO project results are shared with all regions that contribute. To encourage the delivery of CO projects, councils are reimbursed for 50% of their contributions from a \$4 million allocation for COs under ACAAF.

Each project is subject to a review and approval process. Application, review and approval processes vary across national and industry councils. To receive ACAAF funding, applications must comply with ACAAF-specified principles and be consistent with the Program's selection criteria.

Each industry council assesses needs and priorities within their respective province/territory and allocates ACAAF funding to projects best suited to address these needs.

#### **1.2.4 Beneficiaries and Stakeholders**

Intended beneficiaries of the ACAAF Program are individuals, organizations, associations, for-profit companies, universities, colleges, and cooperatives that comprise the agriculture and agri-food sector in Canada.

Primary stakeholders for the ACAA program include both AAFC and the agricultural and agri-food sectors in each region. ACAA complements federal/provincial/territorial priorities under the Agricultural Policy Framework (APF).

### 1.2.5 Resources

The initial allocation for the ACAA Program was \$51 million per year, (\$255 million over the five year term from April 1, 2004 to March 31, 2009). Funding was reduced by \$15M in the first year of the program due to implementation delays, i.e., \$240 million in total, or \$48 million per year over the five-year period.

Table 2 depicts ACAA expenditures as of August 10, 2009. 24.7 FTE's were allocated to the ACAA program. As can be seen, based on the actual expenditures to date, the program has lapsed approximately \$36 million.

**Table 2: ACAA Expenditures by Year (as of August 10, 2009)**

Vote 1	2004 – 05	2005 - 06	2006 – 07	2007 – 08	2008 – 09	Total 5 Yrs.	Variance*
Operating	\$330,678	\$182,014	\$234,827	\$158,363	\$111,430	\$1,017,312	\$4,232,688
Salary	1,412,069	1,338,685	1,532,205	1,627,397	1,888,478	\$7,798,834	(\$1,798,834)
EBP*	282,414	267,737	306,441	325,479	377,696	\$1,559,767	(\$359,767)
Enabling Teams	850,000	850,000	850,000	850,000	850,000	\$4,250,000	\$0
Sub-Total	\$2,875,161	\$2,638,436	\$2,923,473	\$2,961,239	\$3,227,603	\$14,625,913	\$2,074,087
Grants	\$27,348,670	\$30,300,000	\$31,934,428	\$31,823,946	\$31,937,787	\$153,344,831	\$21,655,169
Contributions	1,880,508	7,122,756	6,249,575	10,480,624	13,272,318	\$39,005,780	\$11,994,220
Sub-Total	\$29,229,178	\$37,422,756	\$38,184,003	\$42,304,570	\$45,210,104	\$192,350,611	\$33,649,389
Vote 1 & Vote 10	\$32,104,339	\$40,061,192	\$41,107,476	\$45,265,809	\$48,437,708	\$206,976,524	\$35,723,476

\*EBP – Employee Benefits Plan

\*\* The variance of \$35.7 million reflects the amount lapsed by the program because of a delay in implementation due to a need to re-design the program from CARD and from a delay in funding approval until November 2004.

Source: AAFC, Adaptation Division, Agriculture Transformation Programs Directorate

### 1.3 Logic Model and Expected Results

As stated above, the ACAA objectives identified at the time the program was approved were to:

- expand the sector's capacity to respond to current and emerging issues;

- position the sector well to capture market opportunities;
- engage the sector actively and continuously to contribute to future agriculture and agri-food policy directions; and
- integrate sector-led projects tested and piloted under ACAAF into future federal, provincial, or territorial government or industry initiatives.

During the planning phase of the evaluation, it was determined that it would be difficult, if not impossible, to assess ACAAF's performance against these objectives as they are stated very broadly and appear aimed at developing industry capacity and self-sufficiency, whereas ACAAF's activities seemed directed at support for specific innovation or adaptation projects; and there is no baseline data to provide a basis for measuring changes in industry "capacity" or "positioning" over the life of ACAAF. Consequently, the ACAAF Program Logic Model was updated at the time of the evaluation to better reflect the likely outcomes of the Program's activities. Intended expected results are identified in the short-term, intermediate-term and long-term.<sup>5</sup>

With the exception of some of funding for national projects, ACAAF is delivered as a grant or unconditional transfer payment program.

According to Program documentation, in the short-term, funded projects should result in:

- solutions to current or emerging issues;
- knowledge gained through strategic/market analyses;
- collaborations, partnerships and information sharing within the sector and with other sectors; and
- development of new and/or value-added products, process and technologies, some of which will subsequently continue on the path to commercialization.

In the longer-term, ACAAF is intended to:

- lead to an accelerated rate of conversion of applied research into commercial products;
- expand new or existing products into new markets;
- accelerate the adoption of innovative products, processes or technologies by the sector; and
- integrate solutions to current or emerging issues into industry strategies or government policies or programming.

---

<sup>5</sup> ACAAF Evaluation Terms of Reference, July 2008



## **2.0 METHODOLOGY**

This chapter outlines the issues addressed in the evaluation and the various lines of research conducted to address these issues.

### **2.1 Evaluation Issues**

The evaluation addressed the following issues

#### *Rationale and Relevance*

- Relevance of ACAAF to current government & AAFC priorities
- Continued need for ACAAF by industry
- Clarity/plausibility of links between program activities and outcomes (Program theory)

#### *Performance*

- Effectiveness of partnerships with regional Industry Councils for program delivery
- Contribution of ACAAF to industry-led solutions to current/emerging issues
- Integration of solutions into govt. policies or industry strategies
- Collaboration/information-sharing
- Introduction of new or value-added products, technologies or processes
- Conversion of research into market opportunities
- Longer-term economic or other benefits of projects
- Program delivery cost-efficiency
- Success in leveraging industry and other contributions

### **2.2 Methodology Overview**

The evaluation used the following lines of evidence:

#### *Literature Review*

The literature review provided an understanding of current practices and lessons learned in the area of agri-innovation and of how government can best support the competitiveness of the agricultural sector, especially in the areas of adaptation and innovation.

### *Document Review*

A large number of documents were reviewed as a part of this evaluation, including program foundational documents, management and operational documents and other studies and discussion papers of relevance to evaluation issues.

### *Sample Project File Review (SPR)*

A random, statistically significant sample of 258 active or completed projects as of June 30, 2008 was drawn from the ACAAF projects database.<sup>6</sup> Hardcopy files of these projects were reviewed for information on program activities and outputs, and program performance and cost-effectiveness.

### *ACAAF Project Database and Data Analysis*

Tombstone and performance data from the ACAAF Extranet project database as of March 31, 2008 was analysed with respect to project outcome reporting; project breakdown by pillar and region; and project areas of activity.

Financial data for the ACAAF Program was reviewed and analysed to obtain administration costs, planned versus actual expenditures and funds carried over.

Extranet was analysed for long-term impact information on ACAAF as the long-term tracking data is found on the same database.

### *Key Informant Interviews*

Key informant interviews (KII) were conducted with ACAAF program stakeholders (e.g., AAFC industry council board members, project managers etc.). Interviews were conducted by telephone or in person.

### *Case Studies*

Case studies were conducted of five projects that were selected from the sample project file review. Three of these are completed projects and the other two are to be completed within the next few months. Case studies were especially useful for providing information on achievement of short-term outcomes, longer term impacts (financial and/or economic impact, incremental changes in sales and/or market coverage, job creation, and productivity) and on lessons learned from projects.

### *Economic Impact Study*

An analysis of the provincial and extra-provincial economic impacts of ACAAF projects was carried out by the Adaptation Council of Saskatchewan in the summer of 2008. The results of this study informed the discussion of long-term impacts.

---

<sup>6</sup> The sample frame excluded projects started during the last two fiscal years (i.e., 2007-08 and 2008-09) of the program due to potentially limited intended outcome achievement data availability on these projects. The sample has a confidence level of 95%.

## **2.3 Challenges and Limitations**

Key challenges and limitations of this study were:

- Timing: ACAAF had a relatively slow start and insufficient time had passed to allow for evaluation of projects funded in the last years of the Program. Consequently, the evaluation focused on the initial years of the Program.
- Gaps in project information: The lack of information on the status of funded projects, i.e., achievement of short and long-term outcomes. To address this gap, a significant amount of time was spent on the validation of individual project financial and other data (also to address inconsistency of information from various sources, i.e., file review, ACAAF database, and ACAAF cumulative revenues and expenses report).
- Limited sample project review: projects that started during the last two fiscal years (2007-08 and 2008-09) were excluded from the project file review due to potentially limited intended outcome achievement data.
- Limited ability to assess the achievement of ACAAF long-term outcomes due to the long time-frame required for achievement of these outcomes, for example, commercialization of innovative products, technologies or processes can take a number of years. These projects represent about 30% of ACAAF projects.
- Time constraints precluded the use of some methodologies, such as a survey of proponents of completed projects, that would have provided some quantitative data on long-term outcomes.
- Key informant interviews represent the perspective of the stakeholder group as represented by the interviewees. These are not necessarily objective.

## 3.0 Evaluation Findings

### 3.1 Relevance and Rationale

This section examines the rationale for ACAAF and whether it is aligned to current federal priorities in the area of science and innovation.

***ACAAF's mandate originates in the Canadian Adaptation and Rural Development Program (CARD) and the CARD II program.***

Consultations with stakeholders across Canada near the end of CARD II programming identified a need for continued support to industry for the testing of new and innovative ideas or approaches to address current or emerging issues, such as loss of market share to imports; economic losses (from disease, etc.), and to help industry take advantage of new opportunities to transform research into commercially viable products or to expand into new markets.

ACAAF was implemented at the same time as AAFC's new policy framework, the APF; while ACAAF was not part of the APF, federal and provincial governments perceived ACAAF as a program that would permit quick direction of resources to new or emerging issues, and that would act as a "path-finding" vehicle for highlighting priority areas for future federal / provincial / territorial policy frameworks.

***The need for the ACAAF Program is not well elaborated within program foundation documents.***

ACAAF Program documents cite a need to transform the results of agricultural research into market opportunities. However, no information is provided on the particular market failures faced by the Canadian agricultural sector in general and those specific to different members of the value chain that inhibit the transformation of research into new or improved products, processes or technologies. On the whole, foundation documents for the ACAAF program lack a thorough analysis of the need for the program, resulting in very broad Program objectives and funding terms and conditions.

***Research carried out as part of the evaluation confirms the significance of several barriers to innovation in Canada's agricultural sector, including lack of resources, comparative disadvantages with Europe and the U.S. in terms of market size and a failure to transfer knowledge to the industry.***

A review of literature pertinent to innovation within the Canadian agriculture and agri-food sector identified several key important obstacles to agricultural innovation in Canada, including:

- a lack of financial resources within the private sector to invest in innovation;
- the long gestation period for innovation;

- a comparative disadvantage with European and US firms, in terms of market size;
- a failure to transfer knowledge from knowledge institutions (universities, public research organisations) to end users;
- intellectual property and regulatory barriers; and
- non-tariff barriers to export markets.<sup>7,8</sup>

Additionally, almost two-thirds of key informants interviewed as part of the evaluation identified funding/resources, training issues, and regional/farm disparities as the main challenges facing the agricultural sector in its efforts to become more innovative. Most interviewees reported a continued need for ACAAf-type funding to support innovation projects.

Other countries have taken steps to address some or all of these barriers and challenges. For example, the EU has established “free trade” zones, harmonized many agricultural and food standards, and undertaken initiatives to improve knowledge dissemination throughout the agricultural sector. China has established a very comprehensive strategy for developing its biotechnology sector. The strategy includes knowledge development, industry development and sustained development phases.<sup>9</sup> The Netherlands has established “Food Valley”, a network innovation system that fosters ties among stakeholders along the value chain and the innovation chain, so as to effectively transfer knowledge, science and technology to the industry.<sup>10</sup>

Overall, the literature supports the view that there is a continued need for government support of agricultural innovation in Canada.

***The links between ACAAf Program objectives, activities, outputs / funded projects, and outcomes are unclear.***

Program fundamental documents indicate that ACAAf is aimed at “expanding the industry’s capacity to respond to current or emerging issues”, “positioning the sector to capture market opportunities and enabling the sector to be “actively and continuously engaged to contribute to future policy directions.”

These statements would seem to imply that the long-term goal of ACAAf is to build sector capacity to the point where it could assume an active strategy of innovation without ongoing government assistance. However, based on a review of Program documentation and a review of funded files, it is not clear that projects funded by the Program are likely to bring this about.

---

<sup>7</sup> Labrecque J. et al, *Directions for Support of Canadian Agricultural Competitiveness: Lessons from Theory and Practice on Innovation and Adaptation*. January, 2009-02-18

<sup>8</sup> Gray, Richard, *Best Practices for Canadian Agricultural innovation: lessons from Theory and Practice*. December, 2008

<sup>9</sup> Richard Gray, *ibid*

<sup>10</sup> Labrecque, J. et al, *op cit*

As previously noted, the lack of resources is a major barrier to innovation in the Canadian agriculture and agri-food sector. Two other related barriers are the “thick border” with the U.S. (various non-tariff barriers to free trade, such as Country-of-Origin Labelling requirements) and the lack of economies of scale for Canadian firms, who must distribute costs of innovation over much smaller markets than, for example, U.S. firms.<sup>11</sup>

***The ACAA Program continues to be a means of achieving federal priorities in the areas of science, technology and innovation.***

ACAAF's activities and objectives continue to be relevant in the context of current federal priorities. The ACCAF Program:

- supports agricultural innovation and is in line with Government of Canada priorities to “help businesses within Canada’s traditional industries to innovate” (November 2008 Speech from the Throne);
- addresses emerging issues in the agriculture and agri-food sector which complements federal support to industries in difficulty, including agriculture, and the protection of families and communities dependent on those industries (January 2009 Speech from the Throne); and
- aligns with the Federal Science and Technology Strategy (2006) in that it seeks to translate knowledge into commercial applications, encourages private investment into research and development and supports collaboration among government, education and the private sectors.

***ACAAF is well-positioned with respect to existing AAFC innovation programming.***

AAFC staff administers a number of other programs that support innovation within the agricultural sector. These programs are focused on either basic or applied research (the discovery stage of innovation) or on the commercialization phase of product, technology and/or process innovations. While this type of innovation is also a primary focus of ACAA, the latter is targeted at the pre-commercialization phase of product / technology / process innovation rather than at the discovery or commercialization phases (Table 3). Consequently, ACAA was designed to work in a complementary fashion with these other programs.

---

<sup>11</sup> Best Practices for Canadian Agricultural Innovation: Lessons from Theory and Practice, 2008, Richard Gray

**Table 3: Placement of AAFC Innovation Program Funding**

Discovery Phase	Pre-Adoption /Pre-Commercialization Phase	Commercialization Phase
Matching Investment Initiative		Farm Credit Loans
Agriculture Bio-Products Innovation Program	Advancing Canadian Agriculture and Agri-Food (ACAAF) Program	Agri-Opportunities
		Agri-Innovation Fund
AAFC in-house Science Research		CAFI – International Market Development

A review of cross-participation in ACAAF and other departmental innovation programs indicates that only a small number of recipients funded by the Matching Investment Initiative or Agri-Opportunities also received funding from ACAAF. However, 27 of 73 recipients funded under the Canadian Agricultural and Food International Program also received funding from ACAAF.<sup>12</sup>

ACAAF funds a wide range of projects besides product / technology / process innovation, including organizational innovation / adaptation; intra- and inter-sectoral collaboration, and information dissemination. Of the 258 projects in the sample project file review, 77 projects involved new or value-added products, technologies or processes.

***There is some potential for ACAAF to overlap with proposed Growing Forward innovation programming.***

*Growing Forward*, the Department's new multi-year framework for federal / provincial / territorial collaboration on agriculture and agri-food priorities provides for one integrated innovation program that is designed to address barriers at each stage of the innovation continuum, from discovery through to commercialization. The Program recognizes that ACAAF has supported and, if renewed, will continue to support regional and national path finding projects that complement the proposed GF innovation programming.

There exists some potential for overlap / duplication between ACAAF and other *Growing Forward* innovation programming, unless there is a clear articulation of the respective spheres of activity. Overlap / duplication is likely to be less of a problem at the regional level, where ACAAF can indeed act as a path finding, quick response program that focuses on regional issues and opportunities.

---

<sup>12</sup> Comparative Review of Agri-Innovation, PriceWaterHouseCoopers, 2008.

***Synergy exists between ACAAf and provincial programs; however, there is some potential for overlap/duplication with provincial innovation programming.***

There are 47 provincial innovation / adaptation programs across Canada that are similar to ACAAf in terms of objectives and/or target groups. This is not surprising in that agriculture is an area of shared jurisdiction between the federal and provincial/territorial governments. In some cases, industry councils administer some or all provincial innovation programs as well as ACAAf and are well-suited to determine the best fit for a funding proposal or whether a project is eligible for funding from both ACAAf and provincial programs.

ACAAf guidelines do not preclude the possibility of applicants receiving funds from provincial or municipal governments; on the contrary, the ability of ACAAf to leverage funds from other levels of government is one measure of the Program's success.

In regions where industry councils do not deliver provincial programs or where they deliver only some of the available programs, there is the potential for similar projects being funded under ACAAf and provincial programs, respectively.

Under *Growing Forward*, provinces will have the option of continuing existing programs or establishing new programs under the cost-matching structure. Interviews with AAFC staff suggest a need for ACAAf to fill "gaps" in provincial and cost-shared innovation programming. While this will no doubt be the case if ACAAf is renewed, especially in those provinces/territories that provide no or limited support for innovation, it will be important to ensure that it works in synergy with provincial innovation programs.

### **3.2 Program Activities and Outputs**

#### **3.2.1 ACAAf Coverage: Regions and Value-Chain**

***ACAAf funding is widely and equitably dispersed across Canada's regions.***

Of the total ACAAf budget for the period from 2003/04 to 2007/08, 20% was allocated at the start of the Program for national projects and the remaining 80% was allocated to regional industry councils, based on each region's share of Canadian farm receipts, for regional and Collective Outcome (CO) projects.

Between April 2004 and March 2008, AAFC's Adaptation Division had approved 113 national ACAAf projects and regional industry councils had approved 1030 regional projects. Figure 2 illustrates the distribution of projects and actual expenditures in each region and for national projects.

National projects account for 10% of projects and 21% of program expenditures to date, in keeping with the initial funding allocation.



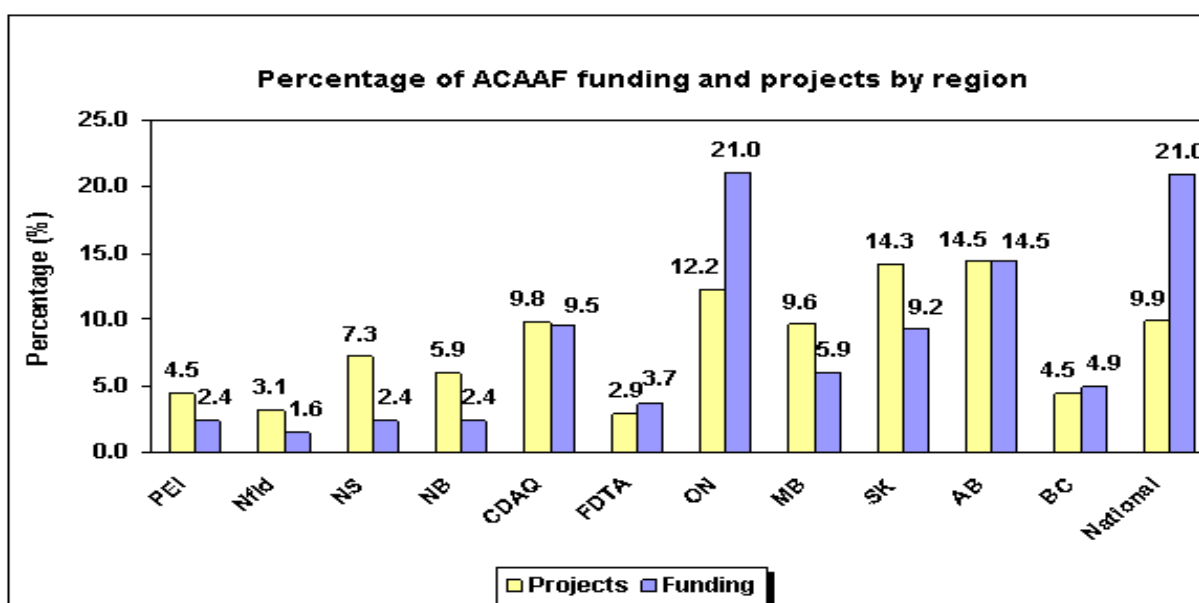
On a regional basis, major program participants were:

- recipients in Quebec with 13% of projects and 13% of the total ACAAF funding;
- recipients in Ontario, with 12% of projects and 21% of total ACAAF funding;
- recipients in Alberta, with 14.5% of projects and 14.5% of total ACAAF funding; and
- recipients in Saskatchewan, with 14% of projects and 9% of total ACAAF funding.

Of the remaining regions, Manitoba accounted for the largest share of projects (10%) and 6% of program funding. One percent (1%) of projects was located in the Territories.

As can be seen from Figure 1, smaller regions tended to fund more projects (on a proportional basis) than larger regions, but the projects were of lower dollar value.

**Figure 1: Percentage of ACAAF Funding and Projects by Region**



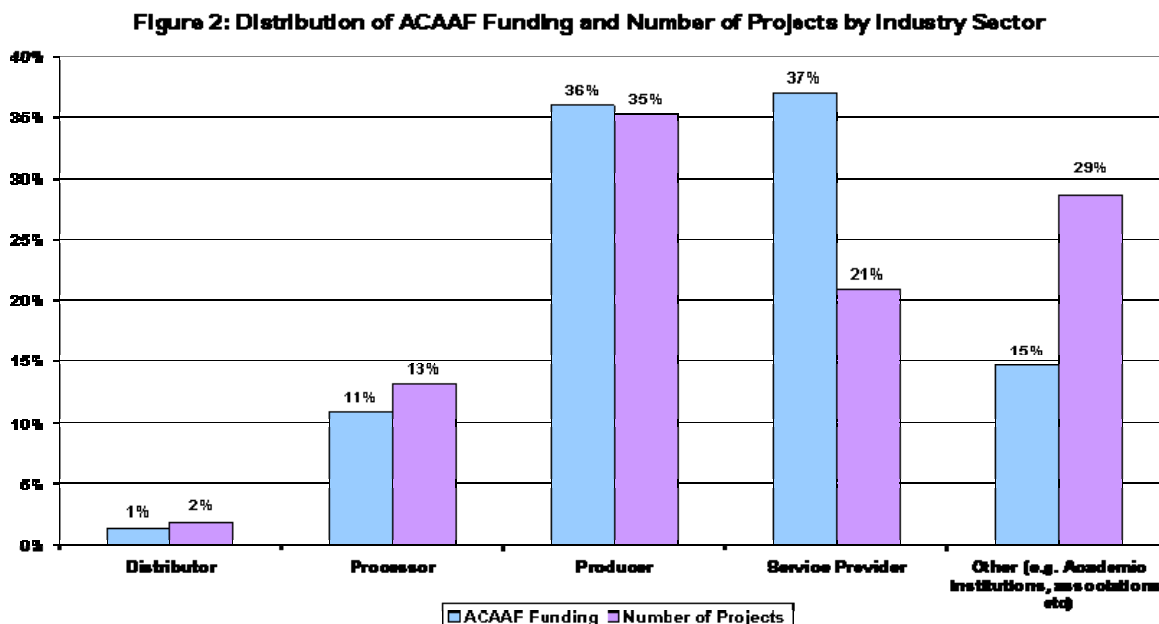
Source: Sample Project File Review Database

### ***ACAAF projects are representative of the entire value chain.***

One of the expectations for ACAAF, identified in key Program documents, was that it would target the entire value chain, including producers, processors and distributors. The Program has been successful in meeting this expectation; nevertheless, some sub-sectors have received greater support than others. As Figure 2 illustrates, the producer sector (individuals or associations) accounts for 35% of all ACAAF projects

and 36% of ACAAf funding (producers account for only 16% of the sector's contribution to GDP).<sup>13</sup>

**Figure 2: Distribution of ACAAf Funding and Projects by Industry Sector**



Source: Sample Project File Review Database

Processors, by contrast, accounted for 13% of projects and 11% of ACAAf project funding. This is lower than processors' share of the sector's contribution to GDP (25%). As well, processors account for significant shares of ACAAf funding in four regions – Quebec (28%), Manitoba (62%), BC (46%) and Saskatchewan (28%). In all of the other regions and at the level of national projects, processors' share of ACAAf funding ranges from 0% to 8%. It is noteworthy in this regard that, in Quebec, processors have their own industry council (the FDTA). In five of the other regions processors are not represented on industry council Boards.

Evidence from the literature suggests that the low rate of participation in ACAAf by processors may be due in part to external factors, (i.e., a lower overall rate of innovation among processors in Canada, compared to the European Union and a lower rate of uptake of government funding by processors across all economic sectors in Canada).<sup>14</sup>

<sup>13</sup> An overview of the Canadian Agricultural System: 2007, AAFC, Research and Analysis Division

<sup>14</sup> Labreque, Joanne et al. *Directions for Support of Canadian Agricultural Competitiveness: Lessons from Theory and Practice on Innovation and Adaptation*. January 2009.

### 3.2.2 Short-Term Outcomes

ACAAF-funded projects were assessed against the following short-term outcomes:

- Industry-led solutions to current and emerging issues and opportunities (Pillar 1);
- Collaboration/information sharing (Pillar 3);
- Introduction of value-added products, technologies and processes (Pillar 1); and
- Identification of products or markets with commercial potential (Pillar 2).

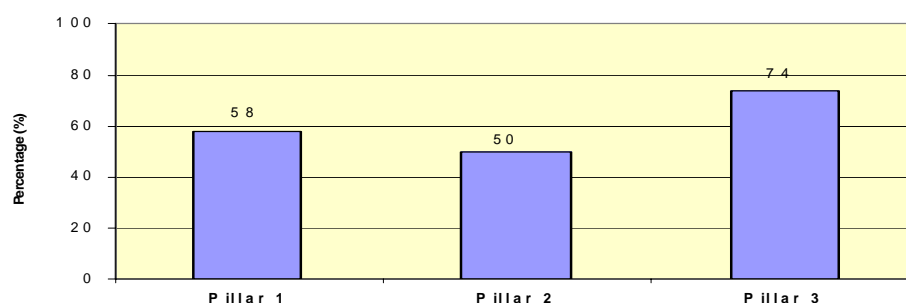
***Reporting on short-term outcomes is incomplete and, where completed, is inadequate for some projects.***

A review of documentation between industry councils and funding recipients suggests that industry councils require that funding recipients submit progress and financial reports and a final report on funded activities that provides information on what the project achieved. Industry councils are responsible for ensuring these reports are collected for regional projects and that financial and outcome information is contained in them and, subsequently, uploaded onto the ACAA database. AAFC is responsible for obtaining this information and entering it into the database for national projects.

The evaluation found that 64% of ACAA project files on the program database contained reports on project outcomes. Pillar 3 projects had the highest rate of project reporting, at 74%. However, a significant number of Pillar 3 projects involved conferences or workshops where the short-term outcomes were the holding of the event, for which outcomes reporting is straight forward.

In contrast, less than 60% of completed Pillar 1 and Pillar 2 projects had outcomes information on the Program database (Figure 3). Proponents receiving funding for multiple projects were slightly less likely to report on outcomes than those proponents that received funding for only one project. It is important to note that funding to industry councils for regional projects is provided in the form of a grant (i.e., an unconditional transfer payment).

**Figure 3: Completed ACAA Projects Reporting Short-Term Outcomes**



Source: Analysis of ACAA Program Database, September, 2008

The evaluation also found that, among those funding recipients providing reports on performance, the information was of limited value as, in some cases, only output information was provided and, in other cases, information was predominantly qualitative rather than quantitative. For example, information was provided regarding achievements such as training of individuals, presentation of results at a conference, as opposed to, e.g. number of individuals trained or reach, e.g., no of conference participants, rate of uptake of a new process, technology or other innovation.

Table 4 below provides information on project outcome reporting for completed regional and national projects. Eight-four percent of completed projects had performance information on outcomes compared to 62% for regional projects.

Reporting practices varied significantly between industry councils and ranged from reports on 25% to 100% of funded projects. This variance appears to reflect the extent to which individual industry councils follow up with recipients to ensure they provide required performance information.

**Table 4: Outcome Reporting by Completed Regional and National Projects**

Region	Percentage of Projects with outcome reporting
Québec (FDTA)	100%
PEI	86%
Saskatchewan	72%
New Brunswick	71%
Alberta	66%
Manitoba	66%
Nova Scotia	66%
Yukon	57%
Newfoundland	53%
Nunavut	50%
Ontario	42%
British Columbia	34%
Québec (CDAQ)	33%
NWT	25%
<b>Total Regional Projects</b>	<b>62%</b>
National	84%
<b>Total: National &amp; Regional</b>	<b>64%</b>

Source: Analysis of Program Database, September, 2008

***ACAAF has supported a number of successful projects aimed at addressing emerging issues.***

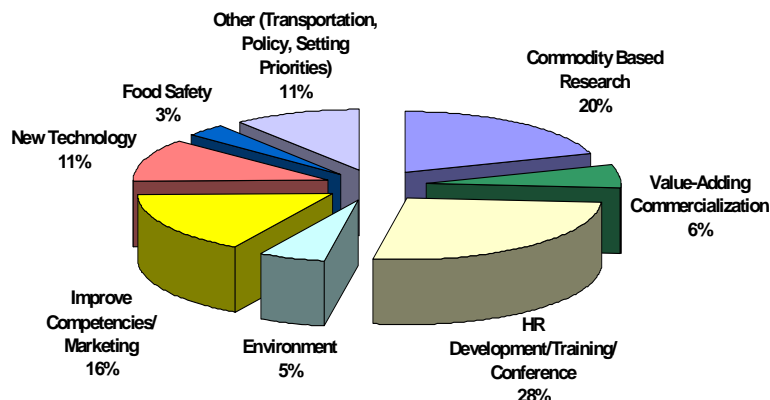
Industry-led Solutions to Emerging Issues, i.e.. ACAAF Pillar 1, involved the majority of both projects funded (67%) and expenditures (76%) under ACAAF. However, while ACAAF Pillar 1 projects were intended to contribute to the development of responses by

industry to emerging issues and opportunities, a number of projects aimed at this outcome were funded under Pillars 2 and 3.

The definition of “industry-led solutions to emerging issues” in Program documents is so broad that most, if not all, projects under all three pillars could meet this objective. Consequently, analysis of Pillar 1 projects provides only an approximate picture of the extent to which projects and funding were aimed at this outcome.

As Figure 4 illustrates, ACAAf projects addressed a wide range of agriculture and agri-food sector issues, including environmental and food safety issues, research into diseases and pests affecting various commodities, policy and strategic issues, and training of individuals in areas such as tracking and tracing and administration of new vaccines.

**Figure 4: Breakdown of Issues Addressed in Projects**



Source: Sample Project File Review Database

The majority (76%) of ACAAf-funded projects were implemented as intended, based on the sample project file review. However, implementation success rates varied depending on the issue addressed. This included 83% of projects focused on human resource development / training and 81% of projects aimed at improving competencies or consumer awareness through information dissemination. However, according to recipient reporting, only 60% of food safety projects were implemented as intended.

There are many examples of ACAAf projects that addressed significant issues including projects that examined:

- impacts of global warming on needle retention in Christmas trees destined for export;
- cattle losses resulting from viral infections;
- environmental impacts of excessive fertilizer use;
- economic losses from parasitic invasion of honey bee hives;
- a shortage of qualified individuals trained in HACCP food safety protocol;

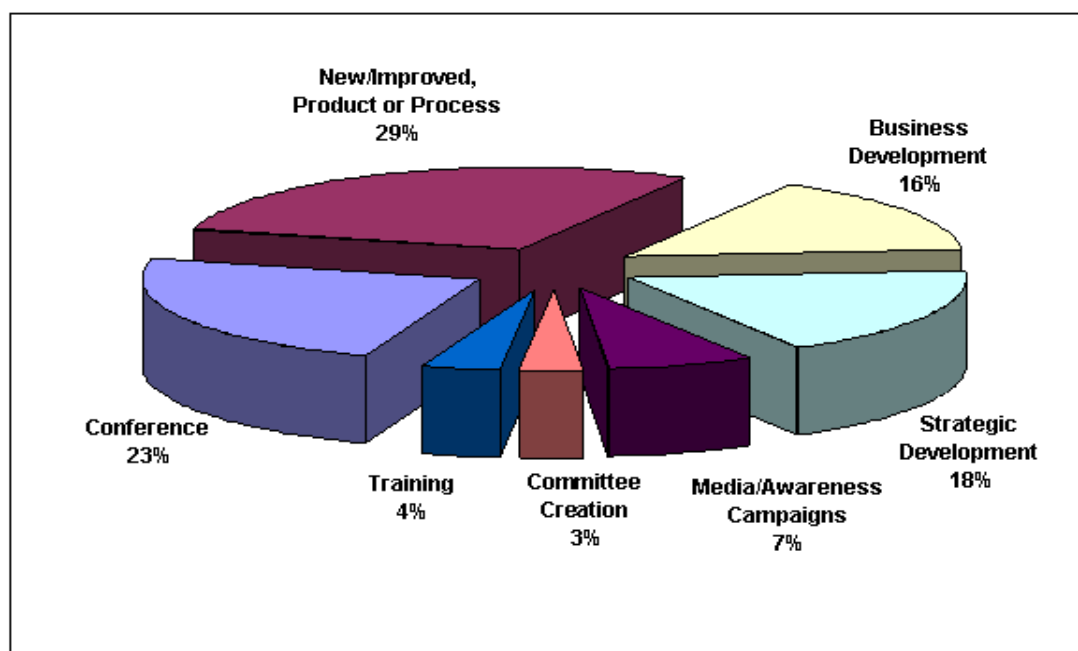
- economic losses to the grape-growing sector from imported pests and disease; and
- year-round availability of premium lamb products, through improved breeding strategies.

***ACAAF contributed to the development and testing of a number of new, value-added products, technologies and processes, in support of both commercial and non-commercial applications.***

Of the files included in the sample project file review database, 30% (77) related to development of new or value-added products, processes or technologies, as noted in Figure 5 below.

Of the 77 funded projects that focused on new or improved product or processes, 25 were aimed at commercialization (Pillar 2) while 52 were being developed on a non-commercial basis with the intent of widespread adoption across a commodity or other group (Pillar 1).

**Figure 5: Distribution of Projects by Category**



Source: Sample Project File Review Database

Most of these funded projects involved analyses of the technical, marketing or financial feasibility of potential new products, processes or technology; or adaptation and/or installation of innovative production or processing equipment or technologies. In the vast majority of cases, it is too early to determine whether they will result in commercial success or in widespread adoption by the target sector group.

Projects involving new or value-added products, processes or technologies included:

- the development of value-added products made with Angus beef; and
- the development of a grass-based fuel pellet for wood stoves.
- the development of a high quality, high yield, disease-resistant asparagus variety; and
- frost abatement technology for application to vineyards in southern Ontario.

***ACAAF has supported pre-commercialization activities, with a majority of completed projects reporting achievement of their short-term objectives.***

In the analysis of the sample project file review database, the pre-commercialization stream included 25 product, technology or process development projects described in the previous section, as well as 13 business development or marketing projects in support of commercialization. Just under one-half of these projects (17/38) were completed at the time of the evaluation; 11 reported that they achieved most or all of their objectives.

Examples of pre-commercialization projects include:

- improved canola processing to produce valued protein concentrates, resulting in commercialization and large-scale production;
- marketing of flour made from grape pomace;
- determining the viability of extracting potassium phosphate from biodiesel production and marketing it as a fertilizer;
- value-added consumer products from Angus beef;
- adaptation of pie dough rounder to meet volume and quality requirements; and
- development of a liquid manure injector system suitable for forage, hay and pasture fields.

Of these projects, three are underway and have not yet reported on final results. Of the remaining three, funded recipients reported that two (the canola project and the pie dough rounder) achieved most or all of their objectives product development is being undertaken by the proponent of the third project. The canola project has resulted in a commercial-scale pilot plant and in the sale of licences abroad for use of the processing technology.

***ACAAF is supporting activities that promote collaboration & information-sharing among industry participants.***

A goal of ACCAF Pillar 3 is collaboration and sharing information to advance the sector, while also assisting the sector to proactively develop responses based on new information to enable it to take advantage of immediate and emerging opportunities. Projects were to focus on timely and effective information gathering, analysis and dissemination.

One measure of collaboration is projects that involve multiple partners. The evaluation found that, of the sample project files reviewed, 78% had multiple funding partners. As well, Collective Outcome projects, which require collaboration among commodity groups and industry councils in different regions, represented roughly 20% of all regional projects. Additionally, 23% of total funded projects were conferences, which by their very nature involve information sharing.

While all ACAAF projects are to promote collaboration and information-sharing, to some extent, Pillar 3 projects specifically target these outcomes. Nearly 80% of completed Pillar III projects were implemented as intended. In most cases, this meant that the conferences, workshops or other information dissemination were carried out as planned. For example, 92 % of ACAAF-funded conferences achieved their short-term outcomes; not surprising given that success for these projects is measured as the conduct of the conference itself.

Other forms of information dissemination were less successful; for example, recipients reported that 60% of training projects achieved their objectives.

Nevertheless, overall, the success rate for these types of projects appears to have been quite high. Examples of successful projects include:

- research into, and dissemination of findings on farming best practices in Eastern Canada to complement previous research in Western Canada;
- development of a HACCP training program for the food manufacturing industry and delivery to over 430 individuals;
- research into characteristics of demand characteristics for pork products by various ethnic groups;
- conduct of a workshop to develop a strategic plan for the Maritime beef industry; and
- development of a training program for dairy herdspersons.

***ACAAF has not been successful in bringing about increased engagement of the sector in public policy dialogue.***

Few ACAAF projects were aimed at this outcome. An evaluation case study involved a project that was aimed at strengthening industry capacity in this regard; its results are discussed below.

### **Canada West Project to Develop the Functional Food and Natural Health Product Industry (Case Study 5)**

This project intended, in part, to develop the functional food and natural health product industry in Western Canada; to strengthen relationships among provincial organisations; and to lead the process to develop a consistent structure across the four western provinces for dealing with regulatory issues and education. The project proponent was the BC Functional Food and Nutraceutical Network (BCFFNN).



The project involved two conferences, 44 planned workshops and eight videoconferences, as well as development of a web site.

According to the funding recipient, the project resulted in 21 of 44 planned workshops and no videoconferences. The project did result in a 25% increase in membership in the WCFN from 2006 to 2007. As well, according to the recipient, it contributed to improved relationships of WCFN with members and partners and increased knowledge of the industry on a range of regulatory and other issues. There is little evidence to date, however, that the project has resulted in the functional food and natural food industry in Western Canada establishing structures and processes to enable it to be engaged on an ongoing basis in regulatory or other policy issues affecting the industry. This may be due, in part, to the limited amount of time that has elapsed since the start of the project.

### ***Many projects of limited impact under Pillar 3***

While there were numerous worthwhile projects under this pillar, the sample project file review revealed that, in a number of cases, ACAAF was funding regular, annual conferences of agricultural groups or associations, rather than information sharing designed to address specific emerging issues.

While the conferences were of value to the groups involved, support under Pillar 3 was intended to address current or emerging issues and opportunities, rather than to be source of funding for ongoing events.

### ***ACAAF has been successful in expanding the number of collective outcomes projects over the past five years***

Collective outcome projects (COs) are funded by more than one industry council and require collaboration on the part of participating industry councils and commodity groups or other organisations within each of the participating regions. The number of COs supported by ACAAF has increased steadily over the five years of the Program.

COs were reported as having reduced the incidence of different regions carrying out similar projects and having supported the sharing of best practices among regions. As such, they have the potential for significantly improving the Program's cost-effectiveness while contributing to the Program goals of collaboration and information-sharing. Eighty percent of the completed collective outcome projects (15) in the sample project file review had been implemented as intended.

CO projects addressed a variety of issues and / or opportunities of importance such as:

- innovative uses of dairy by-products;
- non-chemical methods for cinch bug control;
- forest/ blueberry co-production model;
- viability assessments for various grains & oilseeds in Atlantic Canada; and
- reduction in dairy farm greenhouse gas emissions.

While constituting a minority of funded projects (20% of total regional projects), CO projects are generally seen by industry councils and departmental staff to be of value. The increase in the number of collective outcome projects from Program years one to three and continued consistent use in years four and five (as detailed in Table 5 below) provides further evidence of the perceived value of CO projects.

**Table 5: Total Approved Collective Outcome Projects by Year**

Fiscal Year	2003-04	2004-05	2005-06	2006-07	2007-08	Total
Collective outcome projects approved	0	16	53	45	43	157

Source: Adaptation Division, ACAAf Extranet data base

***A number of projects have been approved under ACAAf that do not appear to be aligned with program objectives.***

While recognizing that both the ACAAf regional and national offices take significant steps to ensure due diligence in their review and approval of projects, the evaluation's review of sample projects identified a few projects with questionable alignment to ACAAf objectives, including:

- participation of an industry council at a meeting of another council on the differences between ACAAf and its predecessor program;
- funding a salaried position to administer AAFC's Advanced Payments Program (APP) and the Spring Credit Advance Program (SCAP) ;
- support for consumer awareness media campaigns that promoted use of commodities or other products from a specific region, contrary to program guidelines;
- projects that were aimed primarily at marketing products in other countries; and
- support for numerous annual conferences of commodity or other associations. As previously noted, roughly 20% of ACAAf projects involved conferences.

### **3.2.3 Long-Term Outcomes**

The ACAAf logic model identifies four long-term outcomes against which the Program was assessed. These are:

- adoption by the sector of innovative, value-added products, technologies or processes;
- conversion of applied research into new products;
- expansion into new markets; and
- strategies to respond to emerging issues developed and implemented by government or industry.

The evaluation attempted to assess the extent progress towards these outcomes but was limited by the following:

- timing, i.e., the evaluation was conducted in the Program's fourth year of operation. For many ACAAF-funded projects, especially those involving the development and adoption or commercialization of new products or expansion into new markets, long-term impacts will not be manifest for a number of years;
- limited tracking and performance data, further discussed below; and
- limited timeframe for the evaluation, limiting evaluation research.

Nevertheless, based on a limited number of case studies, a review of available data, the sample project file review and an economic impact study of ACAAF and CARD projects carried out in Saskatchewan in 2008, the following are the findings with respect to long-term impacts of ACAAF.

***Tracking of long-term outcomes of selected completed projects has not been fully implemented.***

Following recommendations of the November 2003 CARD II evaluation, ACAAF implemented a program of tracking long-term outcomes for a sample of projects in 2006. The long-term tracking (LTT) was to provide a basis for assessing broader economic and other impacts of projects and was expected to be a data source for the summative evaluation. LTT was to be done for selected projects in addition to the project progress and summary reports provided by funding recipients.

LTT is in place for regional and national projects. Industry councils are to collect and pass on LTT information from regional project proponents to AAFC National Headquarters while AAFC, in turn, collects LTT information on national projects.

In 2006, National Headquarters put significant effort into the development of the LTT initiatives and into providing industry councils with the guidance and tools required to implement the system, including a long-term tracking manual, performance indicators and web-based data collection templates. As well, they provided workshops to train industry council staff on the LTT system. At the time of the workshops, many of the councils selected projects for inclusion in the database.

LTT was implemented on a sample taken for projects in excess of \$100,000. Projects over \$100k represent approximately 90% of all program funding and 38% of total projects. Guidelines originally required the tracking of ten projects per large council and five projects per small council. These requirements were later reduced by two projects and one project respectively in order to reduce reporting burdens on the councils. For national projects, the goal remained the selection and monitoring of a minimum of 25 projects.

Proponents of projects selected for LTT were to provide yearly reports on longer-term outcomes, starting one year following the project's completion and to continue three to five years following project completion.

As Table 6 illustrates, there are 30 national and 57 regional projects in the program database selected for long-term tracking. Of these, 37 are completed projects as of October, 2008, for which there should be at least one long-term tracking report in the database. However, at the time of the evaluation, information was available for only 67% of national and 41% of regional LTT projects.

**Table 6: Longer-term Project Tracking Results to Date**

Project Type	Total Projects	Completed by end of October 2007	# of Completed Projects with Reporting	% of Completed Projects with Result Reporting
National	30	15	10	67%
Regional	57	22	9	41%
<b>Total</b>	<b>87</b>	<b>37</b>	<b>19</b>	<b>51%</b>

Source: ACAAF Database: Long-term Tracking Database as of January 22, 2009

Issues such as ACAAF staff turnover and insufficient resources are reported to have contributed to less monitoring and follow-up of LTT than anticipated. Also, AAFC and industry councils are heavily dependent on the cooperation of project proponents for the success of LTT and lack the means of ensuring that cooperation.

***Long-term tracking information collected to date is of variable quality.***

The overall quality of the information contained within the LTT database is, for the purposes of assessing outcomes, somewhat variable. In some cases, long-term performance indicators (i.e., "reports completed and submitted to ACAAF") are of little value for assessing broader economic or other impacts. In other cases, the performance indicators (development of new markets, manufacturing and sales increases, employment increases, and the implementation of plans) are appropriate, but the information provided by proponents in relation to the indicators is of varying quality. In many cases, reports detail factors limiting the achievement of results; in some cases, projects are closed to future LTT.

***While ACAAF has contributed to the development of new or innovative products, process or technologies, there are few instances to date where this has translated into commercialization of products, expansion into new markets or wide-spread adoption by the industry of non-commercial innovations.***

Seventy-seven ACAAF projects involved in the development of innovative products, processes or technologies, of which 52 were non-commercial in nature, intended for

adoption by producers, processors or others in the value chain and 25 were aimed at commercialization. Another 13 projects were business development projects, aimed at expanded markets for products in development or already developed.

The program database review and the sample project file review provided few examples of projects that had moved along the innovation continuum to either successful commercialization or widespread adoption of products or processes by the sector. A possible explanation is that the time frame from pre-commercialization to commercialization can take a number of years and can be affected by external market or other factors.

To supplement the findings from the sample project review, we undertook case studies on five projects to assess progress towards expected outcomes. These projects were selected from the sample project file review. Of these case studies, four involved the development of innovative products, processes or technologies or the expansion of products into new markets.

### **Case Study 1: Co-Cultivation of Blueberries and Forest**

This project received \$143,000 from the ACAAF program. It explored the potential for co-cultivation of blueberries with managed forests in the Lac-St-Jean region of Quebec.

This region has long been a major wood producing region and a source of both wild and, more recently, cultivated blueberries. The two sectors have come into competition for use of increasingly limited land suitable for both commodities.

The project involved the establishment of various configurations of blueberry and managed forests and assessing them in terms of blueberry productivity, forest management issues and increased pollination by native insects (currently, bees are imported to provide pollination). As well, the project examined impacts of pesticide use on local waterways.

Although the project will not be completed until late 2009, early results suggest that the project may exceed expectations, opening up an additional 8,500ha. of land for blueberry production, representing an estimated additional \$8.5M in revenue for local blueberry producers.

The project also promises to provide important data regarding the potential for pollination by local insects and information on impacts of pesticide use that is applicable to other blueberry-growing regions.

## **Case Study 2: Aqueous Fractionation of Oil-extracted Canola**

Conventional solvent-based processing of canola oil yields 40% high-valued oil and 60% low-valued meal that trades at 60% of the value of soybean.

With \$500,000 support from the ACAAF Program, the funding recipient developed a process for secondary fractionation of canola that results in a much higher proportion of high-valued protein products. ACAAF provided funding for production of sufficient product for testing by the feed in industry in Canada and in several export markets and for completion of the engineering design of a commercial demonstration production line for the key protein product.

The project has led to the establishment of a spin-off company that has licensed the technology and is implementing the production line. Licensing agreements have been established with firms in Europe and South America. In the course of the project, an improved technology was discovered that maintained extraction efficiencies without loss of protein solubility, increasing potential operating margins.

The recipient did not provide estimates of the long-term economic benefits of this project, as they are on the cusp of commercialization; however, based on 2007 prices, it is estimated that the fractionation process could increase canola revenues from \$370/MT to \$600/MT and margins from \$20/MT to \$150/MT.

## **Case Study 3: Adaptation of Pie Molding Equipment**

This project was part of a large expansion and relocation of a Quebec bakery that was operating at full capacity and that could neither meet market demand nor support expansion into new markets.

ACAAF provided the bakery with a loan for the adaptation of pie molding equipment so as to enable it to produce home style pies in large quantities without compromising quality standards. Home style crust is very susceptible to damage when handled by standard equipment.

The adaptation also allowed the bakery to expand the number of pie diameters it could produce and to inject its own fresh fruits individually, rather than pre-mixed fruits. The total cost of the pie mold equipment and adaptation was \$216K, of which ACAAF provided \$76K. This was the only component of the \$3M expansion which met ACAAF innovation criteria. The remainder of the expansion cost was funded by a number of private and government sources.

The bakery's sales have increased by 33% since the expansion and are expected to increase by 10% to 15% over the next five years. The number of employees has increased from 45 to 60.

The bakery has also expanded its markets to all regions of Quebec and is expanding into the Ontario market. Operating margins have increased by 5% following the expansion.

While ACAAF contributed only a small part of the funding, the adapted equipment was essential to the overall success of this venture.

#### **Case Study 4: Manitoba Made Marketplace**

This project, which is led by the Manitoba Food Processors, is designed to increase value-added processing of Manitoba agricultural commodities through a program that offers mentoring and support for commercialization of new food products. Activities include product evaluation, food manufacturing and marketing training and food commercialization cost-sharing (package design, promotional materials, market strategies, etc.).

To date the project has supported 120 companies. Project sizes ranged from \$100 to \$10K. Ninety-five percent of companies supported by the program have launched a new product. ACAAF has contributed a total of \$300k to projects, while the industry has provided \$1.2M.

A planned economic evaluation has not yet been completed; however, the project has resulted in increased sales and/or market entry for over 100 small and medium-sized companies and in the launch of several Manitoba products into regional and national markets. One participant has had their products accepted by a large retail grocery chain.

These are just a few examples of projects that have the potential for high ratios of benefits to costs.

Full implementation of LTT should result in more detailed information on these and selected other projects that have been identified as having potential for significant economic or other impacts in the longer-term.

#### ***Some ACAAF projects have been integrated into ongoing sector or government initiatives.***

Of the 258 files included in the sample project file review, 50 were identified as the types of projects that could lead to an ongoing industry strategic initiative or to a government policy or program initiative. For example, several projects involved the design and implementation of pilot tracking and tracing initiatives for a commodity (e.g., grapes & grapevines). It is too soon to determine whether the technologies and

processes adopted for these projects will form the basis for industry-wide or government-led tracking and traceability programs.

A number of ACAAF projects have been integrated into industry initiatives, including the following:

- establishment of an ongoing dairy herdsperson training program at a provincial community college;
- establishment of the Maritime Beef Council, supported by three provincial organisations;
- integration of an ACAAF HACCP pilot training program into an ongoing web-based diploma program; and
- developmental work towards a national voluntary Johne's disease control program.

***Limited research available suggests that ACAAF funded projects have a net positive economic impact.***

No study has been conducted of the overall economic impact of ACAAF. However, the Agricultural Council of Saskatchewan, ACAAF's delivery partner in Saskatchewan, commissioned a study in 2008 of the economic impacts of CARD and ACAAF funded projects in that province<sup>15</sup>. The project team obtained information on incremental economic activity from a survey of 154 proponents of CARD and/or ACAAF projects and analysed the direct, indirect and induced economic impacts of these projects on Saskatchewan's economy and that of Canada as a whole.

Results indicate that ACAAF's investment of approximately \$4.3M in these projects resulted in economic output of \$4.7M in Saskatchewan and \$12.8M in Canada as a whole. The impact on Gross Domestic Product (GDP) amounted to \$2M in Saskatchewan and \$5.4M in Canada as a whole.

The impact on GDP is a better measure of the net economic impact of CARD and ACAAF. Based on the impact of ACAAF projects on GDP, ACAAF generated a positive benefit to cost ratio of \$1.1M for the projects in question.

Assuming these results can be generalized to other regions and to national projects, they suggest that the investment in ACAAF is yielding a net positive return.

### **3.2.4 Effectiveness of Partnerships with Industry Councils**

An intended outcome of the ACAAF Program was to build on and improve the effectiveness of the partnerships established under the CARD program with industry councils for the delivery of regional adaptation programming. In this section, we look at the success of the program in this regard, based on:

- review of the ACAAF program database;

---

<sup>15</sup> Agricultural Council of Saskatchewan, Economic Impact Study, 2008.



- sample projects review;
- review of long-term tracking data;
- interviews with AAFC and current and past industry council officials; and
- review of industry council's business processes and tools.

***ACAAF industry councils have been successful delivery partners.***

Most industry council members are representatives of the key producer groups in the regions. Thus, they have comprehensive knowledge of the current and emerging issues the industry groups in their respective regions are facing. Industry councils meet regularly with industry groups, and promote collaboration and information-sharing, including sharing the results of ACAAf-funded projects. The councils are also increasingly collaborating with one another, especially in the context of collective outcomes.

Regional council staff works with applicants and potential project proponents to ensure consideration of their applications and/or to improve the potential for success of the project. In some regions, industry councils administer other federal and/or provincial programs and are able to direct applications to the most appropriate funding source. Even where they do not, however, council staff is knowledgeable regarding other federal and provincial programs in the region and exercise due diligence to ensure applicants are directed to the “best-fit” program. Finally, most of the larger councils meet at least monthly – more frequently when required – resulting in timely approval of projects (in some cases, projects have been approved within a couple of weeks).

***Project monitoring and reporting by industry councils is a concern.***

Project monitoring and reporting is a concern for several reasons. There are, at times, significant delays in the uploading of project descriptive, financial and performance information to the ACAAf extranet. Most regions upload this on a bi-monthly basis; thus the extranet data is out of date. Project financial data is not integrated into the ACAAf financial management system, making it difficult to reconcile program financial data with project data or to relate expenditures to results

***Accountability for results is a concern.***

A concern with respect to the Program is that, although the industry councils are responsible for making selection decisions with regard to regional and Collective Outcome projects, under the current funding mechanism, they are not accountable for monitoring and reporting the results achieved.

Some interviewees suggested that some industry council board members have limited knowledge of results achieved by the majority projects funded.

Council representatives report that they collect performance information solely to comply with AAFC requirements, not to monitor ACAAf performance. While the details

and impacts of some highly successful projects are communicated through newsletters and other communication, industry councils are not responsible for systematically collecting information and reporting on ACAAF-funded projects in their respective regions.

***The use of grants as a funding mechanism is a cause for concern.***

ACAAF provides funding to the industry councils in each region in the form of grants or unconditional transfer payments. Industry councils then fund projects through agreements or loans to ultimate funding recipients. Funding conditions are communicated to industry councils in the form of funding award letters from AAFC that refer to planned activities, roles and responsibilities that have been outlined in proposals the Department has received from industry councils.

Industry councils indicate in their funding proposals that they agree to deliver the program in accordance with the terms and conditions stated in approved ACAAF terms and conditions. AAFC has limited ability to enforce compliance with commitments as funding is provided through a grant, or unconditional transfer payment. In a few cases, councils have funded projects despite ACAAF objections on the grounds of eligibility, mostly in the case of projects which are supporting regional marketing or international marketing of products or commodities.

Concerns also exist with project monitoring and reporting, especially performance reporting with respect to regional projects. If these concerns are to be addressed, a more robust funding mechanism will be required, such as contributions funding.

The October 2008 federal *Transfer Payment Policy* calls for the use of contribution funding to recipients who further distribute funding to one or more persons or entities. In such cases, contribution funding is accompanied by a Contribution Agreement to be signed by both the Minister (or delegate) and the funding recipient and in which performance expectations, reporting requirements and funding conditions are outlined. These agreements also provide for the conduct of recipient audits<sup>16</sup>

### **3.3 Cost Effectiveness**

***Actual expenditures under ACAAF were less than planned expenditures for the first year of the program.***

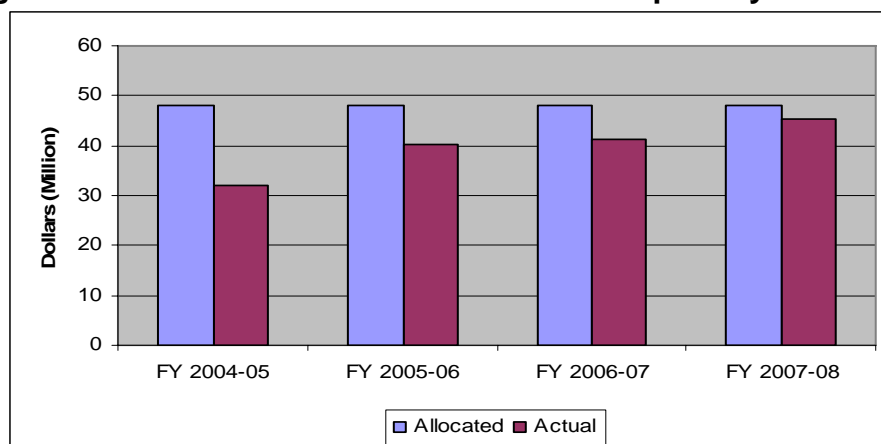
As per Figure 6, actual ACAAF expenditures were less than the allocated budget in the first two years of the program, while in 2006-07 and 2007-08, expenditures equalled or exceeded the annual allocation. As of March 31, 2008, 14% of allocated funds remained uncommitted.

---

<sup>16</sup> Directive on Transfer Payments, Appendix B: Core Design Elements, Government of Canada.

The gap is likely due to a number of factors, including start-up delays due to the re-design of the program from CARD and a delay in receiving funding approval until November 2004.

**Figure 6: Total Allocated vs. Actual Dollars Spent by Fiscal Year**



Source: Financial Data Provided by AAFC's Adaptation Division

***Administrative cost-efficiency of Industry Council delivery of ACAAf varies across regions.***

Currently, there is no ceiling on the amount that can be allocated for Program administration costs by industry councils.

The cumulative average for direct administrative costs for all regions was 12% as of March 2008. When the cost of AAFC oversight is added, the cumulative average administrative cost for all regions is approximately 13%.

Administrative costs vary widely across industry councils, ranging from 6% in B.C. and Ontario to around 20% in Newfoundland and Manitoba.

AAFC HQ costs for administering national projects are estimated at 12%.<sup>17</sup>

While there is no clear standard for Program administration costs, ranges of 5% to 15% are typical depending on the type of program and delivery model.

ACAAF administrative costs are within this range; however, the high costs of administration in some regions are a cause for concern.

---

<sup>17</sup> Excludes the territories and AAFC oversight/management costs (estimated at 6% ).

***ACAAF has been successful in leveraging contributions from industry and provincial/municipal governments.***

Leveraging ACAAf funds with other external resources demonstrates the commitment and importance of projects to the various stakeholders. Key stakeholders interviewed suggested that leveraging is one of the key characteristics of successful projects. Figure 7 provides a breakdown of funding sources by ACAAf Pillar for the projects reviewed during the course of the evaluation.

The overall ratio of ACAAf to industry cash commitments is 1:0.62 – that is, for every dollar in ACAAf funding, industry provides \$.62. The ratio improves to 1:0.85 when cash commitments from other federal departments and provincial/municipal governments are included.

For regional projects administered by industry councils the ratio of ACAAf to industry cash commitments is 1:0.87, which is better than for national projects (1:0.16).<sup>18</sup> The overall ratio for regional projects improves further to 1:1.2 when cash commitments from other federal departments and provincial/municipal governments are included.

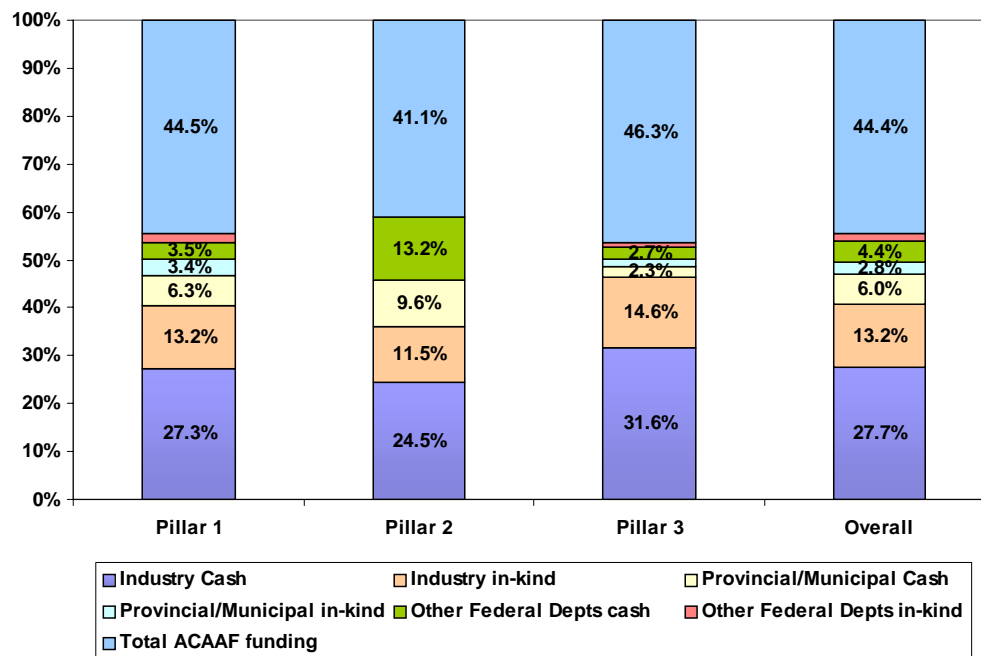
The lower ratios of ACAAf funding to funding from other sources for regional projects likely reflects the fact that most regional industry councils generally require industry financial cash commitments prior to funding projects, whereas these are not mandatory (though encouraged) for national projects.<sup>19</sup>

---

<sup>18</sup> Includes other federal, provincial and municipal governments.

<sup>19</sup> Industry financial commitments were not mandatory for national projects. However, priority was given to projects which had either industry cash commitment and/or industry in-kind contributions.

**Figure 7: Sources of funding by ACAAF Pillar**



Source: Sample Project File Review database

## 4.0 Conclusions and Recommendations

### 4.1 Conclusions

#### 4.1.1 Relevance and Rationale

ACAAF has a mandate that originates in the CARD and CARD II programs to support adaptation, innovation and competitiveness in the agricultural and agri-food sector.

Research carried out as part of the evaluation confirms that several market failures continue to act as barriers to innovation in Canada's agricultural sector. These barriers include a lack of resources, comparative disadvantages with Europe and the US in terms of market size and a failure to transfer knowledge from research organisations to the industry and the domestic market.

The need for the ACAA Program is not well elaborated within program foundation documents nor are these documents clear regarding the specific market failures that ACAA is intended to address. Consequently, ACAA's objectives are broadly stated and the links between ACAA program objectives and program activities are unclear. The program was implemented for a fixed five-year term, in part, to reduce industry expectations of ongoing funding.

Overall, ACAA continues to advance federal priorities in the areas of science, technology and innovation through its alignment with the principles and objectives of key documents such as the 2008 *Speech from the Throne* and the 2006 *Federal Science and Technology Strategy* as well as AAFC's Science and Innovation Strategy and the *Growing Forward* multilateral priorities.

While ACAA is well-positioned with respect to existing AAFC innovation programming, potential exists for overlap with *Growing Forward* programming in support of innovation, particularly in regard to ACAA national projects. Overlap/duplication is likely to be less of a problem at the regional level, where ACAA can act as a pathfinding, quick response program that focuses on regional issues and opportunities.

Potential exists for synergy with provincial innovation programming; however, there is also the potential, in some provinces, for overlap or duplication. The development of the *Growing Forward* policy framework provides an opportunity to coordinate federal and provincial programs to ensure complementarity rather than duplication.

#### **4.1.2 Program Performance: Activities and Outputs**

ACAAF funding is widely and equitably dispersed across Canada's regions. Of the total ACAAf budget, 20% was initially allocated for national projects and the remainder (80%) was allocated to industry councils, based on each region's share of Canadian farm receipts. Actual expenditures to date have been in line with these allocations.

ACAAF projects are representative of the entire value chain; however, processors are not strongly represented on the industry councils in most regions and participate in ACAAf at a lower rate than one might have expected, given their share of the sector's contribution to GDP. The low rate of participation may be due, in part to the characteristics of the processing industry.

For the most part, ACAAf projects appear to be aligned with the Program's theory and intended outcomes. Nevertheless, the extensive file review conducted during the course of the evaluation found a number of projects were funded in areas that are not clearly aligned to Program objectives and expected outcomes, for example projects relating to consumer awareness media campaigns, overseas product marketing, and annual general meetings of industry associations.

#### **4.1.3 Program Performance: Short-Term outcomes**

Reporting on short-term project outcomes is incomplete and inadequate. The evaluation found that less than two-thirds (64%) of ACAAf-funded projects on the program database contained reports on short-term outcomes and that, where information was available, it tended to be qualitative rather quantitative and, in some cases, described outputs rather than outcomes.

Nevertheless, the sample project file review revealed that the majority of ACAAf projects (76%) have made some progress towards achieving their short-term outcomes.

These outcomes included the testing of improved varieties of horticultural products; improved harvesting methods; identification of optimal fertilizer application for food crops; research into diseases and pests affecting various commodities; and training of individuals in areas such as tracking and tracing and administration of new vaccines.

ACAAF also supported the development and testing of a number of new, value-added products, technologies and processes, in support of both commercial and non-commercial applications, including grape and grapevine tracking and tracing technologies; a commercially viable advanced technology for processing of canola seeds and development of value-added Angus beef products.

As well, ACAAf has supported collaboration and information-sharing among industry participants, especially under its third Pillar, and through Collective Outcomes projects, which necessitated collaboration among commodity groups and industry councils in different regions. However, there is limited evidence that the program has resulted in

the industry engaging on an ongoing basis in contributing to the agricultural policy dialogue.

The evaluation identified projects whose alignment with ACAAF's objectives is questionable. As well, numerous projects were not aligned with the ACAAF pillar under which they were funded.

#### **4.1.4 Program Performance: Long-Term Outcomes**

The evaluation was limited in the extent to which it could evaluate ACAAF's achievement of long-term impacts, in part, because long-term impacts will not be manifest for a number of years for many projects, especially since the program experienced start-up delays. Further, as ACAAF's long-term tracking initiative has not been fully implemented, little information is available on long-term outcomes.

As well, the timeframe for the evaluation limited the amount of information that could be gathered on long-term impacts. Nevertheless, the evaluation found that, while ACAAF has contributed to the development of new or innovative products, process or technologies, there are only a few cases to date where these have translated into commercialization of products; expansion into new markets; or wide-spread adoption by the industry of non-commercial innovations.

Case studies carried out as part of the evaluation indicated that some ACAAF projects have the potential for significant returns on investment. For example, potential increased annual revenue from co-cultivation of blueberries with woodlots could amount to \$8.5 M annually and an innovative canola seed processing technology could increase revenue from \$370/MT to \$600/M.<sup>20</sup> This project has already led to the establishment of a commercial-scale pilot processing plant and licensing of the technology in two foreign markets.

No research has been conducted of the overall economic impacts of ACAAF across Canada. However, a study was carried out in 2008 of the economic impacts of ACAAF projects in Saskatchewan on that province and on Canada. The study revealed that, based on impacts on provincial and national GDP, an ACAAF investment of \$4.2M resulted in a net positive economic impact of \$3.2M.

The evaluation also identified a number of projects with significant potential for integration into industry or government initiatives or in the long-term. For example, several projects involved the design and implementation of pilot tracking and tracing initiatives for a commodity (e.g., grapes & grapevines). While it is too early yet to determine whether the technologies and processes adopted for these projects will form the basis for industry-wide or government-led tracking and traceability programs, several of these projects were very successful in achieving their short-term outcomes.

---

<sup>20</sup> Based on 2007 prices.



#### **4.1.5 Program Performance: Partnership with Industry Councils**

ACAAF industry councils have contributed to the successful delivery of ACAAF in a number of ways. Industry councils represent key producer groups in the regions and, to a lesser extent, of other groups along the value chain. They have comprehensive knowledge of issues faced by the industry in their respective regions. Industry councils meet regularly with industry groups and promote collaboration and information-sharing, including sharing the results of ACAAF-funded projects. The councils are also increasingly collaborative with one another, especially in the context of collective outcomes.

A number of issues have been noted with the current delivery model. There are significant delays in the uploading of project descriptive, financial and performance information to the ACAAF extranet. As well, project financial data is not integrated into the ACAAF financial management system, making it difficult to reconcile program financial data with project data or to relate expenditures to results (e.g., for different types of projects).

There are also concerns, regarding accountability for results of ACAAF. Although the industry councils are responsible for making selection decisions with regard to regional and CO projects, under current agreements they are not accountable for the results achieved by the program.

Underlying the two concerns above is a more fundamental issue – the use of grants as the funding mechanism for the regional industry councils. Given the changes to the federal *Transfer Payment Policy*, a more robust funding mechanism will be required.

#### **4.1.6 Cost- Effectiveness**

Actual expenditures under ACAAF lagged behind planned expenditures for the first year of the program. The lag in expenditures compared to allocations was due to a number of factors, including start-up delays due to the re-design of the program from CARD and a delay in receiving funding approval until November 2004. The implication of the variance in expenditures from allocations is that some industry councils will continue to fund projects under ACAAF well beyond the planned life of the program.

The cost-efficiency of industry council delivery of the ACAAF Program varies across regions. Administrative costs were found to vary widely between regional industry councils and ranged from 6% for some councils to approximately 20% for others. AAFC HQ costs for administering national projects are estimated at 12%. The direct cumulative average administrative cost for all regions was 12% as of March 2008.

ACAAF has been successful in leveraging contributions from industry and provincial/municipal governments. The overall ratio of ACAAF to industry cash commitments is 1:0.62 – that is, for every dollar in ACAAF funding industry provides

\$0.62. The overall ratio improves to 1:0.85 when cash commitments from other federal departments and provincial/municipal governments are included.

## **4.2 Recommendations**

1. The ADM, Farm Financial Programs Branch, should:
  - a. Clarify objectives and expected outcomes for the new adaptation programming; and
  - b. Ensure that the program focuses on areas of need that are not addressed by other *Growing Forward* innovation programming.

### ***Management Response:***

- a. The program theory was clarified in the fundamental documents and the Performance Measurement Strategy (PMS) for the new program. The outcomes were developed in consultation with the Office of Audit and Evaluation. *Target Date: May 28, 2009. This is now completed.*
  - b. Departmental Liaison Officers review all regional projects and advise Industry Councils on other federal programs available to industry in the regions to avoid any duplication of funding. Liaison Officers have been briefed to ensure a common understanding of their role. A similar approach will be adopted to ensure coherence between CAAP activities and the new Agri-Flex fund. *Target Date: Ongoing*
2. In keeping with the 2008 Treasury Board *Policy on Transfer Payments*, the ADM, Farm Financial Programs Branch, should ensure contribution agreements, not grants, are used for delivery of the new adaptation programming funding by both the Department and its delivery agents.

### ***Management Response:***

The next generation of adaptation programming (i.e., Canadian Agricultural Adaptation Program - CAAP) will be administered under contribution agreements with the 14 industry councils. A contribution agreement template is being developed. *Target Date: September 30, 2009. The Contribution agreement template is now with industry councils for comments.*

3. The ADM, Farm Financial Programs Branch, should ensure that contribution agreements with delivery agents also clearly articulate:
  - a. Principles that delivery agents are expected to adhere to and eligibility criteria that they are expected to follow in the selection and management of ACAAFF projects;

- b. Performance information, i.e., results and financial information, they must collect and provide to AAFC, and the timelines for its provision.

**Management Response:**

- a. The contribution agreements with Industry Councils will specify that projects have to be consistent with CAAP objectives, principles and criteria. Principles and criteria will be in the program guide which will be provided to all Industry Councils and will be posted on the program web site. *Target Date: Agreement and program guide to be ready September, 30, 2009.*
  - b. Contribution agreements will specify performance expectations, consistent with departmental templates and a series of clauses to ensure appropriate data collection to report on project / program results. *Target Date: Agreement to be ready September 30, 2009.*
4. The ADM, Farm Financial Programs Branch, should ensure that all Adaptation programming contribution agreements with funding recipients clearly articulate the purpose and expected results of AAFC's funding and the performance, financial and other information that must be provided by recipients and timelines for its provision.

**Management Response:**

Contribution agreements with Industry Councils will specify that agreements with ultimate recipients have to state the purpose of the funding and the requirements for the provision of performance information by recipients. Industry Councils will be provided with a template agreement to that effect, based on the AAFC template. Agreements between AAFC and Industry Councils will clearly articulate the same requirements, as well as those between AAFC and National recipients. *Target Date: Templates for agreements with ultimate recipients will be distributed to Industry Councils by October 15, 2009.*

## Appendix A: Evaluation Questions

### Rationale and Relevance

1. *What was the rationale for ACAAF? Is that rationale still valid? Is there a continued need for AAFC to provide funding help the industry adapt to new and emerging issues and concerns? To help the industry move along the innovation continuum? Are intended outcomes well-defined? Is there a plausible link between funded activities and intended outcomes? Is ACAAF aligned with federal government priorities?*
2. *How is ACAAF positioned with respect to other innovation programs offered by AAFC, by other federal departments, provincial governments? Is there complementarity? Is there overlap or duplication?*

### Impacts

3. *How effective has been the support to/advancement of industry councils in delivering ACAAF? Has it resulted in projects that are clearly aligned with ACAAF objectives and priorities? That have the most potential benefit to the sector?*
4. *How have ACAAF projects contributed to the development of responses by industry to emerging issues and opportunities? Have the results of projects been integrated into industry strategies or initiatives, or into government policies or programs?*
5. *To what extent have ACAAF projects led to the establishment of collaborations, partnerships & alliances? To the sharing of information across the sector, within sub-sectors or among partners? How enduring have these partnerships and alliances been? How has the sector benefited from these?*
6. *To what extent has ACAAF contributed to the sector advancing along the innovation continuum? Have ACAAF projects resulted in the identification of products or markets with potential for commercial exploitation? What have been the impacts in terms of conversion of research into commercial products? In terms of capturing market opportunities?*
7. *Have ACAAF projects resulted in the identification of new or improved production processes or technologies, or value-added products that could benefit the sector or groups within the sector? How has the sector benefited from these projects?*
8. *What are the characteristics of successful projects vs. unsuccessful projects?*
9. *Have there been any unexpected impacts resulting from ACAAF?*

## **Cost Effectiveness**

- 10. How cost-efficient has program delivery been?*
- 11. How effective is ACAAF at leveraging funds from industry and other levels of government?*
- 12. Where should future ACAAF funding be directed?*