2015 leading INNOVATION & SUSTAINABILITY

A CANADIAN AGRICULTURAL RESEARCH POLICY FOR THE 21ST CENTURY

CONFERENCE REPORT

AIC 2015: Leading Innovation and Sustainability

Executive Summary

Researchers, academics, government and industry representatives, and other agricultural research stakeholders came together on July 12-14 in Ottawa to help shape a modern agricultural research policy for Canada. Over two days, conference participants provided advice on key policy elements in three thematic areas:

1. Balancing Pure and Applied Research
2. Interdisciplinary Partnerships, Collaboration, and Cooperation
3. Issues in Public-Private Partnerships

Several overarching themes and points of consensus emerged during discussion that will guide the policy.

A national body is needed to develop an overall agricultural research agenda for Canada. Working with a wide range of stakeholders, the national body would set long-term strategic priorities to guide the allocation of research funds and personnel for the next ten to twenty years.

A national research agenda established with trust, transparency and accountability at its foundation, would help redress the balance between short-term fast-to-market and long-term basic research priorities. It would provide guidance for improved research funding models and establish opportunities for funders and research institutions to work effectively together.

Interdisciplinary and cross-sectoral partnerships with stable, predictable funding, and good administration and facilities provide the opportunity to pool resources and leads to more effective research that helps Canada meet its agricultural research potential. Participants called for:

- Enhanced stakeholder engagement, communication and research dissemination strategies.
- Flexibility in research, administrative and financial design.
- Reduction of administrative red tape discouraging collaboration.

Public-private partnerships (P3s) and public-private-producer partnerships (P4s) leverage funds and resources to encourage research collaboration. In order to mitigate risks, prior to the project beginning, agreements outlining the roles and responsibilities of partners, goals and outcomes of the project, intellectual property, and accountability mechanisms should be reached.

The Agricultural Institute of Canada will circulate the draft policy in August 2015 for comment, and a final policy will be released in September.

Background

AIC 2015, a conference of researchers, academics, producers, government representatives, and agricultural advocacy organizations, was the culmination of a two-year process of outreach and consultation by the Agricultural Institute of Canada to develop a Canadian agricultural research policy for the 21st century. Over two days, conference participants attended workshops where they provided us with advice based on their experiences and expertise on key elements of modern agricultural research policy.

Prior to the conference, AIC reached out to over 1,000 agricultural research stakeholders, inviting them to participate in a consultation survey to set the framework for our conference discussions. Their input formed the basis of our conference work and drove the key questions discussed in the workshop sessions in three individual, yet overlapping thematic areas:

1. Balancing Pure and Applied Research
2. Interdisciplinary Partnerships, Collaboration and Cooperation
3. Issues in Public-Private Partnerships.

This report summarizes their work which will contribute to the development of a modern agricultural research policy. AIC will circulate the draft policy to conference participants and stakeholders in August for comment, aiming for a final policy to be released in September.

WORKSHOP SESSION 1: SCIENTIFIC DISCOVERY AND APPLICATION: BALANCING PURE AND APPLIED RESEARCH

Summary of workshop discussions:

Public sector investment serves a critical role in promoting innovation in research areas where the private sector is unable to sustain long-term investment (ten to twenty years) - the time it takes much basic research to yield results. Applied research builds on basic/pure research and helps fuel innovation and the development of commercial applications. Neither sphere should exist in isolation of the other as both have valuable roles to play in the agriculture sector.

The pre-conference consultation identified the need for an overall agricultural research agenda for Canada, particularly for the next ten to twenty years, to guide the allocation of public and private resources so that these resources, and Canada's research capacity, are used effectively to meet the multiple (and inter-related) research needs of the sector.

Eight key questions were discussed within this theme.

A) Who are the stakeholders that should be involved in determining the overall agricultural research priority areas for Canada?

All workshop groups agreed that an overall agricultural research agenda for the next ten to twenty years with broad research priorities is needed. They also agreed that there is no existing national forum or framework to set research priorities. Such a process should include a broad range of actors with a stake in the research value chain.

Both federal and provincial governments, producers, and scientists in institutions and universities must be included. Participants also identified a much wider range of stakeholders throughout the value chain that should be included to ensure buy-in and ongoing commitment.

These include:

- research funders
- academics from other disciplines (e.g. environment, nutrition)
- growers
- consumers
- industry organizations
- processors
- environmental groups
- exporters and distributers
- industry organizations involved in technology transfer

Additionally, groups determined that a multi-disciplinary approach to identifying research stakeholders is needed.

All of which is to say, there is a consensus that a research vision that sets broad priorities is needed, and that a truly visionary research agenda with long-term buy-in and commitment must involve multiple stakeholders representing diverse interests.

B) What existing, improved or new mechanisms could be used to engage these stakeholders in informing research priority areas?

The need for a national body to set strategic priorities was frequently cited by participants who often referred to the Canadian Agriculture Research Council (CARC), disbanded by the federal government at the end of 2006, as an example. One group called for a CARC 2.0.

The national body would have a mission to provide a broad, proactive agricultural research vision and to set long-term national strategic research priorities or themes that are multidisciplinary in approach. It would take into account the evolution of values in population health, plant and animal health, and environmental health, and include robust feedback loops and communications mechanisms.

Considerations for a national vision include:

- Address commodity and non-commodity specific priorities.
- Encourage cross-cutting at a higher level.
- Address ecosystems and sustainability.
- Address nutrition and public health issues.

While there is broad support for a national body – whether it be structured like CARC, or some better version of CARC – others suggested that a second level in structure is needed – such as clusters by commodities made up of funders, research institutes and growers to set priorities within the broader framework. The inclusion of organizations representing emerging commodities, products and uses should also be considered.

Mechanisms to engage stakeholders like the existing value-chain roundtables, sector groups, and regional and national-focused meetings with all stakeholders could kick start the vision process. National meetings like AIC 2015, that bring together a range of expertise, experience and sectors, would be an important engagement strategy to both develop a research agenda, and provide an ongoing forum with stakeholders to identify common goals and priorities.

Webinars could provide more frequent opportunities to engage stakeholders and provide ongoing feedback loops among different stakeholders. But as one group pointed out, research gaps and missing stakeholders need to be identified before any work can be done.

Some felt that a national CARC-like body would need to be funded by diverse stakeholders to safeguard against political change or funding within groups.

In summary – there was strong consensus that a national body with a mission to develop a broad, proactive vision and set long term national strategic research priorities, in consultation with a wide range of stakeholders, would be necessary to establish a long-term agricultural research agenda.

C) What would be required to make the process of setting research priorities transparent and accountable to the stakeholders?

Trust, commitment and buy-in to a bigger strategic plan were consistent themes among participants. Opportunities for dialogue and forums for communications are necessary to establish this. Publicizing research successes engages the public and creates opportunities for greater buy-in while demonstrating accountability and transparency. However communications with broad stakeholders and the public requires attention to clear language for comprehension, and bilingual requirements.

Communication is the key at every level of accountability and transparency – to the public, to funders, to providers, and to the sectors. Mechanisms for ongoing feedback, reporting processes to evaluate progress against priorities, respect for stakeholders and funders, and transparency in the structure and process for setting priorities would help facilitate long-term trust, commitment and buy-in.

D) Is it possible, and if so, how is it possible to engage all the stakeholders in advancing a vision of agricultural research priorities?

Most workshop groups concluded it is possible to engage stakeholders in a way that allows them to become advocates, advancing the vision for agricultural research. When all stakeholders - from researchers to end users - become advocates, it smooths the path to achieving our shared vision.

Some groups suggested organizations demonstrate their commitment by adopting the national vision as part of their own vision and priorities. This would help facilitate more joint-collaborative ventures.

Another group took a marketing direction – that going beyond scientific research publication, and publicizing research success stories to the general public, can demonstrate the value of funding dollars and engage end users in the value of agricultural research.

E) Is a 'fast-to-market' mindset driving research funds to agricultural research to meet short-term market objectives at the expense of longer-term broader policy concerns such as long-term global food security? Are there other factors?

While a number of groups agreed that a "fast-to-market" mindset is driving research funds to meet short-term market objectives and felt that a balance needed to be reached, other groups could not find agreement.

Some felt that both short-term market objectives and longer-term policy concerns were suffering. Some suggested that the current trend is a necessary rebalancing to provide return on investment leading to greater available research and development funding. Others suggested that all research is tied to economic gains, and that diverse pools of funds with diverse mandates must support both commercially viable and public good research. As well, since funding trends are toward industry involvement in partnerships, it is inevitable that research priorities would shift.

Groups that reached a consensus that a "fast-to-market" mindset is at the expense of longer-term broader policy concerns felt that limited funding and competition for funding is a factor. Others felt that reduced core funding has driven a greater reliance on short-term funding cycles that inevitably divert human resources to shorter-term projects.

Decreasing agriculture and science literacy has contributed to increasingly poor communication of the value of long-term fundamental research. The links from basic research, to applied research, to proprietary, and finally to return on investment are no longer easily demonstrated.

Competing interests exist due to current structures – industry needs speed to demonstrate return on investment while scientists must "publish or perish" in the academic world – further hindering longer-term research.

F) If a "fast-to-market" mindset is driving research funds to agricultural research to meet short-term market objectives, then what can be done specifically to redress the imbalance?

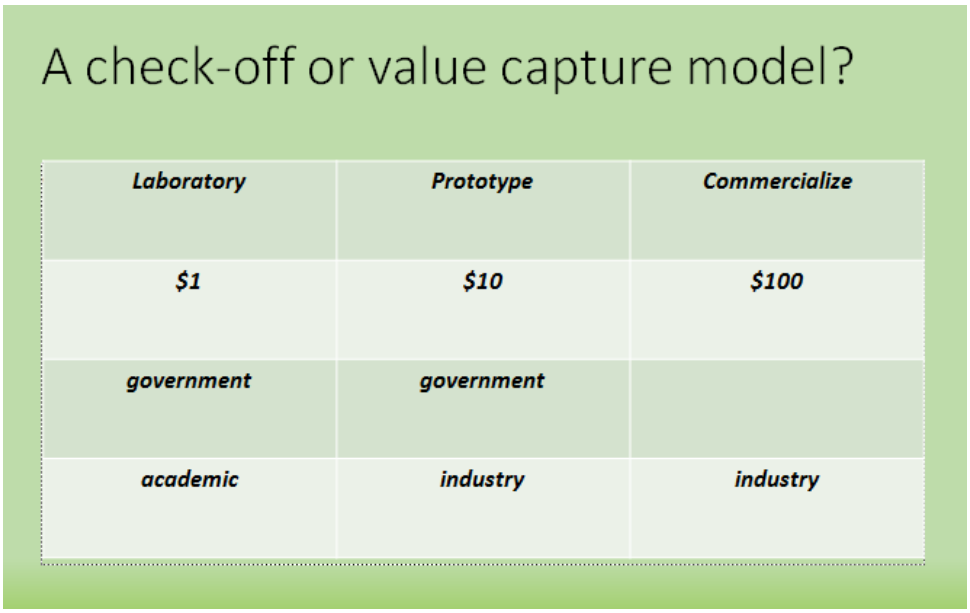
Even among groups that could not find common ground on the premise, they did agree there is room for improvement. The following are some suggestions from participants:

- Develop opportunities for funders and research institutions to work together more effectively.

- Pre-determine priorities for basic and applied research.

- Establish a concrete mechanism for an improved basic research funding model.

  In the example below one group proposed first developing a better understanding of what fundamental (basic) and applied research is and secondly adopting a basic research funding model based on check-off or value capture – ex. $1.00 per tonne. Below is the proposed sliding scale of funding levels with "one science, multiple applications" at its core:



- Set aside a portion of current cluster funding set for program funding.

- Focus on growing the entire funding pie.

G) Is a coordinated approach to disseminating research results needed? Is the idea of a comprehensive, accessible database a good one? What would be its biggest challenge to overcome?

All groups agreed that a coordinated approach to research dissemination is needed, particularly to producers, the public, and between researchers. However there lacked consensus on the appropriate vehicle to achieve this. One group cautioned that while it would be important at some point in the future, it should not distract from the primary, urgent priority of action on a national agricultural research strategy.

While the idea of a database was intriguing and many felt it could reduce duplication and provide a snapshot of the current state of work, many raised logistical issues as potential roadblocks for success. An accessible database that takes into account the needs of a variety of stakeholders would require a long-term commitment for development and ongoing maintenance to stay current. Others pointed out that the executions of past databases have failed and that there are a number of existing repositories of research that may simply need to address issues of awareness and access.

WORKSHOP SESSION 2: INTERDISCIPLINARY PARTNERSHIPS, COLLABORATION AND COOPERATION

Summary of workshop discussions

While respondents to the pre-conference consultation believe we are failing to meet our agricultural research potential as a nation, there is vibrancy to the interdisciplinary partnerships and collaborations that do exist. Yet, as we saw in Theme 1, more could be done to realize the potential.

As one respondent said, *"Not enough of these partnerships and networks are cross-sectoral by definition, but exclusive to one sector."* For some respondents, the effectiveness of some collaborative partnerships and networks is due in large part to the efforts of researchers themselves, and not any particular design or process to facilitate the collaboration.

In their workshop session participants discussed four questions raised during the pre-conference consultation that would help formulate research policy in this area.

In the pre-conference consultation it was suggested that inter-disciplinary partnerships need:

- Solid government funding
- Support from industry, academia and NGOs to build the needed relationships
- Participation of different perspectives
- The participation of partners who are necessary to achieving results
- Dialogue around ongoing and future research
- Objectives that better the entire sector
- The means to get research results into the hands of producers
- To operate at the local, regional and provincial levels
- To get guidance from farmers and farm organizations
- To maximize the effectiveness of the dwindling pool of research dollars
- To facilitate interaction among disciplines

A) Which of these features are particularly important? Are there any on the list that should not be? What is missing?

Interdisciplinary partnerships need to be well-funded to support extra administrative and collaborative costs often associated with a well-functioning partnership. More solid government funding is required, but as some workshop groups pointed out, co-funding from other disciplines could be a source for pooled resources.

Participants from sectors without industry funding such as a levy system identified solid government financial support as a necessary feature, particularly as it relates to emerging industries. The 1:1 funding criteria is a barrier to partnerships since some industries do not have the capacity to generate funding to support interdisciplinary work.

Improved dialogue and communication early in the program design was identified as a key feature often missing in partnerships. Support from government, industry, academia and non-governmental organizations to build necessary working relationships in advance of program design was also a common feature across the workshops.

Several other features of a well-functioning partnership were identified:

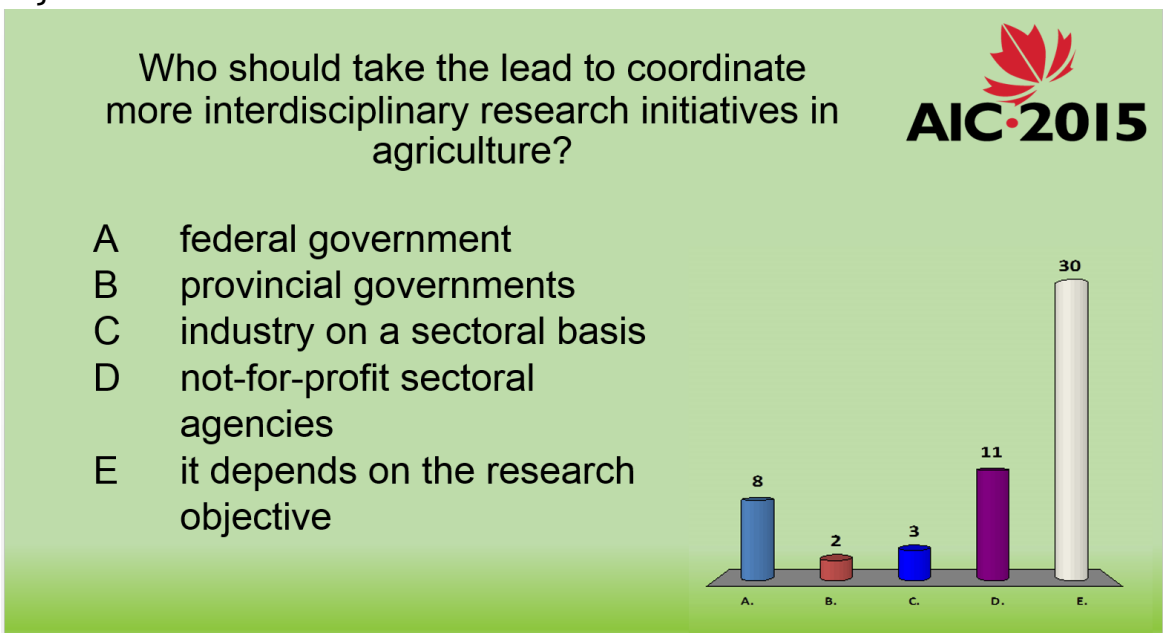
- The engagement of outside stakeholders to bring in different perspectives on the project plan and desired results.
- Deciding up front, in program design, how intellectual property and research results will be shared.
- Finding platforms for ongoing dialogue and more robust interactions between partners.
- The dissemination of research results to producers.

Good administration was another major feature identified for successful interdisciplinary partnerships, and that extended into discussions of cross-sectoral partnerships. Good administration provides stability and ensures rules do not change during the project. Multiple and changing administrative processes can increase project costs and reduce human and financial resources dedicated to the research itself.

It is important to note that a few groups reminded us that that not all projects are suited for interdisciplinary partnerships or collaborations and should not be forced onto projects in order to receive funding. Interdisciplinary partnerships may not be ideal but a cross-sectoral partnership might.

In summary, successful partnerships must be mutually beneficial to both the funding and non-funding stakeholders, have stable and predictable funding, good administration, an agreed upon intellectual property mechanism, good facilities, a broad process for information sharing and dialogue, and the ability to share in the outcomes of the research.

Who should take the lead in coordinating more interdisciplinary agricultural research? A conference poll of participants suggests it depends on the research objectives:



B) What should be included in an agricultural research policy for Canada to facilitate the right kind of inter-disciplinary partnerships?

Flexibility emerged as a common thread that would facilitate well-functioning inter-disciplinary partnerships. Policy should address flexibility in partnership design to incorporate the ability to change course if research suggests a different outcome, as well as flexibility in the administrative and financial processes facilitating inter-institutional partnerships.

An agricultural research policy should address parameters to foster a partnership environment that facilitates engagement, communication, and knowledge transfer at multiple levels. Human resource capacity issues such as succession planning and continuity of post-graduate researchers and technicians with longer-term partnerships in academic settings should also be addressed. Building in a longer-term perspective in partnership agreements that builds capacity and infrastructure for future collaboration can reduce future financial costs.

Policy in this area could also speak to potential systems to identify appropriate disciplines and technologies that have potential application to producers and would attract new researchers with expertise in fields not normally associated with agriculture.

C) What recommendations do you have to ensure that accountability mechanisms put in place by public funders do not get in the way of partnerships?

Frustration with the accountability measures and reporting requirements of funders was identified as a major barrier to partnership success. The importance of accountability to funders is understood, however the multiple and differing reporting requirements of various public funders, the lack of standardization and the complexity of reporting mechanisms led many groups to suggest red tape as an important barrier that make partnerships more complex than they need to be.

Representatives from some smaller organizations felt Agriculture and Agri-Food Canada (AAFC) reporting mechanisms are intimidating and discourage collaborations and partnerships. Additionally, recurring partners can often be treated as first time partners with no prior history with the public funder, starting administrative processes over again and duplicating past administrative work.

A policy that can suggest mechanisms to reduce costly administrative red tape relating to program administration and funding, while respecting the need for accountability by the public funder, would be an important contribution to reducing barriers to partnerships and collaborations.

D) Frequently issues and solutions in agriculture are global in nature – with respect to food security for a growing global population, sustainability and a changing climate. International collaborations are increasingly important in this context. What needs to be included in a modern agricultural research policy to encourage international collaboration?

With growing issues of global food security, climate change and sustainability, international collaborations will become increasingly more important. Workshop groups suggested ways an agricultural research policy could address international collaboration by noting that the G7 and G20 agricultural objectives require regional and international collaborative approaches.

International trade offers a win-win incentive for increased agricultural research collaboration. While governments are important players, some groups felt that bi-national or third party organizations, rather than government programming, are better suited to managing long-term multinational research relationships.

Again, mechanisms for the dissemination and accessibility research results were touched on by a number of workshop groups.

International exchanges, international meetings discussing white papers, developing action plans and common research objectives could allow for the development of themes for research internationally. Feeding into global political gatherings such as the G20, may provide the tools to assess the risk of working with international partners.

WORKSHOP SESSION 3: ISSUES IN PUBLIC-PRIVATE PARTNERSHIPS

Summary of workshop discussions:

Public-private partnerships are increasingly more prevalent in agricultural research in Canada, as in many countries around the world. **Growing Forward 2** (GF2), a federal, provincial and territorial cost-shared agriculture policy framework announced in 2013 made innovations funds available for activities arising from public-private partnerships (P3s).

Public support for innovation in agriculture in Canada will likely continue to be tied to the public-private partnership (P3) framework. In the final workshop session of AIC 2015, participants discussed possible policy frameworks around four questions examining issues in public-private partnerships.

A) How do public-private partnerships help build Canada's agricultural research capacity (including research personnel and infrastructure)?

Public-private partnerships leverage funds and resources, and by their very nature, encourage collaboration between government, universities and industry. They help build research capacity by directly funding faculty positions and graduate students. Some examples from participants included:

- The Grain Farmers of Ontario and SeCan wheat breeder faculty funding at University of Guelph.
- The Loblaw Chair in Sustainable Food Production at the University of Guelph.
- Significant long-term investment in vaccine partnerships in Veterinary Infectious Diseases which includes royalty sharing agreements.
- The OMAFRA Highly Qualified Personnel scholarship creating training opportunities with industry and academia.

Public-private partnerships (P3s) also improve access to infrastructure. For example, industry support can provide research access to under-utilized public facilities, which then provides support for ongoing maintenance of equipment. Some groups suggested industry better understands the value of research infrastructure.

By creating return on investment for the private sector, P3s help build capacity by increasing competitiveness and help commercialize research results.

While relying on P3s can help fill gaps, some workshop groups felt it does not address long-term capacity issues. Developing long-term partnerships can more effectively address capacity; however some participants believed that industry will only invest in long-term research (ex. environmental sustainability) when there is financial interest to do so.

B) What are the risks, if any, of public-private partnerships for the stakeholders involved in agriculture research?

The ownership of intellectual property was identified as one of the major risks for stakeholders in public-private partnerships. There are challenges when partners do not have the same rules around intellectual property. Agreements on patents, licencing, and copyright need to be reached early in the process by all the parties to avoid the derailment of a partnership later on.

Another recurring theme was public acceptance of the innovation outcomes. The involvement of private industry can lead to perceptions of bias with influential public-opinion makers – the perception that the public good may not be served. Transparency that involves players throughout the value chain, and good communication planning for results dissemination can mitigate the possibility of poor public reception of the research or innovation. For a minority of workshop groups, there was some tension about private industry receiving public funding to conduct research, and the impact that could have on the public's perceptions of the credibility of the science.

Administrative aspects of P3s were also identified as a risk for stakeholders. Long government approval timelines can delay the start of research. There is risk involved in starting research early and not ultimately receiving funding - but waiting could mean losing opportunity. Reliance on existing sources of funding is a risk if, for example, government support of a long-term program or project is withdrawn following the end of a funding cycle.

Participants representing producers indicated that producers are often the industry actor in P3s. Those players pointed to possibilities of less stability of the producer financing due to the volatility of those reliant on check-off for funding.

C) What, if anything, should be included in an agricultural research policy framework to mitigate the risks associated with public private partnerships and to encourage their positive contribution?

Most of the identified risks could be properly managed in the planning stages to reduce the risk of disagreements later in the process. An agricultural research policy could address opportunities for identifying best practices in the operation of P3s and suggest ways of sharing best practices with granting and implementing agencies. Different types of partnerships could benefit from a sharing of best practices in planning, multi-level communications strategies, and efficiencies in project administration.

Suggestions for best practices include:

- Reach agreements at the outset on the roles and responsibilities of each partner, the goals and outcomes of the project, intellectual property issues, and the accountability mechanisms to the partners and other stakeholders.
- Establish planning to address academic freedom, contingencies for emerging issues, loss of personnel or changes in funding, flexibility in research direction, and communications strategies to disseminate the research.
- Establish mechanisms to further trust, full collaboration and engagement between partners.

D) In the pre-conference consultation some respondents spoke of the benefits of P4s – public-private-producer partnerships—with respect to agricultural research. What should a modern agriculture research policy say, if anything, about the relationship between producers and public private partnerships?

Many producer organizations consider themselves the industry partner in P3s, so for some the question was moot. Those who were not from producer organizations overwhelmingly agreed that producers should have a role in agricultural research partnerships. There was general agreement that whoever could enhance a project should be engaged, with contributions from industry, producers and government.

The administrative burden of participation was identified as a barrier for producers, particularly for smaller groups, in the time and human resources required to perform the necessary administrative reporting.

Producers play a major role in agriculture extension and knowledge transfer. Many groups believed information sharing is easier when producers are partners and there is a quicker uptake of the research outcomes.

Fostering consortia of multiple producers, industries and governments, particularly in non-competitive research areas such as food safety where it is easier to cooperate across industries could be another option to accessing wider pools of research funding.

Here again, an agricultural research policy could suggest best practices for successful P4s including:

- Robust engagement and communications strategies at multiple levels.
- Engagement of other stakeholders in the value chain to enhance the credibility and acceptance of research outcomes.
- Openness and transparency in an environment where consumers are increasingly interested in issues such as environmental sustainability and animal welfare.

P3s or P4s?

Just prior to AIC 2015, the federal government announced an innovative P4 agreement between the federal government, industry partner Canterra Seeds, and producer partner the Alberta Wheat Commission to invest in the development and commercialization of Canadian Prairie Spring wheat varieties.

"July 8, 2015 – Lethbridge, Alberta – Agriculture and Agri-Food (AAFC)`

Agriculture Minister Gerry Ritz today announced the first of its kind $3.4 million public-private-producer partnership (P4) wheat breeding program.

This inaugural collaboration between Agriculture and Agri-Food Canada, CANTERRA SEEDS and the Alberta Wheat Commission (AWC) will benefit Canadian producers by advancing the development and commercialization of Canadian Prairie Spring (CPS) wheat varieties. In addition to a federal investment of nearly $1.2 million, the AWC and CANTERRA SEEDS are investing cash and services to the CPS Lethbridge program."

[Source: http://news.gc.ca/web/article-en.do?nid=997749]

CONFERENCE PARTICIPANTS

ABG Lawyers
Agriculture and Agri-Food Canada
Agriculture Financial Services Corporation
Ag-West Bio Inc.
Alberta Barley Commission
Alberta Pulse Growers
Alberta Pulse Growers Commission
Association of Canadian Faculties of Agriculture and Veterinary Medicine
BASF Canada
Beef Cattle Research Council
BC Grain Producers Association
BC Institute of Agrologists
Canadian Agri-Food Policy Institute
Canadian Cattlemen's Association
Canadian Centre for Swine Improvement
Canadian Fertilizer Institute
Canada Foundation for Innovation
Canadian Hatching Egg Producers
Canadian Horticultural Council
Canadian Nursery Landscape Association
Canadian Poultry Research Council
Canola Council of Canada
CropLife Canada
Dairy Farmers of Canada
Dalhousie University – Faculty of Agriculture
Egg Farmers of Canada
Food and Agriculture Organization of the United Nations (FAO)
Grain Farmers of Ontario
Government of Alberta – Ministry of Agriculture and Forestry
Inter-American Institute for Cooperation on Agriculture
International Center for Biosaline Agriculture (Dubai)
Manitoba Corn Growers Association
National Farmed Animal Health and Welfare Council
Novalait Inc.
Ontario Broiler Hatching Egg & Chick Commission
Ontario Federation of Agriculture
Ontario Ministry of Agriculture, Food and Rural Affairs
Saskatchewan Pulse Growers
Swine Innovation Porc
University of Manitoba – Food Sciences
University of Guelph – Guelph Turfgrass Institute
University of Guelph – Ontario Agricultural College
University of Guelph – Ridgetown Campus
University of Guelph – School of Environmental Sciences
Vineland Research and Innovation Centre
Western Grains Research Foundation

CONFERENCE EVALUATION SURVEY

Here's a sample of your feedback:

Quality of the panel presentations:

18% Very Good
45% Good
36% Average

Workshop sessions:

58% Just the right amount of time allotted for workshops
25% Too much time allotted for workshops
17% Not enough time allotted for workshops

"A different sort of interactive engagement could have been useful (i.e. world cafes, roving discussion groups, etc). The high level of participation was good, and some alternative forms of participating would be helpful."

Were all opinions taken into consideration?

83% Yes
17% No

Would you like to see workshops incorporated into future conferences?

100% Yes

Did you feel you had enough time to network with other participants?

83% Yes
17% No

Were you satisfied with AIC 2015?

92% Yes
8% No

Some ideas for the next conference:

"some foresighting exercises - what are the top 5 things that will impact agriculture and then in turn, what should we be doing in research to help prepare producers to handle the impacts."

"I think that industry groups were quite well represented, as were governments at the provincial ministerial level and the federal level. It would have been nice to see more university participation as well as some higher ranking officials in every segment."

"Please bring in experts from regions who have indeed modernized their ag policy…"

Thank you to all participants and speakers for your contributions at AIC 2015. We look forward to seeing you next year in Ottawa for AIC 2016!