

**Fostering Innovation in Canadian Agriculture and Agri-Food
A Pre-Budget Submission to
Honourable Jim Flaherty, Minister of Finance
By
The Canadian Seed Trade Association
December, 2008**

The Canadian Seed Sector's Contribution to the Canadian Economy

The Canadian Seed Sector contributed over \$3.9 billion to the Canadian economy in 2007, and employed over 14,000 Canadians.

The seed industry in Canada makes a very strong contribution to the economy – over \$3.9 billion in 2007. A study recently commissioned by the CSTA also found that our industry employed over 14,000 Canadians in 2007. More than 3,000 were highly-skilled plant breeding staff including scientists, biotechnologists and technicians. In addition, a large number of these jobs are located in small regional centres and rural communities.¹

The Canadian Seed Trade Association brings together 130 member companies who are engaged in all aspects of seed research, production and marketing both domestically and internationally. Our membership ranges from those who sell garden seed and herbs to large western grain handlers; and from small family-run businesses to large multinational corporations.

In 2007 our member companies invested \$56.1 million in research and development. That is 6% of the total retail sales of these companies, and 26% of their combined operating budgets.

Success in Agriculture Starts with Seed

Not only does our sector make a substantial contribution to Canada's GDP and employment; it is a very strong contributor to the success of Canada's agriculture and agri-products industry. In fact, seed is the driver of success.

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- Plant breeding and research brings new technologies to farmers, and new attributes and quality to consumers. For example:
 - Innovation delivered through seed brought canola to Canadian agriculture and all of the food and feed benefits associated with it
 - Seed driven innovation has delivered crops that are increasingly resistant to diseases and pests. That, combined with herbicide tolerance, reduces crop risks, lowers costs for farmers, and reduces the pesticide load on the environment
 - Plant breeding and research is improving food quality for consumers, delivering beneficial fatty acids and anti-oxidants to improve health

¹ The Value of the Canadian Seed Sector to the Canadian Economy, June, 2008
Prepared for the Canadian Seed Trade Association by AgGenuity Consulting Inc. and AgBioT Research Consulting Ltd.

Within the next decade the global bio-economy, driven by plant science, could be worth \$500 billion. If we take the right steps now, Canada could be positioned to capture a substantial portion of that.

Creating an Environment for Innovation

Canadian agriculture and agri-products have benefited from both public and private sector research and plant breeding. It is important that both continue

The private sector accounts for 39% of total investment in plant research and development in Canada, and requires a positive environment to maintain and expand that investment.

A Flexible, Adaptable and Enabling Regulatory Environment

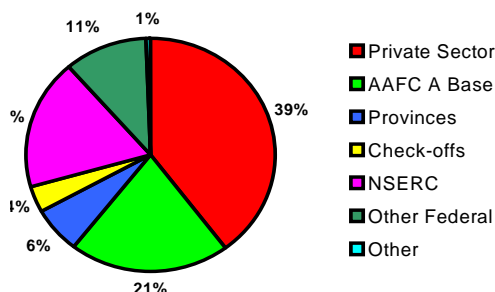
There is a bright future for agriculture and agri-products. Work done for the Grow Canada® Coalition estimates that within the next decade the global bio-economy, driven by plant science, could be worth \$500 billion. If we take the right steps now, Canada could be positioned to capture a substantial portion of that.

Seed is the primary driver of agricultural innovation and the agricultural economy. By creating an environment that enables and promotes investment in seed driven innovation, the government will be providing an economic stimulus to the entire agriculture and agri-products sector.

Research and plant breeding are critical to innovation in agriculture and agri-products. Canadian agriculture and agri-products have benefited from both public and private sector research and plant breeding. It is important that both continue, and that the positive public/private sector cooperation demonstrated by the canola industry, for example, should be encouraged. Canola was developed by the Research Branch of Agriculture and Agri-Food Canada, and now benefits from about 75% of total private sector research spending.

CSTA supports continued and increased funding for public sector plant breeding and research. However, as demonstrated in the graph below, the private sector is playing a very strong role in research and development, and requires a positive environment to maintain and expand that investment.

Figure 1: Investment in Plant Research and Development, 2007



A requirement of both the public and private sector is a flexible, adaptable and enabling regulatory environment. The agriculture and agri-product marketplace is changing rapidly. Windows of opportunity open and close very quickly. However, our current process for regulatory change, which is cumbersome and slow to respond to the changing needs of industry innovators, farmers, end users and consumers, puts us at risk of missing opportunities. For example:

- The seed industry has been working on, and waiting for, changes to the system of variety registration for decades. The current system does not provide for timely introduction of new varieties, and the process for change has been both lengthy and frustrating, and, in some crops has limited producer access to new varieties.

- Canada is one of the only “developed” countries that has not upgraded its Plant Breeders’ Rights (PBR) legislation to conform with the 1991 convention of the UPOV (International Union for the Protection of New Varieties of Plants). There has been absolutely no progress, nor have there been any attempts to modernize Canada’s Plant Breeders’ Rights, since proposed legislation did not pass through Parliament earlier this decade.
- Canadian seed developers don’t have access to the same intellectual property protection tools that are available to their competitors. For example, U.S. and Australian developers can patent plant varieties, where Canadian developers cannot.
- Regulatory requirements for producing, inspecting, sampling, testing, bagging, labeling and tagging of seed are also outdated, and do not take into account the changing marketplace, the environment or the introduction of new technology and equipment.

The regulatory environment must remain science based. It must also be flexible enough to anticipate and quickly adapt to new technologies and advances in both conventional plant breeding and biotechnology when the opportunities for producers and the marketplace are presented.

Funding Innovation – an Economic Stimulus for Agriculture

The Private sector invested over \$56 million in research and development in 2007 and plans to almost double that investment within 5 years. The main source of revenue for private sector investment in research is the sale of certified seed. The following table makes the relationship between certified seed sales and investment in innovation very clear.

Table 1 – Certified Seed Use Vs. Private Sector Investment ²

Crop	% of Seed Used that is Certified	% of Total Private Sector Investment <i>(Projected 2012)</i>
Canola	92%	74%
Corn	98%	12%
Soybeans	87%	10%
Cereals	18%	2%

² CSTA member surveys and Blacksheep Strategy Study for CPTA,

Farmers benefit from seed driven innovation, which continues to deliver higher yielding varieties; varieties that make better use of agricultural inputs; varieties that are resistant to disease and crop pests, and varieties that can grow in less than ideal conditions. All of these translate to higher returns to farmers. Work done by the George Morris Centre indicates that 8 recently introduced varieties have generated an additional \$170 million to farmers annually.³

Food processors benefit from seed driven innovation because it can deliver higher oil content, better protein; better malting and baking characteristics, higher starch content and other attributes that are beneficial for processing.

Consumers benefit from seed driven innovation because it can deliver a healthier diet. Already seed developers have created soybean and canola varieties that help to eliminate trans fats in food; and barley varieties that can lower cholesterol.

Society benefits from seed driven innovation for all of the reasons stated above, and because new innovation can actually improve agriculture's contribution to the health of the environment, by allowing for reduced tillage and reduced use of fertilizers and pesticides.

There are many beneficiaries of seed innovation. However, because the sale of certified seed is the primary source of funds for investment in innovation, the costs are borne by only about 30% of Canada's farmers – the ones who regularly purchase certified seed.

Surveys indicate that the majority of farmers believe that certified seed delivers benefits and is a contributor to success. They also agree that sales of certified seed generate funds for investment in future innovation, and that the value of that innovation outweighs the cost of certified seed. However, in an effort to control short term costs, many producers choose not to regularly purchase certified seed.

CSTA proposes that government implement a broad based tax incentive for farmers who purchase certified seed. As an economic stimulus for agriculture, a tax incentive would drive increased innovation and increased competitiveness in agriculture. Additionally, it would ensure that the costs of innovation would be shared by all who benefit.

The tax incentive proposed by CSTA would make the cost of certified seed equal to the cost of saved seed. It would involve the addition of a certified seed multiplier line to the Statement of Farming Activities form completed by farmers when filing income tax. The producer would enter the amount spent on the purchase of certified seed on line 9664 of the form and subject that amount to a multiplier.

Farmers, food processors, consumers and society in general benefit from seed driven innovation, but most of the costs of that innovation are borne by only about 30% of Canada's farmers.

A Certified Seed Tax Incentive

As part of an economic stimulus package for agriculture, CSTA proposes that government implement a broad based tax incentive for farmers who purchase certified seed.

How A Tax Incentive Would Work

3 Case Studies of Benefits Generated from Certified Seed, Al Mussell and Maria Klimas, George Morris Centre, February 2008

The George Morris Centre has calculated that the multiplier required to offset the additional cost of certified seed is 1.55.⁴

In short, farmers would claim 155% of the cost of certified seed as an expense for income tax purposes, lowering taxable income and increasing tax refunds.

The Costs and Benefits

The tax income forgone by government if the tax incentive resulted in an increase in certified seed use from the current average of 30% to 50% would be \$89.5 million.⁴ Recall that the annual revenue increase for farmers alone from the introduction of just 8 new varieties was over \$170 million.

In fact, the economic benefit of a tax incentive could be much more. A 2004 study by Martin *et al* that considered a smaller subset of crops than this study, and only considered western Canada. It found that based on a Statistics Canada sales multiplier of .77, the indirect economic effect of a tax credit that induced full use of certified seed was \$615 million per year.⁵

Other Components of An Economic Stimulus Package

While a tax incentive for farmers who purchase certified seed is the major component of an economic stimulus package for agriculture because it would have the largest impact on the entire value chain, there are other steps that CSTA supports as part of an economic stimulus package for agriculture.

We urge government to consider reduced risk management program premiums for producers who plant certified seed.

Certified seed is the product of a proven process which includes third party verification of quality and purity. CSTA supports the recognition of the reduced risk associated with the use of certified seed, in risk management programs like Crop and Production insurance. We urge government to consider reduced risk management premiums for producers who plant certified seed.

CSTA supports the continuation and improvement of the Scientific Research and Experimental Design (SR & ED) tax credit

CSTA supports the continuation and improvement of the Scientific Research and Experimental Design (SR & ED) tax credit, which is used by some plant breeders and researchers in Canada. We believe that it should be expanded to include counter-season research activities done outside of Canadian borders.

4 Mussell, Al, And Terri-Lyn Moore. *A Tax Incentive For Certified Seed: a Broader Assessment*. Study completed for the Canadian Seed Trade Association. May, 2007

5 Martin, Larry, Al Mussell, and Terri-lyn Moore. *Tax Incentives on Certified Seed as a Means to Achieve Sustainable Agricultural Prosperity: An Economic Evaluation-* Study completed for Quality Assured Seeds, Inc. George Morris Centre, 2004.

Conclusion

Canada's seed sector makes a substantial contribution to the Canadian economy, almost \$4 billion in 2007, and it employs over 14,000 Canadians. Just as importantly it drives innovation, competitiveness and success in the agriculture and agri-products industry, and benefits Canadian consumers, and the environment.

The creation of an enabling regulatory environment, and the delivery of an economic stimulus package with a tax incentive for producers who purchase certified seed as its feature component, will benefit not only the seed industry, but the entire economy of Canada.

This submission has clearly outlined that the cost of the stimulus package proposed by the CSTA is far outweighed by the benefits it will bring to the Canadian economy.

Mr. Minister, CSTA encourages you to very seriously consider our proposals and to work with us to make this economic stimulus package a reality for the future of Canadian agriculture and agri-products.