



# A Certified Seed Tax Incentive

## Fostering Innovation in Canadian Agriculture and Agri-Food

# A Certified Seed Tax Incentive

Seed is the foundation of agricultural innovation. Plant research and development

## 1. Presents opportunities for farmers

- Productivity, insect and disease resistance, reduced input costs, improved market opportunities etc

## 2. Presents opportunities for end users and consumers

- Improved interaction with the environment, Improved food safety, health benefits
- Varieties and traits designed for the market place

# A Certified Seed Tax Incentive

Plant Research and Development increases productivity for farmers

## Improved Yield

- Corn yield ↑ 400% in 60 years
  - 59% in just 15 years
- Canola Yield ↑ 32% in 30 years
  - Most in the last decade
- Wheat Yield ↑ 22% in 30 years
  - Ontario winter wheat ↑ 62% in just 15 years

## Improved Productivity

- Increased disease and pest resistance
- Improved nitrogen use
- Drought and salinity tolerance

# A Certified Seed Tax Incentive

Plant Research and Development provides choice for farmers

<b>Crop</b>	<b>Varieties Available</b>
Alfalfa	158
Barley	191
<b>Canola</b>	<b>239</b>
<b>Corn</b>	<b>713</b>
Lentils	25
Oats	89
<b>Soybean</b>	<b>507</b>
Wheat	213

Source: CFIA Website

# Costs and Returns to Investment

Plant Research and Development increases choices for processors and end users eg.

- Reduced trans-fats
- Reduced saturated fats
- Increased anti-oxidants
- Increased Beta-Glucan
- Omega 3 oils
- Specific energy and protein content for livestock
- Resistance to pests reduces toxin potential for livestock (eg. fusarium)

Plant Research and Development benefits the environment eg.

- Drought and salinity tolerance
- Reduced pesticide use and tillage

# A Certified Seed Tax Incentive

## The Seed Industry invests in innovation

- Private Sector plans to invest \$56.7 million in research in 2007
- Close to double that – \$105.7 million by 2012
- Over 95% of that investment will be in corn, soybeans and canola

**Investment is funded through sales of certified seed**

# A Certified Seed Tax Incentive

Investment is funded through sales of certified seed

Crop	% Acreage Planted With Certified Seed
Corn	98%
Canola	92%
Soybeans	87%
Flax	28%
Barley	21%
Oats	16%
Wheat	16%
Peas	14%

Source: survey done by Blacksheep Strategy for the Canadian Plant Technology Agency

# A Certified Seed Tax Incentive

Investment is funded through sales of certified seed

Crop	% of seed used that is certified	% CSTA member projected investment (5 years)
Canola	92%	74%
Corn	98%	12%
Soybeans	87%	10%
Cereals	18%	2%

*CSTA Investment Survey and Blacksheep Study for CPTA*

# A Certified Seed Tax Incentive

Investment is funded through sales of certified seed

Without sales of certified seed, funds are not generated for investment and innovation lags

For example:

- Canadian Wheat
  - Production ↓ 20% over the last 20 years
  - Exports ↓ 20%.
- Canadian Barley
  - Production over 20 years ↓ 34%

Yield gains in both crops have only increased slightly.

# Costs and Returns to Investment

## Hyland's FT Wonder (soft red winter wheat)

- Variety Development Cost - 9 years - \$926,814

	Year 1	Year 2	Year 3
Margin	\$1.92/25kg	\$1.84/25kg	\$1.90/25kg
Sales	176,000 units	10,546 units	32,000 units
Profit	\$337,920	\$19,405	\$60,800

**Sales dropped 94% after the first year**

**Variety Development Cost     \$ 926,814**

**Three Year Total Profit         \$ 418,125**

**Three Year Net                     (\$508,689)**

# A Certified Seed Tax Incentive

## A certified seed tax incentive would:

- Help to increase the use of certified seed, increasing funds available to invest in research and development
- Through increased research and development, improve opportunities for farmers, end users and consumers
- Increase brand credibility through improved quality assurance systems
- **Ensure that the costs of seed driven innovation are shared by all who benefit – not just carried by purchasers of certified seed**

# A Certified Seed Tax Incentive

## How It would Work

- Producers who buy certified seed claim 155% of the cost of the seed as expense on income tax
  - i.e. producer purchases certified seed at \$8.00 per bushel
  - $\$8.00 \times 1.55 = \$12.40$  tax deduction per bushel
- Increased tax return compensates for the extra cost of certified seed
- Increased returns from sales of certified seed are invested in research and development
- Costs of research and development are shared by all who benefit (tax payers)

# A Certified Seed Tax Incentive

## A certified Seed Tax Incentive – Calculating the Incentive

	Certified Seed Price	Bin Run Seed Price*	Spread
	(\$/bu)	(\$/bu)	(\$/bu)
<b>Ontario</b>			
Soybeans	25.80	6.46	19.34
Wheat	18.00	4.18	13.82
Alfalfa	150.02	120.02	30.00
Timothy	74.24	51.97	22.27
<b>Saskatchewan</b>			
Wheat	8.63	5.31	3.32
Oats	6.00	2.25	3.75
Barley	6.63	3.56	3.07
Peas	10.50	3.46	7.04
Alfalfa	150.02	120.02	30.00
Timothy	74.24	51.97	22.27

\* *Commodity price plus cleaning and conditioning*



# A Certified Seed Tax Incentive

## A certified Seed Tax Incentive – Calculating the Incentive

	<b>Tax Saving Required</b>	<b>Total Expenses</b>	<b>Tax Credit</b>
Saskatchewan Benchmark Farm	45 519	86 318	53%
Ontario Benchmark Farm	37 784	50 776	74%
National Average			55%

# Cost to Government

## A certified Seed Tax Incentive – What is the Cost to Government?

- To offset the extra cost of certified seed, a national tax incentive of 55% is required

	Tax Saving Required per farm(\$)	Total Value of Tax Credit (\$)	Marginal Tax Rate	Total Cost (\$)
Eastern Canada	37 784	81 612 478	0.31	25 422 287
Western Canada	45 519	439 259 064	0.35	153 740 672
<b>National</b>		<b>520 871 542</b>		<b>179 162 959</b>



# Implications for Trade Obligations

## A certified Seed Tax Incentive – Implications for Trade Commitments

### WTO Agreement on Subsidies and Countervail (SCM)

- Tax income foregone is a subsidy
- Legal opinion tax incentive is not likely challengeable  
(*McMillan Binch Mendelsohn 2007*)

### WTO Agreement on Agriculture

- Input based support is “amber”
- If all seed sold in Canada received a tax incentive, Canada’s notified amber spending would increase to \$1.54 B. Allowable spending = \$4.2 B



## Benefits of A Tax Incentive

### A certified Seed Tax Incentive – What is the Benefit?

- Expanding market for certified seed will increase returns for increased investment in seed R&D in Canada
- Sales multiplier estimated by Statistics Canada of 77%
  - in 2004 study, estimated spinoffs of \$615 million (western Canada)



## Benefits of Seed Driven Innovation to Government

George Morris Centre evaluated 8 recent wheat and barley varieties

- Increased yield increased production and returns to farmers and elevator system
- Increased tax returns to government

8 varieties alone generated:

From farmers      \$59.7 million

From elevators    \$1.8 million

Total                \$61.5 million



## A Good Idea That Needs to Be Supported

- Contact the Federal Ministers of Agriculture and Finance
- Contact your M.P. and your MLA
  - Write a letter
  - Make a call
- Help Build Support
  - Speak to other farmers and farm groups
  - Get them to write letters to their M.P.s and MLAs
- Together we can deliver innovation for farmers and end users.