

A Vision for a Next Generation Seed System

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Context

Seed is the driver of innovation that the world's farmers will need to feed, fuel and clothe a global population that is expected to reach 9.3 billion in fewer than 40 years; while at the same time facing the challenges of climate change and competing demand for water, land and resources.

Over the past 100 years or so, Canada has developed a seed system that strives to ensure the quality, safety, and availability of seed for planting in Canada, and for export to other countries. The current system has evolved to include different actors, rules and regulations, and distinct steps that bring seed from variety development to distribution for use in Canada and around the world. Overall, the current system has both strengths that the seed industry may wish to retain and areas that are ripe for improvement, if not complete redesign.

In this context, industry has come together under the Seed Synergy banner to collectively envision what a next generation seed system in Canada could look like. Six Canadian seed industry partner organizations have agreed to work together to be more effective in advocating for a strong, vibrant Canadian seed sector that provides opportunities for seed industry stakeholders to continue to thrive on domestic and international markets.

These organizations are: the Canadian Seed Growers' Association (CSGA), Canadian Seed Trade Association (CSTA), Canadian Seed Institute (CSI), Commercial Seed Analysts Association of Canada (CSAAC), Canadian Plant Technology Agency (CPTA) and CropLife Canada.


Together, these organizations formed the Seed Synergy Collaboration Project. The goal of the project is to develop recommendations and implementation plans that will enable a next generation seed system for Canada. The project will aim to achieve a high degree of support for its recommendations from key stakeholders across the seed system, in government, and civil society. To this end, these recommendations will be developed with a heavy emphasis on consultation and engagement with members of the participating organizations and the broader seed value chain in Canada.

As a first step, the leaders of these six organizations have outlined a draft vision for a Next Generation Seed System, described below.

VISION: Next Generation Seed System in Canada

Seed is the critical first link in the agri-food value chain. It's the starting point for growing crops that produce food, feed, and other bioproducts for both domestic and export markets.

Canadian Seed Sector Profile, July 2014

	<p>Canada's seeds have the following attributes:</p> <p>Choice The system encourages a diversity of seed kinds, varieties, and suppliers.</p> <p>Quality The system ensures all seed in Canada is of known quality.</p> <p>Safety Through good stewardship, the system continues to ensure that all seed is safe for humans, animals and the environment.</p>
<p>A Next Generation Seed System Delivers Value</p>	<p>The Next Generation Seed System in Canada is a system that is optimally structured and organized to deliver value and predictability for the entire value chain:</p> <ul style="list-style-type: none">• A strong, competitive and profitable sector that attracts investment, research and innovation, and that is valued for its significant contribution to society.• An industry-led system that is cost-effective, market driven, agile and responsive, and that enables Canada to do business globally.• A system that meets the needs of all stakeholders along the entire value chain.• A system that instils trust and that garners a high degree of support.

A Next Generation Seed System in Canada will have the following characteristics:

Innovation and competition

The system fosters continuous improvement through innovation and drives choice and competition. The system enables Canada to be competitive on international markets.

Industry-led and government enabled

The system is managed by industry and supported by government; it fosters accountability for all players.

Science-based

The system is built on strong scientific and technical foundations.

Value to industry and customers

The system delivers greater value to the industry and to customers across the value chain, provides great value at a reasonable cost and ensures viability for the industry.

Responsiveness, agility and adaptability

The system is simple and easy to navigate. It is responsive and adapts to emerging issues, market needs and technology in a timely manner. It responds to customer requirements and meets the evolving needs of domestic and international markets.

Harmonization and international leadership

The system enables Canada to take a global leadership role, and facilitates market access by aligning with other national systems.

Transparency

The system is transparent to industry and the public.

Respect for Intellectual Property

The system fosters compliance with intellectual property.

Traceability

The system facilitates traceability across the seed value chain.

Human Capital

The system encourages ongoing professionalization of the industry, through continuous training and education.

Functions of a Next Generation Seed System

Seed is the starting point from which food, feed, fiber, fuel and other products can be produced, to provide great benefits to society.

A Next Generation Seed System in Canada will have the following functions:

1. Research and Development

Purpose: To develop new traits, and seed varieties. Research and development encompasses any type research and development required to develop new or improved seeds (e.g. innovation, trait and variety development, technology, germplasm, etc.) for minor and major crops domestically and internationally.

2. Market Acceptance

Purpose: to enable new seed varieties for market, based on seed identify and/or performance or quality criteria.

3. Production

Purpose: To produce seed and ensure that the identity/quality of seed crop is preserved throughout the production cycle in the field.

4. Processing

Purpose: to process seed for sale, and ensure that the identity/quality of seed is preserved throughout the processing cycle (e.g. seed applied technology, treatment, packaging, etc.).

5. Sales and Distribution

Purpose: to distribute seeds to customers, and ensure that the identity/quality of the seed crop is preserved throughout the movement, storage and delivery processes.

Note: Options for a Next Generation Seed system will consider regulatory and commercial/market elements for each function.

