



# CRAFTING A VISION FOR THE FUTURE OF SEED IN CANADA

## WHERE TO FROM HERE?

LEARNINGS FROM THE SEED SUMMIT

JUNE 2022

### FROM SUMMIT PARTNERS:



## The Seed Summit

Seed Summit 2022 convened representatives across the seed value chain to discuss the future of Canadian seed and changes to the regulatory system (Appendix A). The event drew input from developers, growers, processors, sellers, marketers, exporters, producers, end-users, and regulators.

The summit was designed as a three-day virtual event during which attendees heard from a range of speakers and participated in an open discussion.

Over 700 participants registered for the event. There was a balanced representation across all stakeholder groups (seed industry – 363; regulatory/observers – 128; producers/producer groups; 262). Seed Summit 2022 was hosted jointly by Seeds Canada, Canadian Canola Growers Association, Canola Council of Canada, Canadian Horticultural Council, Cereals Canada, Grain Farmers of Ontario, Ontario Agri-Business Association, Soy Canada, Western Canadian Wheat Growers, and the Western Grain Elevator Association.

The objectives of the summit were to:

1. Learn what customers and end-users need from Canada's seed sector.
2. Enhance awareness of the importance of the Seeds Regulations and their impact on the agriculture sector in Canada.
3. Look at best practices from other jurisdictions that would enhance Canada's agricultural competitiveness across the value chain.
4. Identify the key areas where regulatory change is needed and explore potential solutions.

Each session of the summit had a different theme, as well as a keynote speaker and a panel to speak to that theme:

Session 1: Canada's Seed System: Past, Present and Future!

Session 2: Understanding and Meeting the Needs of Producers

Session 3: Improving Variety Development and Delivery

## What Do Stakeholders Need from the Seed System?

Despite nine hours of engaging and enthusiastic dialogue over the three summit sessions, stakeholders' needs for the seed system can be summed up succinctly.

For the most part, the seed system serves its farmer and end-user customers well. Canada is recognized for its safe, secure, and high-quality system. **Customers were adamant that these qualities should not be compromised in a new system designed under SRM.**

However, when pressed to consider the system beyond Canada's borders, opportunities for improvement presented themselves. Canadian farmers, processors and seed sector players are competing globally, and they want access to technology at the same time as our stealthiest competitors. However, there isn't a clear understanding of where exactly the process can be tightened up.

While farmers are looking to access new technologies, like varieties that are more efficient users of inputs and have enhanced resistance to abiotic and biotic threats, they are also looking for products that allow them access to new markets. Processors are also anxious to hasten the release of innovation in this space. With its reputation as a reliable and sustainable source of high-quality crops, Canada has an opportunity in speciality value-added processing, like high-protein or speciality oil-profile products.

The seed system of tomorrow needs to be transparent. Farmers are incorporating more technology into their operations and with this comes the ability to make production decisions based on seed specifications. Now is the time to determine what "seed-tag" information is valuable and necessary for the customer and what, if any, information needs to be carried with the seed during its life cycle.

Farmers are all about efficiency and optimization in their operations, and they expect the same from the rest of the value-chain, including the seed sector. They are willing to make an investment when there is a clear value proposition. They recognize the importance of competition in spurring on innovation and controlling costs. Any framework that is developed needs to create an environment that encourages investment, including a clear, science-based path to market, intellectual property rights and a mechanism for return on that investment.

In an ideal system, everyone along the value chain is sharing relevant information to improve the industry's success, and everyone is making money.

## Where to from Here? Recommendations for the Future of Seed Regulatory Modernization Following the Seed Summit

Everyone seems to agree that innovation is, generally, positive. And when that positive innovation is developed, it must be efficiently delivered into the hands of its intended customers. However, is evident there needs to be a clear delineation between what system improvements can be made through the SRM process and what improvements fall under other regulatory or market-driven processes. For instance, seed royalties, the ability to use farm-saved seed and the regulation of plants with novel traits (PNTs) were brought up consistently throughout the summit sessions.

The Seed Regulations are separated into five parts:

Part I: Seeds other than Seed Potatoes

Part II: Seed Potatoes

Part III: Variety Registration

Part IV: Registration of Establishments that Prepare Seed and the Licensing of Operators

Part V: Release of Seed

It is parts I-IV that are being considered in SRM. Within those four parts are a myriad of processes, from variety registration to seed certification.

CFIA does outline on their [SRM webpage](#) that the following issues are out of scope:

- Value creation: the CFIA, in cooperation with Agriculture and Agri-Food Canada, conducted joint consultations with the grains sector on royalty collection models, enabled by Plant Breeders' Rights, to stimulate greater investment and competitiveness in cereal breeding.
- Plant breeding innovation: the CFIA and Health Canada are actively working on projects to provide additional clarity on the regulatory approach to plant breeding innovations. Early discussions with industry stakeholders and other government departments have been held through a working group under the Biotechnology Working Group (BWG) of the Grains Round

Table. Public engagement activities will be conducted prior to any new policy implementation.

- Seed Synergy and Seeds Canada: seed synergy is an industry initiative that brings together five existing national not-for-profit organizations to explore options for achieving greater synergy in the Canadian seed sector. Seeds Canada is the national seed organization created because of the amalgamation of 4 of the Seed Synergy members (CFIA Seed Regulatory Modernization, 2022)

This confusion around scope and parallel but separate regulatory reforms highlights a significant barrier to value chain consensus on requirements for SRM. **Outside of the seed industry, there is a lack of understanding of the Seeds Regulations and how they impact end-users of seed and facilitate the introduction of new genetic innovation.**

A concerted effort is needed to summarize the implications of the seed regulations and relay this information to producer organizations so that they can participate effectively in consultations and contribute to the final regulatory model.

Farmers and end-users seem to be satisfied with the quality of seed they are receiving. The system, including the variety registration process, protects them from poorly adapted products and ensures continuous, albeit often minor, incremental improvements. They would, however, like to know they can access innovation at the same time, or possibly sooner than their competitors, that there are no barriers to marketing the products of this innovation and that, if they are purchasing certified seed, they are seeing a return on their investment over and above what they would see from the use of farm-saved seed.

Several times on the call, the seed industry, including breeders, was pushed to indicate what specific changes they would like to see implemented to remove barriers to their success. These questions were met with some difficulty in pinpointing specific examples. There were a variety of reasons given for this. There are a variety of crop kinds that fall under the Seeds Regulations, and all are handled in unique ways. There is also a challenge in isolating sub-parts of the regulations rather than looking at the system holistically.

**It is important to acknowledge that, in the eyes of some customers, the system isn't completely broken.** This was stressed repeatedly during the summit, although it was also acknowledged that there are many opportunities for improvement. Technology in the seed space

and the associated spaces, such as product development and processing, have evolved so rapidly that the system no longer allows for innovation to occur at the required pace. Despite being operational and reliable, improvements can, and should, be made to utilize innovations more efficiently to keep pace with our international competitors. However, it should be noted that improvements in efficiency can not be made at the expense of quality assurance. This would result in a failure to serve our customers.

It is important that the seed industry can clearly visualize and paint the picture of “success” in SRM. For farmers, success seems to be a system that protects them from product failure, as the current system does today, but also facilitates the rapid dissemination of new technology that has already received international market acceptance and will offer them a favourable return on investment.

Determining what success looks like should include a scan of systems in place in other jurisdictions. It should be future focused considering the current pace of innovation today and assuming that the rate will likely increase.

Regardless of what organization you represent within the seed industry, success shouldn't look that different. The destination needs to be determined prior to the path to get there. In a successful system, the destination will be customer focused.

It is imperative that, to move forward towards success in SRM, the value chain understands where we are today and where we need to be at the end of the process. Then, the seed sector needs to decide how to get there, checking in often with customers and each other to ensure these pathways don't divert from the destination. As pointed out, customers are most interested in the final product, not how the product was made. Mistaking apathy for acceptance could jeopardize the potential for meaningful change.

**References:**

CFIA [Seed regulatory modernization - Canadian Food Inspection Agency \(canada.ca\)](#) accessed 2022-05-17

## Appendix A: Seed Regulatory Modernization Overview

Seed has been regulated in Canada since 1905 with the implementation of the Seed Control Act, which sought to improve the quality of forage seeds. In 1923, legislation was expanded to include variety registration, protecting farmers from seed that was misrepresented.

Today, several levels of legislation facilitate the production, assessment, and sale of seed. The [Canada Seeds Act](#), or Seed Act, is the overarching document in the regulatory framework. The Seed Act, last updated in 2015, was established in 1985. One step below the Act in the framework is the Weed Seeds Order, which sets out the list of weeds and their classes that may be found in seed, and the [Seeds Regulations](#).

According to the Canadian Food Inspection Agency (CFIA), which is responsible for both the Seeds Act and Regulations, “The main purpose of the Seeds Act and Seeds Regulations is to protect producers and consumers from misrepresentation, prevent the use of low-quality seed and to create a level playing field for companies and individuals involved in seed production” (CFIA Seed Regulatory Modernization, 2022).

In 2018, the federal government announced an intention to finalize the modernization of several regulatory frameworks under their purview, in what is referred to as the “Forward Regulatory Plan.” As part of this process, the CFIA has made a commitment to modernize the Seeds Regulations, “These proposed amendments would modernize the Seeds Regulations as they apply to seeds that are imported, conditioned, stored, tested, labelled, exported, and sold in Canada. The proposed amendments would reduce overlap and redundancy; increase responsiveness to industry changes; address gaps, weaknesses, and inconsistencies; and provide clarity and flexibility to affected regulated parties” (CFIA Forward Regulatory Plan, 2022).

### References:

CFIA [Seed regulatory modernization - Canadian Food Inspection Agency \(canada.ca\)](#) accessed 2022-05-17

CFIA [CFIA Forward Regulatory Plan: 2022 to 2024 - Canadian Food Inspection Agency \(canada.ca\)](#) access 2022-05-17