

Food and Agriculture Portfolio

Innovation in Food and Farming bringing Food Security into Reach

About Alberta Innovates

Alberta Innovates is Alberta's largest research and innovation agency, providing funding, expertise, facilities, and connections that help innovators move ideas from concept to commercialization. Through strategic investments and partnerships, Alberta Innovates accelerates the development, adoption, and scaling of technologies that strengthen Alberta's economy, improve the lives of Albertans, and create lasting economic, social, and environmental benefits. Alberta Innovates is committed to fostering an inclusive innovation ecosystem where all interested and qualified participants have equitable opportunities to contribute and succeed.

Food & Agriculture Portfolio Overview

The Food & Agriculture sectors are major drivers of economic activity in Alberta and contribute significantly to the province's GDP, exports, employment, and long-term economic prosperity. Alberta's strong agricultural production base, abundant feedstock resources, and established innovation ecosystem provide a foundation for continued growth across the value chain.

The **Food & Agriculture Portfolio** is designed to strengthen Alberta's competitive advantages while supporting opportunities to capture greater value from the province's agricultural production. The portfolio supports the development and adoption of technologies that improve productivity, resilience, competitiveness, and value creation across both agricultural production and food manufacturing systems.

Recognizing that Alberta's greatest opportunities span both production agriculture and value-added food manufacturing, the portfolio is intentionally organized into two focus areas:

Sustainable Agriculture

- Productive and Resilient Crop and Livestock Systems
- Digital Agriculture, Automation, and Decision Support
- Resource Efficiency and Circular Agriculture

Food

- Value-Added Ingredients, Proteins, and Novel Foods
- Advanced Food Manufacturing and Processing
- Food System Scale-Up and Competitiveness

This structure balances Alberta's existing strengths in agricultural production with opportunities to increase processing capacity, develop higher-value products, accelerate commercialization, strengthen food system resilience, and grow globally competitive Alberta-based businesses.

Portfolio Scope and Investment Fit: The Food & Agriculture Portfolio is not intended to fund all activities across Alberta's food and agriculture sectors. Funding is prioritized for projects with a clear innovation component and strong alignment with Alberta Innovates' mandate to accelerate research, technology

development, commercialization, adoption, and scale-up. Priority will be given to initiatives that demonstrate a credible pathway to measurable economic, environmental, social, or sector-level benefit for Alberta, rather than routine operations, standard business expansion, or activities with limited innovation or public benefit.

Focus Areas

1. Sustainable Agriculture

Sustainable Agriculture prioritizes innovation opportunities that improve the productivity, profitability, resilience, and environmental performance of Alberta's crop and livestock sectors. Investments are focused on technologies, applied research, practices, and production systems that demonstrate a clear innovation component, a credible pathway to adoption or commercialization, and measurable benefit to Alberta's agriculture sector.

This focus area supports targeted innovation across three themes:

Theme 1: **Productive and Resilient Crop and Livestock Systems**

Prioritizes innovations that improve productivity, profitability, and resilience in Alberta's crop and livestock production systems. Areas of interest include animal health, genetics, soil health, water management, crop protection, forage systems, climate adaptation, and technologies that help producers address defined production challenges such as drought, disease, extreme weather, and evolving market requirements. Projects should demonstrate clear sector need, innovation merit, and a pathway to adoption, commercialization, or measurable impact for Alberta producers.

Theme 2: **Digital Agriculture, Automation, and Decision Support**

Prioritizes the development, validation, and adoption of digital and automated technologies that improve efficiency, decision-making, traceability, and productivity across agricultural value chains. Areas of interest include artificial intelligence, machine learning, sensors, robotics, autonomous systems, remote sensing, precision agriculture technologies, and data-driven decision-support tools. Projects should address a clearly defined industry problem and show how the innovation can be adopted, scaled, or used to improve operational performance in Alberta.

Theme 3: **Resource Efficiency and Circular Agriculture**

Prioritizes innovations that improve the use of agricultural resources while reducing waste and environmental impacts. Areas of interest include nutrient recovery, biomass utilization, waste valorization, water reuse, circular production systems, and technologies that increase efficiency within agricultural operations. Projects should demonstrate both environmental and economic value, including a credible pathway to practical use, adoption, or scale-up in Alberta.

2. Food

Food prioritizes innovation opportunities that increase the value, competitiveness, and growth of Alberta's food and food ingredient sector. Investments are focused on technologies, processes, products, and

business scale-up opportunities that help transform Alberta agricultural commodities into higher-value products, expand innovation-enabled processing capacity, and support companies with credible pathways to commercialization, adoption, or market growth.

This focus area supports targeted innovation across three themes:

Theme 1: **Value-Added Ingredients, Proteins, and Novel Foods**

Prioritizes the development and commercialization of higher-value ingredients, protein products, functional foods, bioactive compounds, and novel food technologies that leverage Alberta's agricultural feedstocks. Areas of interest include ingredient processing, protein fractionation, fermentation technologies, food biotechnology, and innovations that create new products, processes, or market opportunities for Alberta agricultural commodities. Projects should demonstrate innovation merit, market relevance, and a credible pathway to validation, commercialization, or scale-up.

Theme 2: **Advanced Food Manufacturing and Processing**

Prioritizes innovations that improve the productivity, efficiency, competitiveness, safety, and sustainability of Alberta food manufacturing and processing operations. Areas of interest include automation, robotics, advanced processing technologies, food safety systems, digital manufacturing, traceability technologies, packaging innovations, and process optimization. Projects should go beyond routine equipment replacement or business expansion by demonstrating a clear innovation component and measurable benefit to Alberta's food manufacturing sector.

Theme 3: **Food System Scale-Up and Competitiveness**

Prioritizes innovation-enabled scale-up opportunities that strengthen the growth, competitiveness, and scalability of Alberta food and agri-food businesses. Areas of interest include commercialization pathways, supply chain innovation, market readiness, business scale-up, and strategies that help companies scale technologies, manufacturing capacity, or market presence. Projects should demonstrate alignment with Alberta Innovates' investment mandate by showing innovation merit, Alberta benefit, and a credible pathway to commercialization, adoption, investment attraction, or sustained growth.

Food & Agriculture Expected Outcomes

The Food & Agriculture Portfolio is designed to generate measurable outcomes for Alberta by supporting targeted innovation, technology development, validation, commercialization, adoption, and scale-up across the agriculture and food value chain. Expected outcomes reflect the types of benefits that may result from well-aligned projects; they do not imply that all activities within the food and agriculture sectors are eligible for funding. Priority will be given to initiatives that demonstrate innovation merit, a credible pathway to practical use or market impact, and clear economic, environmental, social, or sector-level benefit for Alberta.

- **Technical Advancements** - Advance the development, validation, adoption, and commercialization of technologies, practices, and processes that address defined sector needs

and improve productivity, efficiency, resilience, sustainability, scalability, or competitiveness in Alberta's agriculture and food sectors.

- **Food Security and System Resilience** - Support innovation that strengthens Alberta's capacity to sustainably produce, process, and distribute food by improving production resilience, reducing food loss and waste, enhancing supply chain adaptability, and increasing the ability to transform agricultural commodities into higher-value food and ingredient products.
- **Industry Collaboration** - Enable purposeful collaboration among producers, processors, technology developers, researchers, investors, Indigenous and rural partners, and value chain organizations where collaboration accelerates innovation, de-risks adoption or commercialization, and addresses clearly defined industry challenges.
- **Talent and Capacity Development** - Build innovation capacity by supporting highly qualified personnel, entrepreneurial talent, technical expertise, and applied research or commercialization capabilities where these activities are directly connected to an eligible innovation project and contribute to Alberta's long-term sector competitiveness.
- **Economic Growth and Competitiveness** - Accelerate innovation-enabled growth and diversification in Alberta's agriculture and food sectors through commercialization, business scale-up, increased productivity, expanded value-added processing capacity, investment attraction, and market growth linked to new or improved technologies, products, processes, or services.
- **Rural and Community Benefits** - Contribute to rural and community prosperity where innovation projects create clear Alberta benefits, such as stronger regional economies, resilient supply chains, improved access to food system opportunities, employment or business growth, and enhanced quality of life for Albertans.
- **Environmental Stewardship and Resource Efficiency** - Improve environmental performance and resource efficiency through innovations that support better management of water, nutrients, energy, biomass, soil health, biodiversity, and other resources, while demonstrating practical pathways to adoption, measurable outcomes, and relevance to Alberta's agricultural landscapes and food systems.

How to Apply

The program uses a continuous intake process, as described in the Agriculture and Environment Application Guide. The application guide can be accessed from our online application portal under funding opportunities – [click here](#). In addition, periodic calls for proposal (also known as funding competitions) will be issued to award grant funding. Each call for proposals will have specific priorities and criteria, along with a dedicated program description and application process guide.

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