Sustainable Canadian Agricultural Partnership

Competitive. Innovative. Resilient.

Research and Innovation

Program Guide







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Section 1 - Program Description

The objective of the Research and Innovation (R&I) program is to advance the growth and sustainability of the agriculture and agri-food industry by fast tracking the pace of innovation through basic and applied research and capacity building projects. This can include the development of new technologies and practices, new products, and the advancement of knowledge.

Section 2 - Program Eligibility

The research and innovation program is open to:

- Agri-processors
- Indigenous Groups (government, communities, tribal councils, associations, and organizations)
- Industry Organizations
- Primary Producers
- Research Institutions
- Service Providers

An organization with multiple divisions, operation names or units, will count as one organization.

Current and former Government of Canada employees are ineligible to apply for funding.

Government of Canada departments and agencies are only eligible to apply under the Grain Innovation and Crop Production focus area.

Current Manitoba government employees, who are the majority shareholder (50 per cent or higher) in a business or operation, are not eligible to apply for funding.

A business or operation, which includes a provincial government employee as a minority shareholder, will be eligible to apply for funding.

Current or former members of the Legislative Assembly of Manitoba, current or former members of the Executive council, or current or former Manitoba government senior public servants are not eligible. Current or former federal public office holders are eligible as long as they follow conflict of interest policies and procedures.

Co-Applicants

Co-applicant information will be required for all projects where two or more parties are supporting a project. A co-applicant letter is required at the Application Worksheet (full proposal) stage and is to include:

- Legal name of business or organization
- Contact person (first and last name)
- Role in the project
- Financial contribution towards the project (if any)

All applicants who identify as a researcher (including academic institutions) or a Government of Canada department or agency will be required to identify at least one non-researcher, non-government co-applicant to be eligible for funding. In that case, the co-applicant must be either a primary producer, an agri-processor, an industry organization, or a service provider (non-research).

Section 3 - Funding Streams and Focus Areas

The Research and Innovation program provides grant funding for researcher and industry-led projects that contribute to the development of agricultural knowledge and skills and improve the competitiveness and sustainability of Manitoba's agriculture, agrifood, and agri-product sectors.

There are two funding streams available for research and innovation financial assistance:

- Basic and Applied Research includes basic discovery research that seeks to expand knowledge to projects that attempt to find practical solutions for specific problems.
- Capacity Building includes only the purchase of research equipment (\$10,000 or greater) and equipment specific training to help build research and innovation capacity in Manitoba.

Focus Areas

When applying for funding, applicants are encouraged to focus on one of the following areas:

- Agri-Resource Management
- Economic and Market Analysis
- Grain Innovation and Crop Production
- Livestock Production
- Processing and Value-Added

Agri-Resource Management

Potential project areas include but are not limited to:

- Improving water quality and water use efficiency in production and processing technologies and practices
- Building soil resilience through management of sensitive soils, assessment of soil enhancement practices and practices that enhance carbon sequestration
- Increased understanding of Ecological Goods and Services (EGS) valuation and best practices
- Decision support tools for sustainable resource use such as climate smart decision support tools and metrics

Economic and Market Analysis

Research that mitigates risk for the agriculture and agri-food industry and aids in market development. Potential project areas include but are not limited to production economics, marketing, industry benchmarking, policy, risk management, consumer behaviour and other economic issues affecting the industry.

Grain Innovation and Crop Production

Potential project areas include but are not limited to:

- Plant genomics and breeding
- Assessment of existing or alternative practices for environmentally sound and economically viable crop production
- Evaluation of new technologies and practices such as precision agriculture, digitisation, and robotics
- Sustainable plant protein production (including the assessment of new and improved product attributes) and innovation (including crop livestock integration)
- Designing and evaluating climate-smart crop production strategies
- Innovations that increase the value and expand demand for Manitoba crops
- Detection, assessment and management of diseases and pests of crops
- Exploring innovative solutions to emerging threats in crop production
- Feed grains
- Understanding and inclusion of indigenous and traditional agricultural knowledge in crop production

Livestock Production

Potential project areas include but are not limited to:

- Assessment of existing or alternative practices for environmentally sound and economically viable livestock production
- Sustainable animal protein production (including the assessment of new and improved product attributes)
- Climate-smart livestock production strategies
- Feed and forage production, management, and utilization
- · Animal genomics and breeding
- Detection, assessment and management of livestock diseases and pests
- Beneficial management practices of animal welfare and animal destruction/disposal
- Exploring innovative solutions to emerging threats
- Evaluation of new technologies and practices such as precision livestock farming, digitisation, and robotics

Processing and Value-Added

Potential project areas include but are not limited to:

- Identification of sustainable processing technologies and packaging
- Improving food manufacturing/processing approaches (including AI, robotics, automation) to increase process efficiencies and/or reduce water use
- Identification and utilization of co-products and/or by-products in food and nonfood applications (agri-products, bioproducts), including repurposing food waste into consumable finished products
- Development of novel ingredients and identification of their food product applications (assessment of functional and sensory properties, nutrition quality, and safety)
- Innovation in food product development, including Indigenous and novel foods, alternative protein sources (i.e., insects), precision fermentation
- Identification of personalized nutrition strategies for optimal health and disease prevention utilizing nutrigenetics, nutrigenomics, and other related technologies
- Innovative approaches to incorporate traditional knowledge related to food and new technologies across the value chain (e.g., vertical farming, diabetic friendly foods, and improved food nutrition)

Section 4 - Cost Share Funding

The R&I program projects are cost shared between government and the applicant. The cost share ratio varies depending on the funding stream, total project cost and if the project results in Intellectual Property (IP) or requests confidentiality of results. Please refer to the definition of IP to properly determine how funding ratios may affect the project.

| Funding Stream | IP or Confidentiality Required | Cost Share (gov:applicant) |
|-------------------------------|--------------------------------------|---------------------------------------------|
| Basic and Applied Research | | 70:30 on first \$100,000 |
| | No | 60:40 on remaining amount over \$100,000 |
| | Yes | 50:50 |
| Capacity Building | N/A | 50:50 |

Project Length

The project duration for program activities may be single or multi-year. Multi-year projects can be up to three consecutive years but must be completed by December 31, 2027.

Eligible Expenses

Eligible expenses are directly related to the execution of an approved project. The applicant is solely responsible for all expenses of the project, including all ineligible expenses, any project deficits or cost over-runs.

The following expenses are eligible for funding:

- Provincial Sales Tax (PST)
- Incremental salaries, wages, and benefits
- Subcontracted services
- Professional fees
- Knowledge transfer
- Facility and equipment rentals (including laboratory equipment and facility)
- Materials and supplies
- Travel expenses (related to knowledge transfer and project activities which occur within North America)
- Overhead up to ten per cent of total approved expenses

Capacity building, including capital equipment*

Where a project is approved, no eligible expenses will be reimbursed unless a funding agreement is signed.

See Appendix A for types of eligible expenses and Appendix B for details on eligible expenses.

Ineligible Expenses

The following expenses are ineligible for funding:

- Any expense, including a tax, which is eligible for a rebate, credit, or refund (i.e., Goods and Service Tax (GST))
- In-kind
- Principal investigator, applicant, and co-applicant salaries, wages, and benefits
- Any expenses incurred before or after the dates listed in the funding agreement
- Any expenses not required for the execution of the project
- Normal operating expenses associated with carrying out business operations
- Extended warranties
- Spare parts not used as part of the project
- Expenses associated with lobbying
- Financing charges, loan interest payments, bank fees and charges
- Any compensation to any government employee for organizing or delivering parts of the project
- Purchase of land, buildings, and facilities, associated taxes, and fees (e.g., land transfer tax)
- Any additions to new or existing buildings and facilities, and associated taxes and fees
- Purchase of typical farm equipment (e.g., tractors, skid steers, combines, etc.) and related accessories and attachments
- Normal, current, or ongoing maintenance expenses
- Establishing a commercial operation
- Office renovations
- Sponsorship of seminars, conferences, workshops, events, or initiatives
- Multi-use items (e.g., items that are not directly related to the project activities, such as computers, printers, phones, cameras, pressure washers, general farm equipment, batteries, ATV, trucks, clothing, and footwear, etc.)
- Any project-related activity that generates revenue during implementation of the project
- Expenses incurred for other projects

^{*} Capital equipment is research equipment and specific equipment training greater than \$10,000.

- Knowledge transfer related registration fees & travel expenses associated with Principal Investigators are ineligible when the project involves highly qualified personnel salaries, wages and benefits
- Any item purchased before April 1, 2025
- Leases
- Any other expense deemed ineligible by the program administrator

Funding from Government

The applicant must adhere to the stacking limit. The stacking limit refers to the maximum level of total Canadian government funding (federal, provincial/territorial, and municipal) a successful applicant can receive towards total approved eligible expenses of a project.

The maximum level of total government funding must not exceed:

- 100 percent of total approved eligible expenses; or
- If the applicant is a for-profit business or organization, 75 per cent for capital items that are approved eligible expenses

Section 5 - Letter of Intent and Application Worksheet Assessment

Letters of Intent will be assessed according to the following criteria:

- Scientific merit and originality
- Overall research approach
- Capability of the research team
- Expected results

Application Worksheets will be assessed according to the following criteria:

- Scientific merit and originality
- Research approach and methodology
- Communication plan and knowledge transfer
- Principles and policy assessment
- Capability of the research team
- Financial and delivery risk

Section 6 - How to Apply for Funding

Funding requests for this program are part of a two stage review process:

- Stage 1: Completion of a Letter of Intent
- Stage 2: Completion of an Application Worksheet (invite only)

Letter of Intent

The Letter of Intent is available on the Manitoba Agriculture website during an open call. Go to https://www.manitoba.ca/scap/scienceresearch/research.html

Manitoba Agriculture will publish deadline dates through the Sustainable CAP website and social media channels.

The Letter of Intent must be submitted to the program administrator by the specified deadline.

The Letter of Intent can be emailed to Manitoba Agriculture at agriculture@gov.mb.ca.

Only one Letter of Intent will be accepted for each project.

Applicant must acknowledge and agree to any terms and conditions contained in the Letter of Intent, Program Guide and Program Terms and Conditions.

Only the applicant may complete the Letter of Intent or other program documents.

Application Worksheet

Applicants who have submitted completed Letters of Intent which have been deemed to meet the priorities of the program and possess significant research and innovation merit, will be invited, via email, to complete an Application Worksheet (full proposal). The invitation to complete the Application Worksheet (full proposal) does not mean that a funding decision has been made and does not guarantee that the funding request will be successful.

The Application Worksheet must be submitted to the program administrator by the specified deadline.

The Application Worksheet can be emailed to Manitoba Agriculture at agriculture@gov.mb.ca.

Applicant must acknowledge and agree to any terms and conditions contained in the Application Worksheet, Program Guide and Program Terms and Conditions.

Only the applicant may complete the Application Worksheet or other program documents.

Applicants must comply with all Manitoba and federal government laws and regulations applicable to their projects and to their business or organization's operations. Applicants must also accept and agree to all the terms and conditions of the program.

In the case of partnerships, corporations and other business organizations, a designated person with legal authorization must sign the Application Worksheet. The program administrator may require proof of authorization.

Project activities must be completed, and all reports submitted on or before December 31, 2027, unless otherwise stated in the funding agreement, or no payment will be issued.

Funding for projects will be subject to the appropriation of funds by the Government of Canada and the Manitoba government.

Funding amounts received from all sources must be declared on the Application Worksheet (full proposal). Failure to disclose all financial sources for a project may nullify the funding request.

Definitions

Academic Institution: an educational institution dedicated to education and research, which grants academic degrees or diplomas (e.g., the University of Manitoba and Assiniboine Community College).

Agri-processor: a person or entity actively engaged in agri-food and agri-product processing.

Applicant: a person or entity who satisfies all the eligibility requirements set out in the terms and conditions and who submits an application under this program.

Basic and Applied Research: one or both of the following:

- (a) basic research, meaning experimental or theoretical work, undertaken primarily to acquire new knowledge or explain mechanism(s) of action
- (b) applied research, meaning the methodology used to solve a specific, practical problem of an individual or group

Capacity Building: projects that only include a research equipment investment over \$10,000 and equipment specific training.

Co-applicant: a person or entity supporting the applicant member of a project research group applying for a team grant. If the applicant is an academic researcher or a research institution, a co-applicant is required and must be either a primary producer, an agriprocessor, an industry organization or a non-research and non-government service provider.

Contribution Agreement: the articles of agreement and annexes, as well as their amendments and the general terms and conditions applicable on the effective date of agreement.

First Nation: an Indigenous community officially recognized as an administrative unit by the federal government.

Government Funding: any financial assistance in the form of provincial or federal grants, loans, or other assistance.

Industry Organization: a non-profit organization (e.g., a commodity organization) that is actively engaged in representing primary producers, agri-processors, or agri-business members interests working to further the competitiveness of Manitoba's agriculture and agri-food sector. Industry organizations must be a legally recognized entity, duly registered with the Manitoba Companies Office to carry on business in the province of Manitoba (where required by law).

Intellectual Property: all materials, concepts, know-hows, formulae, inventions, improvements, industrial designs, processes, patterns, machines, manufactures, compositions of matter, compilations of information, patents and patent applications, copyrights, trade secrets, technology, technical information, software, prototypes and specifications, including any right to apply for protections under statutory proceedings available for those purposes, provided they are capable of protection at law.

Knowledge Transfer: the transfer of expertise, learning and skills between parties.

Manitoba Government Employee: any full time, regular, part-time or term individual employed by the provincial government, including any special operating agency or Crown corporation.

Manitoba Senior Public Servant: the clerk of the executive council; a deputy minister or equivalent or an assistant deputy minister; a chairperson, president, vice-president, chief executive officer or deputy chief executive officer of a Crown agency; a person who is designated or who occupies a position that is designated under section 31.1 of The Legislative Assembly and Executive Council Conflict of Interest Act; and includes a person who, on a temporary basis, occupies a position described here.

Minister: the Minister of Agriculture for the Manitoba government, including any person authorized to act on the minister's behalf.

Non-profit: a type of organization that does not earn profits for its owners; but uses all money earned by or donated to it to pursue the organization's objectives and support the operations.

Person: includes an individual, partnership, association, or corporate body (entity).

Pre-commercialization and Pre-adoption: pre-commercial innovations are those in the phases of research and development before commercialization and adoption. Pre-commercial innovations are developed but have not been produced in quantity. They may have been sold on a limited basis for the purpose of testing and demonstration, but they are not readily available in the marketplace. Pre-commercialization or pre-adoption activities may include solution exploration, design, and prototyping, up to the original development of a limited volume of goods or services in the form of a test series.

Primary Producer: an individual grower, producer or rancher, partnership, corporation, co-operative or any other association of people who is actively engaged in farming.

Principal Investigator: the person who directs a research project or program. The principal investigator usually writes and submits the research application, oversees the scientific and technical aspects of the application, and has responsibility for management of the research.

Program: refers to the Sustainable Canadian Agricultural Partnership, Research, and Innovation program.

Program Administrator: Manitoba Agriculture, or where applicable, any person engaged by the Manitoba government, to carry out administrative activities in connection with the program.

Project Proponent: can be any one or more of the individuals or groups described under program eligibility. Where several eligible groups are involved in a single proposal, one individual shall be assigned as project contact for the group.

Research Institution: an institution conducting basic and applied research related to agriculture, agri-food, and agri-products.

Research Team: Research team is a group of researchers collaborating on a project, where each member provides a specific expertise for the successful completion of the proposed project. This expertise may span various areas such as study design, data collection, analysis, interpretation, knowledge transfer, and access to necessary equipment.

Researcher: Any person who conducts research or provides research services to support the agricultural, agri-food and agri-products industries.

Service Provider: an individual, agri-business or organization that provides services to support the agricultural and agri-food industry.

Sustainable Canadian Agricultural Partnership: is a five-year agricultural policy framework by Canada's federal, provincial, and territorial governments to encourage market development, innovation and research, environmental sustainability, value added processing, improved public trust and risk management across Canada's agriculture, agri-food, and agri-product sectors.

Appendix A - Examples of Eligible Expenses

| Expense Category | Types of Eligible Expenses |
|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Incremental salaries, wages, and benefits | graduate students fellowships technicians summer students |
| Subcontracted services | custom workcasual labour |
| Professional fees | outside consultants justified as essential to the project, but must be hired specifically to ensure the project is delivered (e.g., project manager, accountant, legal firm, engineering) |
| Knowledge transfer | communication materials (e.g., manuscripts and extension materials) advertising postage and envelopes printing extension events (e.g., facility rental, audio, and visual equipment rentals) |
| Facility and equipment rental | facility rental (including laboratory rental) land rental equipment rental (including laboratory equipment rental) |
| Materials and supplies | lab supplies chemicals consumables small research equipment (less than \$10,000 each) |
| Capital assets and equipment | research equipment (\$10,000 or greater) required for the project and any installation, calibration and modification required (may include hook-up for research equipment installation, including site preparation like a cement pad or similar) research equipment specific training |

| Expense Category | Types of Eligible Expenses |
|----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Travel expenses – related to seminar, conference, and workshop | registration fees to attend seminars, conferences and workshops related to this project accommodation airfare meals transportation (non-airfare) mileage (for owner vehicle) |
| Travel expenses – related to research project activities | accommodation airfare meals transportation (non-airfare) mileage (for own vehicle) |
| Overhead (up to ten percent of total approved expenses) | accounting and legal expenses administrative wages and benefits depreciation insurance licence fees property taxes office space rental office supplies utilities (e.g., hydro, phone, or internet service) computer and software rental |

Appendix B - Eligible Expense Details

| Expense | Eligibility Details |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mileage | Mileage rates will follow the General Manual of Administration rates for mileage within Manitoba and the National Joint Council rates for mileage outside of Manitoba. |
| | Fuel is only eligible if the vehicle has been rented and the purchase of fuel is supported by an invoice and proof of payment. |
| | Fuel for personal or business vehicles is ineligible as the mileage rate includes fuel. |
| | The applicant will be required to provide a summary of each trip including: • Start point • End point • Total kilometers • Reason for trip |
| | The current mileage rates are: |
| | Within Manitoba: \$0.47 per kilometer. |
| | Outside of Manitoba: \$0.56 per kilometer. |
| Meals | Per meal limits will follow the General Manual of Administration rates for meals within Manitoba and the National Joint Council rates for meals outside of Manitoba. |
| | Eligible meal expenses do not include any alcohol, gratuity, and GST. |
| | Meals are limited to one (1) breakfast, lunch, and supper per day, per eligible person |
| | The current meal rates are: |
| | Within Manitoba: |
| | Breakfast: \$8.64 |

| | Lunch: \$10.84 Dinner: \$18.37 Outside of Manitoba: Breakfast: \$24.35 Lunch: \$24.65 Dinner: \$60.45 |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Principal Investigator | The Principal Investigator is defined as the person who directs a research project or program, writes, and submits the research application, oversees the scientific and technical aspects of the application, and has responsibility for management of the research. The Principal Investigator cannot also act as a subcontractor and receive compensation. The applicant cannot hire a company in which the Principal Investigator is an owner or majority shareholder. |
| Internal Laboratory Fees | For some applicants, it does not make sense to use a third-party laboratory or research facility when in-house options are available. To be eligible, the expenses must: • be supported by documentation of the costs incurred (e.g. rates and duration of rental); • provide proof of the internal payment (e.g. journal entry). |
| Drones | On a case-by-case basis, drones may be considered as an eligible expense if: • the applicant demonstrates that the drone is necessary for the project and not used for other areas of the business; • the primary use of the drone will show a direct link to an agricultural sector benefit. |

| | On a case-by-case basis, a computer and/or CPU module or computer may be considered to be an eligible expense, provided that: |
|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Computers and Central Processing Units (CPU) | the applicant has provided adequate details on the items to confirm that it is not a multi-use item; computer or CPU module cannot be detached from the associated equipment and used for other purposes. |