

Technology Development 2000 Program

2007–08

Purpose

The Technology Development 2000 program supports the development and adaptation of new and leading agricultural technologies and knowledge that will enhance the competitive position of Nova Scotia’s agriculture and agri-food industry.

Objectives

- support technological research opportunities identified by the agriculture and agri-food industry,
- increase the industry awareness of the value of research,
- encourage the participation of industry in the support of research,
- develop research expertise in Atlantic Canada,
- optimize the relationship among research, education and industry
- communicate research results and encourage industry adaptation of technology, and
- identify solutions to short and long term water and soil management issues.

Eligibility

Eligible applicants include:

- individuals, partnerships, corporations, co-operatives, colleges, universities and foundations, farm organizations, commodity organizations, recognized agricultural water authorities and government agencies where:
 - demonstrated partnerships with Atlantic Canada Agri-Food Businesses or other research institutions are required,
 - priority will be given to Atlantic Canada Agri-Food businesses and research institutions; and
 - interprovincial and international collaboration is encouraged where appropriate.

Project Leader(s) are the individual(s) directly responsible for the management of project activities and financial reporting.

Any Applicant(s) or Project Leader(s) with overdue reports from previously approved research projects through this program will not be eligible to apply for new project funding until the outstanding reports have

been submitted to the Programs Office.

Project and Applicant Requirements:

Projects must be consistent with and reflect the objectives and category priorities of this program.

Table 1: Program Category Priorities

Category A General Technology
Part A: Production Research Part B: Environment Research Part C: Product Innovation Part D: Industry Agricultural Research Chairs Part E: Applied Management Projects
Category B Agricultural Water Resource Development
Part F: Surface Water Management Part G: Ground Water Management Part H: Water Distribution Part I: On-farm Irrigation Part J: Soil Moisture Management

See Schedule A & B for further explanation of these program categories and priority areas.

Projects approved for assistance under this program must be environmentally sound. If it is determined that the project could have significant environmental impact, an environmental assessment may be required prior to project approval. It is the applicant’s responsibility to research regulatory requirements in advance of submitting an application, to obtain required permits and to ensure environmental compliance. Projects involving animals must be conducted in accordance with the Canadian Codes of Practice for Livestock, and research practices must comply with the guidelines of the Canadian Council on Animal Care.

Application Process:

The Technology Development 2000 Program uses a two-stage application process. Stage One involves the submission of a Letter of Intent. (Note: Industry Agricultural Research Chair Detailed Proposals are to be submitted at the Letter of Intent stage for proposal review.)

1. During the 2007-08 fiscal year, Letters of Intent (LOI) will be received by the Programs and Business Risk Management Office (PBRM Office) until 4:30 pm on August 15th, 2007 and January 15th, 2008. Original LOI applications can be submitted either by mail or in person. Letters of Intent received after the deadlines will be deemed ineligible for consideration. Letter of Intent forms are available from the PBRM Office or website.
2. Eligible Letters of Intent are reviewed and evaluated by the Technology Development 2000 Research Committee. Successful applicants in Stage One will be invited to submit a detailed proposal. Submission of the detailed proposal is Stage Two of the application process. Information on the detailed proposal format and deadlines will be provided to the successful applicants following Stage One. An invitation to submit a detailed proposal is not a guarantee of funding.
3. Invited detailed proposals will be reviewed and evaluated by the Technology Development 2000 Research Committee. Funding decisions are made by the Committee as a whole. Proposals must reflect program priorities. In addition to meeting program objectives, the proposals are evaluated on:
 - (a) scientific merit as judged by the committee,
 - (b) completeness of application, including adherence to guidelines,
 - (c) availability of resources (land, plots, growth chambers, animals, etc.),
 - (d) availability of funds, contribution to project from industry and other sources,
 - (e) demonstration of innovation, industry need and priority, and a reasonable chance of success,
 - (f) economic impact to the industry, and
 - (G) demonstrated applicant experience or evidence of potential contribution.

Program Communications:

In support of promoting research activities, applicants should be aware that their name, project title, business contact information and abstract/executive summary information may be made publically available on the Programs website. Applicants may negotiate for confidentiality of their project summary and project results. Unless negotiated, this information will be publicly available. For the purposes of determining program acceptance, the Project Proposal information will be reviewed by the program committee or designates.

The program encourages researchers to publish their research results where possible.

Financial Information:

The Technology Development 2000 program is subject to annual budget approval by government. Numbers of applications and budget limitations may necessitate early program closure.

All approved funding is on a cost-shared basis. Applicants may qualify to receive \$10,000 to \$30,000 in assistance per year. Refer to Program Schedules A and B for complete funding details. Percentage level of assistance, total assistance and length of funding for approved projects depends on project category and area of priority.

Eligible Expenses
<ul style="list-style-type: none">• Salaries for term employees: graduate students, post-doctorate fellowships, contract technicians and summer students directly related to the project.• Supplies and disposables• Communications, publications, travel, technology transfer.• Laboratory analysis
Ineligible Expenses
<ul style="list-style-type: none">• Capital Expenditures• Administration and general overhead• HST

Applications must be received prior to conducting any purchases or work related to the project. Expenses incurred prior to project approval is at the applicant's risk.

Claiming Procedures:

On approved projects that are not administered by the NSAC research office, a one-third advance payment is forwarded for project startup. The balance of funding is advanced based on proof of expenditures and project reports.

- Only those expenditures approved in the detailed proposal submission are eligible for reimbursement. Total payments in any year must not exceed that year's approved funding.
- Unclaimed funds in one year will not be available in a subsequent program year.
- Where adjustments to the budget items are requested, the Applicant must submit a revised budget in writing to the Programs Office including the justification for the revisions. The request will be reviewed by the Programs staff and committee (as applicable) prior to approval.
- Any financial contributions under the Program may be repayable if it is determined that the funds have been used for purposes or projects other than those approved in the agreement. The applicant may also jeopardize any future funding assistance through this program.

Reporting Requirements:

Approved projects require Interim and Final reports.

Interim reports are to be submitted 30 days prior to the projects' first year anniversary date. The interim reports will be reviewed and evaluated prior to the release of any second year funding allocations.

Final reports are to be submitted within 90 days after the projects' completion date. Future funding through this program will be jeopardized if a final report is not received.

Both Interim and Final reports must be submitted in electronic copy to the PBRM Office, prm@gov.ns.ca. Templates for Interim and Final Report may be obtained from the Programs office or web site.

Project Extension Requests

Program Extension requests must be made to the Programs Office and must include reason/justification for extension, revised work plan including time lines and any proposed changes in budget allocations. Extension Request Template may be obtained from the Programs Office or web site.

NOTE: Only one extension request will be considered per approved project.

Project Evaluation:

Review and evaluation of projects may be carried out by officials of the Department or other parties chosen by the Department for the purpose of audit, analysis, evaluation, program development and determining assistance.

This review and evaluation process may be conducted prior to project commencement, during work or upon project completion.

Appeal Process:

The appeal process is designed to ensure that the applicant has been treated fairly and consistently in the Technology Development 2000 program review process.

- Appeals must be formally submitted within 30 days of the date of the decision correspondence.
- The applicant must demonstrate that the decision of the review committee is inconsistent with the application of the advertised guidelines.
- New information, published materials or extenuating circumstances that have occurred since the application deadline will not be taken into consideration.

Appeals may be reviewed by external consultants who are senior members of the research community with experience in the Technology Development 2000 program process. The final decision on an appeal is made by the Technology Development 2000 Program. Appeals will be resolved within three months after they are received by the PBRM Office.

Category A: GENERAL TECHNOLOGY

Projects will be considered in the following areas:

Part A – Production Research – develop or identify methods for the advancement in primary agricultural production. Areas of applied research include but are not limited to; microbiology, livestock health and nutrition, disease and pest management, genetic and nutrient utilization. Note: Applied projects that meet the criteria of Part E will be considered first under that section.

Part B – Environmental Research – this program supports applied research for new and innovative soil conservation practices, air protection (both greenhouse gas emissions and reduction in on-farm emanations), biodiversity (both research in habitat enhancement, protection of species at risk and reduction in livestock damage on farm).

Part C – Product Innovation – develop and identify methods to increase activity and capacity for new product innovations and technologies. Research will focus on developing new alternative agricultural products and technologies to expand market opportunities.

Part D – Industry Agricultural Research Chairs – this program supports NSAC agricultural research chairs in partnership with industry.

Part E – Variety Trial Technology Transfer – This program supports trials that are designed to demonstrate alternative management strategies on animal or crop performance supporting technology transfer for on farm applications, ie straightforward testing of fertilizer levels, variety testing trials, cutting heights or livestock number densities.

Financial Assistance

Part A-C - Assistance on eligible costs may be up to 75 per cent of total project costs to a maximum of \$20,000 per year per project for up to two program years. The applicant must clearly demonstrate a minimum cash contribution from industry equal to 15 per cent of the total Technology Development (TD) 2000 funding being requested for each program year (example: Year 1 - TD funding requested = \$20,000, thus industry cash contribution for Year 1: \$20,000 X 15% = \$3000). Industry, for the intent of the Technology Development

2000 Program shall be recognized as the broader agricultural sector. Eligible in-kind contributions may not account for more than 10% of the total Technology Development 2000 funding being requested. An in-kind contribution is the provision of a good or service that has an attached cash value but, it is not an actual cash contribution.

In rare exceptions, if funding is not available from the primary agricultural industry, an applicant may provide justification for the necessary program funding by illustrating how the proposed research meets program objectives and would benefit the primary agricultural industry.

Part D – The maximum annual contribution of \$30,000 per program year for an individual chair position, which must be matched by an industry sponsor. These positions are evaluated annually and can have up to a five year term.

Part E – Assistance on eligible costs may be up to 75 per cent of total project costs to a maximum of \$10,000 per year per project, for up to two program years. The applicant must clearly demonstrate a minimum cash contribution from industry equal to 15 per cent of the total Technology Development 2000 funding being requested for each program year (example: Year 1 - TD funding requested = \$10,000, thus industry cash contribution for Year 1: \$10,000 X 15% = \$1500). Industry, for the intent of the Technology Development 2000 Program shall be recognized as the broader primary agricultural industry. Eligible in-kind contributions may not account for more than 10% of the total Technology Development 2000 funding being requested. An in-kind contribution is the provision of a good or service that has an attached cash value but, it is not an actual cash contribution.

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Category B: AGRICULTURAL WATER RESOURCE DEVELOPMENT

Eligible activities include investigative travel, feasibility studies, prototypes, pilot projects, test sites and demonstrations of innovative methods of improving the utilization of water. Eligible costs include professional services, permits and construction (excluding pumps, pipe, hardware, electrical). Design and construction must meet NSDA approval and all regulatory requirements.

Projects will be considered in the following areas:

Part F – Surface Water Management – developing or identifying methods of improving utilization of surface water, including innovative storage and recharge technologies. Projects may include, water quality improvements, utilization of precipitation and tile drainage water, recycling waste water, designing multi-purpose water sources (fire control, wildlife, recreation/community uses).

Part G – Ground Water Management – developing or identifying methods of improving access to and utilization of ground water. Projects may include, but are not limited to, test wells, pump tests, quality testing, and mapping.

Part H – Water Distribution – developing or identifying methods of improving water distribution. Work must be carried out in cooperation with other affected stakeholders, including NS Department of the Environment and municipalities. Projects may include, but are not limited to, identification of sites and water system design.

Part I – On Farm Irrigation – assisting in the cost of designing improved and customized on-farm irrigation systems, on a pilot basis and excluding capital cost of irrigation systems.

Part J – Soil Moisture Management – developing or identifying methods of improving soil moisture levels through improved utilization of existing soil and water resources. Projects may include, but are not limited to, earthen dams to control runoff and erosion, grassed strips or terraces, interceptor drains and enhancement of organic matter retention. On-farm tile drainage is excluded.

Financial Assistance:

Assistance of up to 50 per cent of eligible project costs per year for one program year. Funding levels are up to a maximum of:

- \$30,000 per project per year for individual projects, or
- \$40,000 per project per year for community-based or multi-user projects.

The minimum 50 per cent of costs contributed to a project by the applicant and cooperators may be a combination of their own funds, other program funds and in-kind contributions. However, eligible in-kind contributions may not account for more than 25 per cent of the applicants' and co-operators' contribution. An in-kind contribution is the provision of a good or service that has an attached cash value but, it is not an actual cash contribution.

How to contact us:

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