



Through the Canadian Agricultural Partnership (CAP), the Department of Agriculture and Land (DAL) is working to support agricultural science, research and innovation. In an increasingly competitive global market, agricultural groups must continuously acquire new knowledge and innovate to retain a competitive advantage.¹ The Department's Science, Research and Innovation Programs provide assistance for farm-level research, innovation and adoption projects to increase the competitiveness, productivity and profitability of the agriculture sector.^{2,3}

DEPARTMENTAL PRIORITIES FOR THE AGRICULTURE RESEARCH AND INNOVATION PROGRAM INCLUDE:

1. Applied Research

Supports short-term research to develop new production methods, fill information gaps and assist in supporting emerging commodities with high potential.

2. Innovative Technologies

Supports implementation of innovative technologies, which are potentially high-risk and first of their kind to the province or region.

3. Industry Research Coordination

Supports commodity groups and industry organizations in the prioritization, coordination and implementation of research activities.

4. Technology and Science Adoption

Supports adoption, implementation and/or evaluation of best practices, new technologies and processes that improve efficiency and profitability.

OVER
\$373,000
INVESTED IN
TECHNOLOGY AND
SCIENCE ADOPTION
PROJECTS

- Isobus Control System;
- Potato Planter Press Wheel Kit;
- Yield Monitor;
- Automatic Sprayer-Boom Section Control System; and
- Grisnich Precision Grader.

OVER 2760 PARTICIPANTS ATTENDED 266 TRAINING OR KNOWLEDGE TRANSFER EVENTS:

- PEI Horticultural Association (Carrot Variety Demonstration);
- Atlantic Grains Council (Producer Workshop/Field Day);
- Atlantic Tech Transfer Team for Apiculture (Producer Training Session); and
- PEI Certified Organic Producers Cooperative (No Till Forage Plot Tours).

Canadian Agricultural Partnership industry and public consultations indicated a need for support with applied research and knowledge transfer activities.⁴

152 NEW KNOWLEDGE TRANSFER PRODUCTS DEVELOPED

- 118 Social Media Items;
- 25 Technical Bulletins;
- 8 Articles; and
- 1 Factsheet.

OVER \$324,000 INVESTED IN INNOVATIVE TECHNOLOGIES:

- Robotic Palletizing System;
- Hemp Dryer;
- Haskap Harvester; and
- Cranberry Cleaner.



SCIENCE, RESEARCH AND INNOVATION IMPACTS.

The projects completed resulted in 601 activities⁵ that contributed to three outcomes⁶. This included:

- 419 activities that resulted in new knowledge being transferred to the sector;
- 179 activities that resulted in new agriculture and agri-food technologies being generated and/or commercialized; and
- 3 activities that increased the sector's capacity to conduct innovative research and development activities.

179 activities which contributed to new agricultural and agri-food technologies being generated and/or commercialized in the following sectors:



- 64 Vegetable farming (including potatoes);
- 33 Oilseed and grain farming;
- 23 Sheep and goat farming;
- 22 Dairy cattle and milk production;
- 18 Beef cattle ranching and farming;
- 8 Fruit and tree nut farming;
- 4 Hog farming;
- 3 Other animal production;
- 2 Support activities for crop production;
- 1 Poultry and egg production; and
- 1 Other crop production.

ENDNOTES

1. Papalexandris, A., Ioannou, G., Prastacos, G. & Soderquist, K. (2005). An integrated methodology for putting balanced scorecard into action. *European Management Journal*, 23(2), 214-227. 2. Government of Prince Edward Island (PEI), Department of Agriculture and Fisheries. (2016). Policy Evaluation of the Department of Agriculture and Fisheries' Non-Business Risk Management Growing Forward 2 Programs. Prepared by the Policy Section, Policy and Agriculture Resource Division. 3. Alston, M. (2010). The benefits from agricultural research and development, innovation, and productivity growth. *OECD Food, Agriculture and Fisheries Papers*, 31. OECD Publishing, Paris, France. 27 p. 4. Department of Agriculture and Fisheries (DAF). (2017). The Next Policy Framework for Agriculture (2018-2023). *What We've Heard Consultations Report*. 13 p. 5. Activities are "operations or work processes... that produces outputs (e.g., training, research, construction, negotiation, investigation)" (Government of Canada. (2010, September). Supporting Effective Evaluations: A Guide to Developing Performance Measurement Strategies. Retrieved October 21, 2020 from <https://tinyurl.com/y43dhlrj>) 6. Outcomes can be understood to be short- and medium-term program effects, e.g., changes in what others do, as influenced by project's outputs (Bamberger, M., Rugh, J., & Mabry, L. (2006). *RealWorld evaluation: Working under budget, time, data, and political constraints*. SAGE Publications, Incorporated).

Note: Data is based on information submitted to the Department as per the Funding Agreement. Prepared by the Strategic Policy and Evaluation Division at the PEI Department of Agriculture and Land. October 2020/File 2465-15-12-04



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DEPARTMENTAL PRIORITIES FOR THE AGRICULTURE RESEARCH AND INNOVATION PROGRAM INCLUDE:

1. Applied Research

Supports short-term research to develop new production methods, fill information gaps and assist in supporting emerging commodities with high potential.

2. Innovative Technologies

Supports implementation of innovative technologies, which are potentially high-risk and first of their kind to the province or region.

3. Industry Research Coordination

Supports commodity groups and industry organizations in the prioritization, coordination and implementation of research activities.

4. Technology and Science Adoption

Supports adoption, implementation and/or evaluation of best practices, new technologies and processes that improve efficiency and profitability.

**OVER
\$300,000
APPROVED IN
TECHNOLOGY AND
SCIENCE ADOPTION
PROJECTS**

- Air Seeder;
- Corn/Soybean Planter Monitor and Sensors;
- Infrared Burner for Blueberries;
- Satellite Imagery;
- Natural Ventilation in Dairy Barn; and
- Genetic Enhancement and Feed Efficiency.

OVER 1200 PARTICIPANTS ATTENDED 117 TRAINING OR KNOWLEDGE TRANSFER EVENTS:

- PEI Horticultural Association (Producer Workshop);
- Atlantic Grains Council (Producer Workshop);
- Perennia Food and Agriculture (Producer Training Session); and
- PEI Certified Organic Producers Cooperative (Summer Field Day).

Canadian Agricultural Partnership industry and public consultations indicated a need for support with applied research and knowledge transfer activities.⁴

21 NEW KNOWLEDGE TRANSFER PRODUCTS DEVELOPED

- 11 Technical bulletins;
- 6 Factsheets; and
- 4 Articles.

OVER \$150,000 INVESTED IN INNOVATIVE TECHNOLOGIES:

- Precision Planting Technology;
- Brussel Sprouts Harvester;
- Automated Tote Box Filler; and
- Malting Equipment.



SCIENCE, RESEARCH AND INNOVATION IMPACTS.

The projects resulted in 245 outcomes, including:

- 139 undertakings which resulted in knowledge transfer activities within the sector;
- 102 New agriculture and agri-food technologies generated and commercialized; and
- 4 activities that increased the sector's capacity to conduct innovative research and development projects.

102 activities in new agriculture and agri-food technologies in the following sectors:

- 32 Vegetable farming;
- 17 Oilseed and grain farming;
- 17 Dairy cattle and milk production;
- 7 Beef cattle farming, including feedlots;
- 5 Sheep and goat farming;
- 5 Fruit and tree nut farming;
- 5 Other crop farming;
- 4 Hog and pig farming;
- 3 Poultry and egg production;
- 3 Other animal production;
- 2 Greenhouse, nursery and floriculture production;
- 1 Apiculture; and
- 1 Support activity for animal production.

ENDNOTES

¹ Papalexandris, A., Ioannou, G., Prastacos, G. & Soderquist, K. (2005). An integrated methodology for putting balanced scorecard into action. *European Management Journal*, 23(2), 214-227.

² Government of Prince Edward Island (PEI), Department of Agriculture and Fisheries. (2016). Policy Evaluation of the Department of Agriculture and Fisheries' Non-Business Risk Management Growing Forward 2 Programs. Prepared by the Policy Section, Policy and Agriculture Resource Division.

³ Alston, M. (2010). The benefits from agricultural research and development, innovation, and productivity growth. *OECD Food, Agriculture and Fisheries Papers*, 31. OECD Publishing, Paris, France. 27 p.

⁴ Department of Agriculture and Fisheries (DAF). (2017). The Next Policy Framework for Agriculture (2018-2023). What We've Heard Consultations Report. 13 p.

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