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# **Considerations on Implementing a Farmland Bank in Prince Edward Island**

*A Research Project undertaken  
for the Department of  
Transportation, Infrastructure and Energy*

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[Cover: Aerial Photo of Bonshaw, PEI by Garth Arsenault]

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## Research Approach and Project Scope

There are inherent limitations in every study. Not everything can be considered. The factors that determine what a person considers limit the scope of inquiry, and should be identified and disclosed from the outset.

When first approached to undertake this research, I was asked to submit a proposal with a statement of deliverables (they are presented in the Introduction). This established the initial “scope” for the project. After beginning the research, new information prompted a request for both a revision of the scope and an extension of time to undertake additional work. It was decided that a jurisdictional scan of farmland leasing programs in other provinces, and a more focused and extensive review of land-related discussions in PEI over the past 20 years, would be added to the scope of work.

A Farmland Bank can achieve a broad range of strategic policy objectives beyond simply buying and leasing farmland. A core methodological concern, aside from the many practical considerations related to implementing a Farmland Banking system in PEI, was the need to determine the most important agricultural policy objectives for the design of a Farmland Bank, as evidenced in the review of Crown farmland leasing programs in other provinces, in particular, sections of the report on the *Saskatchewan Land Bank* and the *PEI Land Development Corporation*.

Policy objectives are normally designed to accomplish two things: (1) address problems and challenges, and (2) achieve certain predetermined outcomes that move closer to the realization of a future vision of what is ideally sought. The conclusion drawn from the 20 year review was that the most urgent problem that should establish the principal policy objective for a PEI Farmland Bank is the need to increase the health of soil in PEI farmland. That conclusion subsequently influenced and gave shape to other considerations and recommendations in this report.

This study focuses on a land banking system designed principally to address challenges within the agricultural sector, and the term “Farmland Bank” is used consistently throughout the report. However, a Farmland Bank would have all the legislative, regulatory and administrative capacity needed to address other land-related problems; challenges which may require the purchase and disposition of non-arable land as well as farmland. This was also the case with the *PEI Land Development Corporation*.

A final note: A considerable number of “links” to source material have been included in this report; however, webpage addresses were not provided, and sources can only be accessed with an electronic version of this report.

## Executive Summary

The current Provincial Government, with the support of the Green Party Official Opposition, has committed to establishing a Prince Edward Island Farmland Bank. In moving forward with this initiative a number of questions must be addressed. What should an agricultural land-banking system look like? Should it be privately-funded, publicly-funded, or be a hybrid of both public and private funding? What should be the organizational structure? And how should it be governed and administered? And perhaps the most important question of all: what should a PEI Farmland Bank aim to achieve by way of agricultural, economic, environmental and social objectives?

In other words, what is the vision for PEI's agricultural industry and rural communities that will guide the design and implementation process? Once the main aspects of that future vision of PEI agriculture are clarified, a "primary" objective can be decided upon for program design that will best enable a Farmland Bank to achieve the many other secondary objectives as it operates on a day-to-day basis to bring about what the future agricultural vision inspires.

A Farmland Bank can be an incredibly powerful tool that makes a significant positive contribution to PEI agriculture as an industry, to Island farmers struggling to survive as a viable business, and to environmental protection and sustainable rural community development benefiting all Islanders.

To obtain a better understanding of how different agricultural policy objectives shape farmland lease programs, a review of provincial farmland leasing programs in other jurisdictions was undertaken.

To achieve a better understanding of the current Island agricultural context within which a new Farmland Bank is being established, a 20 year review of land-related discussions of special relevance to agriculture, farming methods, and the state of PEI farmland soil health, was undertaken.

The 20 year review aimed to identify the (1) main elements of a vision for the future of PEI agriculture and rural life; and (2) the principal obstacles preventing the realization of the desired vision. It revealed two wide-spread and persistent concerns regarding the protection of agricultural land in PEI: (1) that farmland remain agricultural land, and not be developed or sold for non-farming purposes, especially to land speculators; and (2) that soil which has been depleted by intensive farming methods be restored to good soil health.

A PEI Farmland Bank can help to set a new direction for PEI agriculture - called for by the 2009 *Agriculture and Agri-Food Commission* (see section 3.5). That *Commission* proposed that PEI move away from monoculture and industrial farming methods for a number of interrelated reasons, not least of which is the ongoing damage caused to the soil from excessive nutrient extraction and continuous depletion of Soil Organic Matter (SOM), and the heavy use of chemical fertilizers and farm pesticides.

A PEI Farmland Bank – possibly in conjunction with a new provincial Farmland Trust (see section 8.2) – can begin to reverse negative trends in agriculture, along with many other significant negative environmental impacts caused by depleted soil, while at the same time accomplishing a variety of other important objectives. Those program goals would include: (1) providing retiring farmers who do not have a farm-succession plan with a fair-market price so they can sell their farm, ensuring that the land remains in agriculture; (2) fostering the emergence of many new farms in PEI; (3) increasing agricultural diversity, with a greater emphasis on increasingly moving to organic food production, and chemical fertilizer and farm pesticide reduction; and (4) offering programs and services designed to existing farmers to improve both the economic viability and environmental quality of their farms.

As will be discussed in more detail later in this report, this foundational problem with depleted soil health leads to a long list of other negative environmental consequences: such as soil erosion, decreased water and nutrient retention capacity in the soil, and decreased crop yields. This makes restoring SOM the most important agricultural policy objective for PEI Farmland Bank policy and program design.

## **Section One: Introduction**

This introduction provides an overview of what the research entailed. It offers clarification on what defines a farmland banking system. In particular, a PEI Farmland Bank will be primarily defined by the type of organizational structure adopted, and the agricultural, environmental, economic and social policy objectives that shape the particular land use management practices and program goals. The policy objectives and program goals will, in turn, determine the specific terms and conditions of Farmland Bank lease and/or sales agreements.

## **Section Two: Provincial and Territorial Crown Farmland Leasing Programs**

Section two gives a summary overview of Crown farmland leasing programs in other provinces and the Yukon, with an eye to identifying the particular objectives which the farmland leasing programs aim to realize. This section looks at how provincial farmland lease programs are set up and administered in other jurisdictions. Unique features of specific programs are singled out in the summary for consideration for possible adoption (with modifications) for a PEI Farmland Bank.

## **Section Three: A 20 Year Review of Public Land Discussions in PEI**

This section offers a detailed review of land-related discussions and Government land-related decisions of special interest to determining the appropriate policy objectives and programs for a Farmland Bank. The review begins with the 87 recommendations of the [1997 Roundtable on Resources and the Environment](#). It traces the progress of 8 of those recommendations which are directly connected to land-related issues and concerns, as recorded in various *Royal Commissions on Agriculture and the Land*, as well as a number of *State of the Environment, Task Force*, and *Legislative Standing Committee* reports.

What emerges from this review is a much clearer sense of urgency concerning the deteriorating quality of PEI's arable soil, and the need to make "the increase of SOM" the priority target with all Farmland Bank land transactions. Making the restoration of soil health a policy priority has significant implications for Farmland Bank policy and program design, and those implications are outlined and discussed in subsequent sections of this report.

## **Section Four: The Saskatchewan Land Bank**

This short section looks at the 10 years the *Saskatchewan Land Bank* operated, and the unique circumstances that created the need for Provincial Government intervention in the buying, leasing and selling of farmland. It provides information about how it was structured, its objectives, and the terms and conditions of the different programs offered. It shows how the design of the *Saskatchewan Land Bank* was an attempt to address systemic problems critically affecting farmers in rural Saskatchewan at the time. The strengths, weaknesses and most important lessons from the *Saskatchewan Land Bank* era are summarized and assessed.



## **Section Five: The PEI Land Development Corporation**

This section looks at the former *PEI Land Development Corporation's (LDC)* land policies and practices. This review situates the LDC's policies and programs within the broader development strategy impacting all sectors of PEI with the Federal/Provincial *Comprehensive Development Plan*. A review of the PEI LDC shows how the provincial acquisition, management, leasing and selling of PEI farmland was used to effect a significant transformation in PEI agriculture; a transformation which the 2009 PEI *Commission on Agriculture* referred to as a transition from an *Agrarian* to an *Industrial* model of farming.

There are implications for soil health with the adoption of different types of farming systems (e.g., industrial monoculture) which were not considered and incorporated in the LDC agricultural farmland buying/leasing/selling strategy. What was not appreciated at the time – but is now – is how the industrial agricultural model of primary food production damages the soil and environment. After decades of harmful impacts, a new and sustainable “transformation” is required for PEI agriculture. A PEI Farmland Bank can help to effect that transformation with well-articulated policy objectives that bring positive changes within the agricultural industry and farm community, benefitting the economy, the environment and all Islanders.

## **Section Six: Farmland Leasing Programs for a Farmland Bank**

Section 6 offers additional clarification on the relationship between achieving primary and secondary program objectives on the one hand, and the terms and conditions of lease agreements on the other. The primary objective for a PEI Farmland Bank should be the assurance that all Crown farmland achieves and maintains a minimum soil health rating based on SOM percentage, and that the minimum percentage considered acceptable be 3 percent, with higher targets set for improvement).

In addition, to ensure achievement of the secondary program objectives, specific programs with unique terms and conditions would need to be designed and offered under several suggested categories, such as: (1) Retiring Farmer Program (2) New Farmer Program (3) New Immigrant Farmer Program (in conjunction with a new Provincial Nominee Program (PNP) Stream); and (4) a Capitalization Program.

## **Section Seven: Funding a Farmland Bank**

How a PEI Farmland Bank is funded depends on how it is legally structured. This section reviews several possible approaches to funding a Farmland Bank; however, the recommendation of this report - given the public interest in the need to keep farmland in agriculture, help new farmers begin farming, and restore soil health – is that ownership and control of the Farmland Bank needs to reside within the public domain. As a result, funding will need to be public as well.

To achieve any measure of effectiveness, it is suggested that the PEI Government begins acquiring farmland for a PEI Farmland Bank immediately. With an average cost of \$4,000 per acre (based on the most recent 2018 *Farm Credit Corporation* data) an immediate purchase target of 25,000 acres would cost \$100 million. The best suited funding strategy might be to follow a similar strategy as was employed with the Eastern Kings Windmill project in 2007, which utilized a combination of low-interest Government loans and a special PEI Bond issue. An initial target of 25,000 acres could be purchased with \$60 million in low-interest loans by the Provincial Government, and a further \$40 million to be raised through the issuing of a *PEI Farmland Bank Bond* sold to Islanders.

## **Section Eight: The Administration of a Farmland Bank**

As a new Crown Corporation, a PEI Farmland Bank would be a Provincial Government agency. However, it should be structured as a nonprofit entity to accrue tax benefits, access Federal Government funding, and allow maximum input and direction from Island organizations with a special interest in the protection of PEI land, with representation from those organizations on the Board.

Much of the work associated with a Farmland Bank would be undertaken by staff within the *Department of Transportation, Infrastructure and Energy* (TIE) [with experience and expertise with Crown land leasing programs] and the *Department of Agriculture and Land* [with experience and expertise in soil health, soil testing, environmental farm plans, etc.] warranting *formal Collaboration Agreements* between the *Farmland Bank Crown Corporation* and both these departments.

## **Section Nine: Consultations with the Mi'kmaq**

This short section addresses the requirement that the PEI Government consult with the Mi'kmaq Confederacy of PEI on matters “...*that might adversely impact potential or established Aboriginal or treaty rights.*” As a Crown Corporation, a Farmland Bank needs to honour this duty to consult.

## **Section Ten: Summary and Recommendations**

This final section pulls together information and suggestions mostly already discussed in the previous sections of the report, offering two categories of “recommendations”: Farmland Bank and Farmland Bank-Related recommendations. Click the following hyperlinks to be taken directly to each recommendation in the final section of the report.

### **FARMLAND BANK RECOMMENDATIONS**

[Recommendation 1](#): Establish a Publicly-controlled and Publicly-funded Farmland Bank

[Recommendation 2](#): Adopt a two-fold Strategy to Publicly-fund a Farmland Bank

[Recommendation 3](#): Establish Collaboration Agreements between a Farmland Bank and the *Department of Agriculture and Land* and the *Department of Transportation*

[Recommendation 4](#): Establish an “Interim Farmland Purchasing Program”

[Recommendation 5](#): Restrict Agreements with Farmers to “Leasing” for the first 5 years

[Recommendation 6](#): Establish Priority Ranking Criteria for Farmland Purchases

[Recommendation 7](#): Establish priority ranking criteria for Farmland Bank Leases

[Recommendation 8](#): Make Increasing Soil Organic Matter the Primary Objective for Program Design

[Recommendation 9](#): Explore a “Land Management Agreement” with *Slemon Park Corporation*

## **FARMLAND BANK-RELATED RECOMMENDATIONS**

[Recommendation 1:](#) That the Provincial Government implement a *Provincial Land Zoning Policy*

[Recommendation 2:](#) Amend the *Lands Protection Act* to further restrict Non-resident Purchase of Agricultural Land

[Recommendation 3:](#) Ensure Soil Organic Matter tests are undertaken with all Farmland Bank land transactions

[Recommendation 4](#) Increase funding for soil health research and testing

[Recommendation 5:](#) Direct the *Department of Environment, Water and Climate Change* to begin work immediately on a *State of the Environment Report*.

## 1. Introduction

### 1.1 Project scope

The project proposal initially submitted for this study provided the following list of deliverables defining the nature and scope of the research.

1. An overview of the purpose and objectives of a land banking policy and system.
2. A preliminary investigation into the issue of indigenous land claims and considerations, and possible implications for a land banking system.
3. A summary historical overview of discussions and recommendations regarding: establishing a land banking system in PEI previously made in various *Land Commission* and *Task Force* consultations and reports.
4. A thorough review of the land banking systems that previously operated in Saskatchewan and PEI that identifies elements within both approaches that should be considered for possible incorporation into a new land banking model and approach in PEI.
5. A review of possible approaches to funding a land banking system; namely, a consideration of the strengths and weaknesses of different models (e.g., privately funded; publicly funded; private/public funded).
6. A consideration of the operational and administrative requirements of a Land Banking system, including (1) an analysis of the existing distribution of land-related legislation/regulation within the PEI Government and the *Island Regulatory Appeals Commission* (IRAC); (2) where the responsibility for specific land-related issues currently rests within Government departments, agencies, etc.; and (3) whether the efficiency and operational requirements of a land-banking system may require the transfer and/or consolidation of land-related responsibilities.
7. Initial consultation meetings with both the *National Farmers Union* and the *PEI Federation of Agriculture* to obtain information, concerns and suggestions, specially concerning the manner in which each organization believes a consultation process be implemented on a go-forward basis.
8. A summary of key findings from the research, including suggestions and recommendations regarding the logical next steps needed to move the process forward in a timely manner.

After beginning the work, a decision was subsequently made to include a jurisdictional scan of Crown farmland leasing programs operating in other provinces and territories. Also, to undertake a more extensive review of consultations and Government initiatives of relevance to agricultural policy objectives and program design for a PEI Farmland Bank.

## 1.2 Exactly What is a Farmland Bank?

The terms, *Land Bank*, *Land Banking System*, and *Farmland Bank*, all refer to essentially the same thing: a Government policy, program, and administrative system that (1) purchases farmland, and then (2) leases and/or sells that arable Crown land to farmers in accordance with the terms and conditions that ensure certain predetermined agricultural, environmental, economic and/or social policy objectives are achieved. For the purpose of this study, the term “Farmland Bank” will be used, except with the discussion of the Saskatchewan farmland banking system, which was, for the most part, referred to as the “*Saskatchewan Land Bank*” in the literature.

There is no reference in the literature to a “Land Banking System” for non-arable land in Canada; however, there are many non-arable Crown leasing programs, and with both of the only two dedicated historical examples of farmland banking systems (Saskatchewan and PEI) there were legislative provisions allowing the purchase of non-arable land for other purposes than farming. In addition, decisions could be made to take certain parcels of land unsuitable for farming out of agriculture, usually transferring management responsibility for those parcels to other Government departments or organizations (e.g., Nature Trusts and Conservancies).

The thing that makes the use of this provincial power (buying, managing, leasing, and selling farmland) unique to a particular Farmland Bank design is the long-term vision inspiring policies and programs – a vision with the aim of achieving a unique combination of agricultural policy objectives and program goals. The effectiveness of a farmland banking system in PEI will be measured by the degree to which it is able to address and solve real problems that are negatively impacting farmers, future farmers, rural residents, the environment, and all Islanders.

As explained in greater detail in section 5, the *PEI Land Development Corporation* operated throughout the 1970s (until 1982) to advance the primary agricultural policy objective of expanding and modernizing PEI agriculture. Land buying, leasing and farmland sales programs with the LDC were designed to identify and support farmers wanting to expand by acquiring the farmland of neighbouring farms.

Although some benefits accrued from the LDC programs, the end result was a significant reduction in the number of farmers in PEI, with a much larger “average” farm size, and the disappearance of hundreds of smaller mixed-farming operations supplanted by monoculture (cash cropping). In PEI's case, that crop was potatoes for french-fry processing.

Scientists have now explained in great detail how that system of food production is unsustainable with its annual production and high yield demands. [See for example: “[The Impact of Industrial Farming on the Environment](#),” Patrick Kimuyu, Munich, GRIN Verlag, 2018]. Local scientists have also called for a return to using farm practices that will do more to restore the health of PEI soil, as is discussed in more detail in section 6.1. Moving away from intensive farming methods to a more sustainable and diversified agricultural industry - by encouraging the establishment of more mixed-farms and organic farms in PEI - is the opposite direction from that taken by the LDC with its farmland leasing and selling programs. However, based on the findings from the research in this study, those are now the policy objectives that farmland leasing programs should incorporate into program design for a new PEI Farmland Bank.

What is needed is a careful assessment of the systemic problems currently facing PEI agriculture, farmland, water, all watersheds and ecosystems, and rural communities throughout the province. Generally speaking, the long-term negative trends that have already been identified, some of which will be discussed throughout this report, especially in section 3, relate to:

- (1) The steady decline in the number of family farms, with fewer new and younger farmers.
- (2) The high cost of beginning farming, preventing new entrants from starting farming.
- (3) The continuing trend of larger industrial farming operations focused on growing high nutrient-depleting crops such as potatoes and soybeans.
- (4) Seriously depleted soil quality, especially with respect to the percentage of SOM which decreases the nutrient and water retention capacity of soil, increases soil erosion, increases the leaching of nitrates and pesticides into groundwater and aquifers, increases the number and severity of field run-offs into freshwater streams, ponds, and coastal estuaries causing shellfish die-offs from anoxic events, etc. [See: “[Organic matter decline](#),” European Communities 2009; and “[What does organic matter do in soil?](#)” Eddie Funderburg, Ed.D, Noble Research Institute, 2001.]

These are the fundamental issues and problems a farmland banking system can help to address and overcome with the appropriate policies and programs.

In PEI, a Farmland Bank can offer a way to address a number of intractable, systemic problems and long-term undesirable trends negatively-affecting the entire agricultural industry, environment, and economic viability of rural communities. A PEI Farmland Bank can ensure the restoration of soil health for all purchased agricultural land by ensuring that farm plans with soil-restoration provisions are tied to lease agreements, and are followed, as is outlined in more detail in section 6.

More will be said later in the study about the need to design a Farmland Bank to solve agriculture problems by addressing specific environmental and economic factors unique to each land parcel. The particular terms and conditions needed to achieve those policy objectives will also be discussed.

### **1.3 The Principal “Purpose” of a PEI Farmland Bank**

There have been only two historical examples of dedicated “land banking systems” within Canada: a land banking system under the Saskatchewan Government that operated from 1972-82; and the *Land Development Corporation* that operated in PEI from 1969 to 1982. Both had clear agricultural policy objectives and program goals. Both models emerged in response to significant perceived problems within the agricultural sector.

These land banking systems were implemented to bring about systemic policy and program changes and address identified problems. Similarly, the implementation of a PEI Farmland Bank, in today’s context, requires a clear articulation of a vision, and the policy objectives and farmland leasing program goals needed to realize that vision.

In the case of the *PEI Land Development Corporation*, the legislation - first titled the *Agricultural Development Corporation Act* - mapped out very precise goals for the LDC:

1. To assist the agriculture industry;
2. To acquire, develop and improve land;
3. To make land available to farmers;
4. To enable consolidation of farmlands;
5. To provide credit to farmers for land consolidation; and
6. Generally to advance the interests of farmers in an economic and efficient manner in PEI.

Similarly, the land banking system implemented in Saskatchewan, with a unique farmland acquisition and leasing program, was exclusively focused on addressing an agricultural crisis



(farmers facing insolvency). Farmers wanting to exit the industry were unable to sell to neighbouring farmers as they too were struggling financially and could not afford to buy. Despite already owning significant amounts of Crown farmland, the *Saskatchewan Land Bank* bought the land from farmers, then leased it to the neighbouring farmer, or in many cases, back to the same farmer needing capital to become solvent and continue farming.

In its 2019 election platform, the *PEI Green Party 2019* made a commitment to: “Create a land bank to make land available and affordable to new farmers;” and to: “Create a land bank to make land available and affordable to new farmers, while providing retiring farmers with new succession opportunities.”

During the all-leader's debate on the land held before the 2019 election, the PC leader, now Premier, Dennis King, said this about establishing a Farmland Bank:

**Question:** “If elected, what would you do to put in place a Government-funded, land-banking system?”

**Dennis King:** “Well an important part of our platform was the announcement of a Farmland Bank, and as I mentioned earlier in a couple of different questions, the purpose of that is to make it easier for young farmers, or those people wanting to get into the industry but they have this incredible impediment of trying to purchase land that is not available, or is too costly, or that they can't access funds for, and the other part of our platform is the separation of departments, to have a separate *Minister and Deputy for Agriculture*, and a separate *Deputy and Minister for Fisheries*, two of the most important economic drivers for our economy, but **I see the *Department of Agriculture* having to take on a greater role with the implementation of a Farmland bank.** I think there were great recommendations in the *Carver Report*...I think what we have to figure out is what is the best way to effectively operate and finance a Farmland Bank.” (My emphasis)

Both the leader of the Official Opposition and Premier agree that a PEI Farmland Bank must, at a minimum, do two things: (1) provide an opportunity for retiring farmers with no other succession plan to sell their farmland; and (2) provide an opportunity and means for those interested in beginning farming in PEI to do so.

### A Jurisdictional Scan of farmland Leasing Policies and Program

The initial proposal for this study indicated that no land banking systems are currently in place in Canada, and that it would, therefore, not be possible to undertake a jurisdictional scan of existing land bank models and systems for ideas on what might be transferable to PEI. As it turns out, most other provinces and territories do offer Crown farmland leasing programs with their existing holdings of publicly-owned agricultural land. Also, while PEI does not refer to the leasing of farmland as a “program,” it does have some agricultural land leased to local farmers (see section 2.11).

Although other Provincial and Territorial jurisdictions in Canada do not have farmland banking systems *per se*, all have both the jurisdiction and legislative and regulatory authority to buy, manage, lease or sell Crown land, most with farmland leasing programs aimed at achieving certain agricultural objectives. Given that such programs are more or less identical to those of a Farmland Bank, a review of farmland leasing programs in other Provincial and Territorial jurisdictions is important, and as is evident from the information in section 2, there are invaluable lessons and insights to be garnered from the many different farmland leasing programs in operation across the country.

To answer the question, “What is a Farmland Bank?” we first need to know what policy objectives the Farmland Bank will aim to realize. Those objectives will, in turn, determine the specific terms and conditions required in the lease and/or sales agreements with farmers. With all farmland leasing programs, the only way to ensure the program objectives are achieved is to establish clear terms and conditions designed to bring about the specific policy objectives defining the program goals. That’s what will define and give character to a PEI Farmland Bank Program.

## 2. Provincial and Territorial Crown Farmland Leasing Programs

With a number of provinces, the idea of “banking,” or having to first acquire private property for a publicly-owned farmland bank, isn't necessary, since vast tracts of farmland are already Crown lands.

Approximately 89 percent of Canada's land area is Crown land. 41 percent is Federal Crown land, 48 percent is Provincial Crown land, and the remaining 11 percent is privately owned. Most Federal Crown land is in the territories (Northwest Territories, Nunavut, and Yukon) and is administered by *Indigenous and Northern Affairs Canada*.

Prince Edward Island has – by a significant amount – the lowest amount of Provincial Crown land (7.3 percent). This is in contrast to provinces such as British Columbia and NFLD and Labrador, each holding nearly 95 percent of the total provincial acreage as Crown Land.

Given the substantial Provincial Crown land holdings in other provinces and territories, it is not surprising to discover that nearly every other jurisdiction in Canada has well-developed policies and programs that lease and/or sell Crown farmland to establish new farmers, or to support existing farmers, or to address one or more other agricultural policy objectives.

This overview provides a minimum amount of information for each jurisdiction, but attempts to provide the following:

1. Key elements of the agricultural leasing policies and programs;
2. The Government department that manages the farmland leasing programs;
3. The amount of Crown farmland available;
4. The different types of leasing programs in place;
5. The principal agricultural and/or other social and economic policy objectives of the different farmland leasing programs;
6. Select elements of the different programs and policies of particular relevance to the current agricultural and farmland-related issues in Prince Edward Island.

Agricultural land is made available to farmers in accordance with specific agricultural policy objectives, which give shape to the programs and terms and conditions of lease agreements. Every jurisdiction is unique, and each contributes ideas and insights on how to set up and run land leasing/selling programs, some features of which may be transferable and adaptable to the PEI

situation to meet the specific needs of a PEI Farmland Bank.

A significant number of links have been embedded in the following sections to facilitate easy access to invaluable resources that offer guidance, templates and frameworks that may be of use to a go-forward planning committee.

## 2.1 British Columbia

Roughly 95 percent of British Columbia is Provincial Crown land. Not surprisingly, the BC Government has a significant and very broad division managing Crown land. All applications from BC residents to use the natural resources found on Crown land are submitted through [FrontCounter BC](#), the province's window into natural resource permitting, licensing, and tenures.

Crown land is managed under the authority of 3 Acts: the [Land Act](#), the [Ministry of Lands, Parks and Housing Act](#), and the [University Endowment Lands Act](#). There are also a number of Crown land Agreements in place with other agencies, including a [Collaboration Agreement](#) with the [Agricultural Land Commission \(ALC\)](#) that manages the leasing of Crown farmland in BC's designated *Agricultural Land Reserves* (ALRs). ALRs are provincial zones in which agriculture is recognized as the primary use; in ALRs, farming is encouraged and non-agricultural uses are restricted.

The purposes of the *Agricultural Land Commission* (ALC) as set out in section 6 of the [Agricultural Land Commission Act](#) are:

- a) To preserve agricultural land
- b) To encourage farming in collaboration with other communities of interest
- c) To encourage local Governments, First Nations, the Government and its agents to enable and accommodate farm use of agricultural land and uses compatible with agriculture in their plans, bylaws and policies.

The *Agricultural Land Commission* (ALC) is mandated to encourage others, including the Provincial Government and its agents, to take the interests of the ALRs and agriculture into account when generating new policies, participating in land use planning initiatives, changing legislation and regulation, and planning for future developments. As the ALC website states:

“Government ministries and agencies can have considerable impact on agricultural land through such things as transportation planning, wildlife habitat management and conservation, forest and water management and energy planning. Accordingly, the ALC is both proactive and collaborative in working with ministries, supporting and helping them to use their plans, bylaws and policies to enable and accommodate farm use of agricultural land and/or to support uses compatible with agriculture.”

There are a variety of land lease programs administered by the ALC; however, they all rely on the same guidance. The document *Crown Land Allocation Principles* has two short sections: “Purpose” and “Principles”. A more detailed section titled, “*Considerations for the Decision-Maker*,” provides practical observations and insights into how each of the 5 guiding principles presented in the document should be understood and applied when leasing Crown land.

### **PURPOSE**

*The Crown Land Allocation Principles* provide guidance to public officials who are involved in making decisions related to the allocation of Crown land. This guidance is incremental to obligations under law. It recognizes the statutory authority of other levels of Government and guides the development of strategic and operational policy. These principles also guide decisions in the absence of existing policy direction.

### **PRINCIPLES**

- (a) Crown land values are managed for the benefit of the public.
- (b) Economic, environmental and social needs and opportunities are identified and supported.
- (c) The interests of First Nations’ communities are recognized.
- (d) Decisions are timely, well-considered and transparent.
- (e) Public accountability is maintained during the allocation of Crown land.

These guiding principles pertain to all types of Crown leases, and take on additional meaning and clarity when applied to a particular sector such as agriculture. For example, Principle 2(b) becomes: “Economic, environmental and social needs as opportunities are identified **within the agricultural sector** and supported.” In this way, these guiding principles help to define and inform specific agricultural policy objectives for farmland leasing programs.

### **Agricultural Lease Types**

There are 3 categories of agricultural leases offered by the BC Government: (1) grazing leases (2) extensive agricultural leases, and (3) intensive agricultural leases. Each type of Crown farmland leasing program has its own purpose, policy objectives and lease terms and conditions.

### (1) Grazing leases

Grazing lease applicants (also renewals) are required to submit a management plan that must be approved by the *Range Branch* of the *Ministry of Forests, Lands, Natural Resource Operations and Rural Development*, which are then submitted with the application for a grazing lease renewal. Tenures (Grazing and Hay-cutting Licenses and Permits) fall under the *Range Act*. Applications for new grazing leases in BC are not currently being accepted, and an existing grazing lease (most ranchers have a 20 year lease tenure) can only be applied for by the existing lessee upon lease expiry. Rent payments on grazing leases are the greater of the base rent or the forage fee. The minimum annual rent is \$500:

- The base rent is calculated every 5 years at 1 percent of the actual value of the land as established by the *B.C. Assessment Authority*.
- The forage fee is a productivity formula calculated annually and is based on livestock, price and range productivity.

Grazing leases “without an option to purchase” are available for farmland that may be required for a future public purpose such as a flooding reservoir. The normal lease term is from 10 to 30 years. Replacement leases may be issued upon completion of development.

### (2) Extensive Agricultural Lease

“Extensive Agriculture” under BC's *Farmland Leasing Program* is defined as the use of Crown land for soil-bound cultivation to produce cereal, seed, forage, vegetable or fruit crops for mechanical harvesting. The intent of the program is: (1) the development and growth of farms in British Columbia; and (2) retaining the agricultural use of the land.

Other than special circumstances, the *Extensive Agricultural Lease* is only open to those already farming in British Columbia who own farmland within 15 kilometres of the desired Crown land. The owner of private farmland must have 50 percent of the arable area in active cultivated production, with a minimum of 40 hectares cultivated, including 25 percent of the most recent Crown land acquisition.

Leases with a term of 5 years, and an “option to purchase,” are normally available for parcels of land up to 65 hectares in size. The land may be purchased at any time within the term, provided that a minimum of 25 percent of the arable land is under active cultivation. Annual rent charges for leases are 3 percent of the appraised market value of the land with a minimum annual rent of \$500.

### (3) Intensive Agricultural Lease

*Intensive Agriculture*, sometimes referred to as “*Small Agriculture*” in BC, provides access to Crown land in British Columbia for commercial farm production. Specifically, *Intensive Agriculture* is defined as the use of Crown land for the commercial production of animals, fruits and/or vegetables. This includes poultry and dairy farms, market gardens, greenhouses, nurseries, piggeries, and feedlots. This program provides up to 15 hectares of Crown land for commercial farm production.

Under the *Intensive Agriculture Program*, agricultural Crown land is made available for two purposes: (1) to encourage and support the sustainable development of commercial farms in British Columbia, and (2) retaining agricultural Crown land for agricultural use.

An *Intensive Farmland Lease* is available for a standard 30-year term, with a provision for replacement mid-way through the term. Applications for Crown land for intensive agriculture require an operations plan that indicates (1) the nature of use, (2) proposed location and size of improvements, (3) areas to be cultivated, and the (4) timing of development.

The price for the sale of Crown farmland is determined as the full market value of the land, plus the current value of the merchantable timber on the land at the time of sale. For an *Intensive Agricultural Lease*, rents are charged at a rate of 5 percent of the land value per annum plus applicable tax. The minimum annual rent for an *Intensive Agricultural Lease* is also \$500.

## 2.2 Alberta

Alberta has about 100 million acres of public land, including over 8 million acres of farmland leased for grazing and/or cultivation. Land dispositions are issued to farmers under the [Public Lands Act](#); [Forest Reserves Act](#), [Public Lands Administration Regulation](#), and [Forest Reserves Regulations](#), and are administered and enforced by *Alberta Environment and Parks* rangeland aerologists.

### (1) Grazing Leases

Grazing Leases, administered under the *Public Lands Act*, are the most common public land disposition in Alberta. The standard tenure term is 10 years with the possibility for extended tenure up to 20 years for exemplary stewardship. There is the possibility of 30 year leases within designated Heritage Rangelands.

### (2) Farm Holdings Consolidation Program



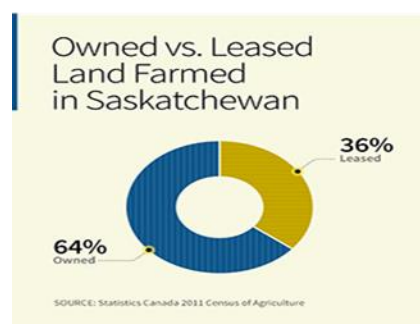
The Farm Holdings Consolidation Program allows holders of long-term *Grazing Leases* and *Farm Development Leases* in the White Area (settled area north of highway 16) an opportunity to request the sale of up to one section (640 acres) of their leased land and to match the highest bid in a public tender.

The type of land disposition generally – but not always – corresponds to Alberta's White and Green area system. Alberta created this distinction in 1948. Sixty-one percent of Alberta is found in the Green Area; 31 percent is in the White Area. Leases are found generally in the White Area.

Eligible leaseholders must submit applications using the form for the *Farm Holdings Consolidation Program*, identifying the land parcel(s) requested. Tender sales are advertised in local newspapers and in *Lands Division offices*, and sales are conducted locally, with the tender opening carried out in a public hall in a community close to the land location. Bidders must provide a deposit equal to 10 percent of the upset price which is 85 percent of the appraised value. At the tender opening, the leaseholder has 30 minutes to decide whether or not to match the highest bid. If the leaseholder wishes to match the bid, a deposit of 10 percent of the upset value of the land must be provided.



## 2.3 Saskatchewan



The *Ministry of Environment* is responsible for managing more than 37 million hectares [91,428,991 acres] of Crown land throughout the province with the heaviest concentration in central and northern Saskatchewan. According to Federal census data, the total Saskatchewan farm area of which farmers had stewardship stayed constant (-0.1 percent) between 2011 and 2016 at 61.6

million acres, of which roughly 36 percent [17.1 million acres] was leased land. The chart below shows how much of that leased land was Government-owned.

Land tenure	Unit of measure	2011	2016
Total farm area <sup>(1)</sup>	Number of farms reporting	36,952	34,523
	Acres	61,628,148	61,585,788
	Hectares	24,940,023	24,922,881
Area owned	Number of farms reporting	35,314	32,353
	Acres	39,620,980	37,876,666
	Hectares	16,034,040	15,328,141
Area leased from governments	Number of farms reporting	6,270	5,333
	Acres	8,170,094	7,520,435
	Hectares	3,306,319	3,043,412

[*Statistics Canada*]

Since 2011, rented farm area in Saskatchewan rose 15.8 percent to 17.0 million acres. This was the largest increase in Canada and accounted for almost 3/4 of the gain in rental area at the national level. Saskatchewan accounted for 42.4 percent of all rented farmland in Canada in 2016 [*Statistics Canada*].

The amount of Government-owned farmland being leased is currently declining in Saskatchewan, mostly as a result of programs implemented by recent Governments providing incentives for farmers to buy their long-term agriculture Crown lease holdings from the Government. An article in the *Western Producer* [[Sask. gov't to sell Crown land to leaseholders](#), November 4, 2015] reported the details of the program as follows:

*“The incentive program will provide a 15-percent discount on sales until March 31, 2016. That drops to 10 percent on April 1 and then five percent on Jan. 1, 2017. This is similar to a program from November 2008 to December 2014 that saw 500,000 acres sold.”*

An additional incentive to purchase Crown farmland came with the announcement that there would be a series of significant increases in Crown farmland lease rates on cultivated land, with increases of 15 percent in 2016, then 30 percent in 2017.

It has been a continual political issue in Saskatchewan whether (or to what extent) the Government believes it should buy, manage, lease and sell agricultural land. There have been decidedly different agricultural objectives with the various policies and programs associated with Crown farmland leasing - at times, policies with quite antithetical purposes: i.e., to either increase or decrease the Government's involvement in the ownership, management and leasing of Crown farmland.

Notwithstanding the political and ideological swings with farmland leasing policies and programs in Saskatchewan over the years, Crown agricultural land leasing continues to constitute a significant Government initiative. There is a broad range of specific agricultural lease policies and types, each with its own objectives, lease terms, conditions, and unique administrative and application processes and procedures. Other jurisdictions have many similar policies and guidelines, but rather than cite them each individually, Saskatchewan provides a comprehensive model. A list is provided for reference:

1. [Productivity Improvement Policy – Agricultural Crown Land](#): To assist lessees of agricultural Crown land to improve the productivity of their leases.
2. [Lease Policy - Agricultural Crown Land](#): To provide a means to manage agricultural Crown land in a sustainable fashion.
3. [Lease Policy Guidelines - Agricultural Crown Land](#): Each application for new lease on agricultural Crown land will be scored.
4. [Management Policy - Agricultural Crown Land](#): To provide a means to ensure leased agricultural Crown land is managed in accordance with proper land use practices and the lease agreement.
5. [Permitting Policy - Agricultural Crown Land](#): To enable vacant agricultural Crown lands normally held under long-term disposition to be used on a short-term basis.
6. [Allocation of Lease by Auction Policy](#): This policy outlines the process, terms and conditions of a pilot auction process the *Ministry of Agriculture* is undertaking to allocate agricultural Crown land leases.

7. [Crown Lease as Security Policy](#): For the purpose of obtaining approval to use your Crown lease as security.
8. [Community Pasture Transition Policy - Agricultural Crown Lands](#): To assist with the transition of community pastures to patron operations.
9. [Game Farming Policy - Agricultural Crown Lands](#): Operating a game farm is permitted on certain agricultural Crown lands.
10. [Pest Control Policy - Agricultural Crown Lands](#): To control serious grasshopper or persistent perennial weed infestations on unallocated Crown lands and provincial community pastures.
11. [Lease Collection Policy - Agricultural Crown Lands](#): This policy sets out the procedures leading to the cancellation of leases.
12. [Pasture Association Grazing Policy - Agricultural Crown Lands](#): This policy provides a method for allocating grazing within pasture grazing associations, a framework for assigning allocations, and conditions regarding lease renewal and land sale to associations.
13. [Municipal Tax Policy - Agricultural Crown Lands](#): This policy outlines how the Ministry and the Municipality cooperatively meet this objective.
14. [Restoration of Saskatchewan's Agricultural Crown Rangelands](#): This policy describes procedures and guidelines for restoration of Saskatchewan agricultural Crown rangelands.
15. [Roads and Highways Land Disposition Policy - Agricultural Crown Lands](#): This document outlines the terms and conditions under which Crown land is made available for new roads and the widening of existing roads.
16. [Sand and Gravel Development Policy - Agricultural Crown Lands](#): The sand and gravel policy establishes the priority rights that Ministry of Highways and Infrastructure and rural municipalities are given to explore for and develop sand and gravel deposits underlying agricultural Crown lands.
17. [Wind Power Policy - Agricultural Crown Lands](#): The wind power surface lease policy reflects the Ministry's support for the development of renewable energy on agricultural Crown land.

The Saskatchewan Government website states that the purpose of the *Provincial Crown Land Leasing Program* is to provide a means to manage agricultural Crown land in a sustainable fashion, preserving it for future generations through agricultural leasing by:

- i. Selecting lessees for advertised Crown land in a consistent and objective manner;
- ii. Establishing requirements for renewing agricultural leases; and
- iii. Facilitating the transfer of leases between generations, co-lessees, buyers and sellers.

To be eligible for an initial Crown farmland lease you must be a Canadian citizen or Permanent Resident; be 100 percent Canadian-owned, and not be a publicly-traded corporation. It's in the specified additional qualifying conditions for initial lease allocations where certain agricultural policy objectives are more evident. It is especially interesting to see how preference is given to applicants who are younger farmers; along with a condition to ensure very large farms are ineligible to lease Government-owned farmland.

## 2. Initial allocation

The following additional eligibility criteria must be met:

- Applicants must control a resource base that is not greater than 200 per cent of the average assessment equivalent of other farms or ranches in the Rural Municipality (RM) where the Crown land is situated. Where an applicant is the only applicant for the land this requirement may be waived.
- Preference will be given to applicants who:
  - Are between the ages of 23 and 35 years inclusive;
  - Have a resource base that is between 50 per cent of average and average for the RM; and
  - Have land that is close to the subject land.
- The Ministry will seek input from RMs in the weighting given each of the above categories in each RM.

## 2.4 Manitoba

On November 8, 2018, [\*Bill 35: The Crown Lands Amendment Act\*](#) received Royal Assent in Manitoba. This legislation provides for the ability to protect *Community Pastures* through special designation, while also enabling a public auction mechanism for the allocation of agricultural leases and permits. Although the *Act* has been amended, there is still ongoing work developing regulation and policy.

In response to consultations on the administration of the *Agricultural Crown Lands* leasing program, *Manitoba Agriculture* has temporarily suspended the acceptance of applications for unit transfers. Unit transfers - the ability of an existing lease holder to assign their lease to the purchaser of their farm operation - was identified by stakeholders as an aspect of the leasing program requiring a more in-depth review to improve transparency and fairness to new and existing program participants.

*Manitoba Agriculture* has released a [Summary Report](#) on the recent *Agricultural Crown Lands (ACL) Program Modernization Consultation*. This review and public consultation focused primarily on forage dispositions, which represent 99 per cent of the ACL program. However, eligibility requirements also apply to cropping leases.

During the formal consultation period, *Manitoba Agriculture* hosted 14 meetings with key stakeholders, and received 37 written responses related to the ACL program. They produced a [What We Heard](#) report with some interesting observations related to environmental protection and climate change:

- (1) Some operations would favour a lower limit, recognizing the benefits of intensive management and smaller footprints;
- (2) Provide mitigation and adaptation to climate change
- (3) The ACL program should increase compliance monitoring and enforcement activities to ensure appropriate use of ACL to support program objectives.

The focus of recent policy development for the Manitoba ACL Program was to enable implementation of a forage tender process for 2019 allocations centred on eligibility, and allocation policy development. However, several other issues related to the use of agricultural Crown lands also needing to be addressed in future policy development were recognized. Suggestions brought forward outside the scope of this particular consultation process included:

- enabling growth through incentives to young farmers
- obligatory timely payments as an eligibility condition to apply or renew
- working with other departments to minimize impacts of multi-resource use
- reconsidering public access in support of agricultural biosecurity
- establishing criteria to enable continuation of lease transfers
- facilitating pest control (plant/animal) to increase agricultural productivity
- facilitating sales of agricultural Crown land to lessees
- facilitating appeals of assessment values on agricultural Crown land

### Foreign Ownership of Manitoba Farmland

*The Farm Lands Ownership Act* is intended to preserve farmland for use by present and future generations of Manitobans. To limit land speculation, and support the development of strong rural communities, foreign interest in Manitoba land is capped at 40 acres. Non-Canadians (Immigrants) and corporations can apply to the *Manitoba Farm Industry Board* for an exemption if they wish to acquire an interest of more than 40 acres. The Board considers factors such as the public interest, the potential benefit to Manitoba, and the specific circumstances of the applicant.

Under the *Manitoba Farm Lands Leasing Program*, a qualifying immigrant is defined as a person who satisfies the Board that he/she intends to become a Canadian Citizen or Permanent Resident of Canada within 2 years. This explicit reference to “Permanent Resident” is significant in that its

inclusion in Crown farmland leasing documents recognizes a direct link with an immigrant program run by another Government Department.

### The Manitoba Farmer PNP Stream

The *Manitoba Provincial Nominee Program (MPNP)* is a *Provincial Immigration Program* made possible through the *Canada-Manitoba Immigration Agreement*. The *Farm Investor Pathway (FIP)* is a *niche* rural economic initiative under the *Business Investor Pathway* of the *Manitoba Provincial Nominee Program (MPNP)*. It allows the Government of Manitoba to nominate immigrants who are best suited to contribute to Manitoba's rural agricultural economy. Applicants nominated by Manitoba – like all provincial nominees in Canada – need to receive favourable consideration from *Immigration, Refugees and Citizenship Canada (IRCC)*, comply with IRCC's statutory requirements, submit *bona fide* documents, and have a genuine intention to reside in Manitoba.

A [Farm Investor Pathway Guidelines Kit](#) provides information on the eligibility requirements and application process for the FIP. As it states at the outset of the kit:

“Interested individuals will be required to demonstrate their adaptability, specifically relating to their practical farming skills, technical knowledge and experience in technological based farming practices that are immediately transferable to rural Manitoba, and that will transfer directly to Manitoba's current primary farm production industry.” (p. 6)

A similar *Provincial Nominee Program Stream* - coupled with Farmland Bank lease offers – could similarly see the introduction of many new farmers in PEI, perhaps especially where farmland is currently not being farmed.

## **2.5 Ontario**

Crown land is no longer actively marketed, leased or sold for private recreational or residential use in Ontario. In most cases, approval from the *Ministry of Natural Resources and Forestry* is required to use or occupy Crown land. The following is taken from section 6 (“Exceptions”) in Ontario's [Crown Land Leasing Policy](#) which sets out rents and fees for the rental of public lands under the ministry's control:

## “6.0 Exceptions

### 6.1 Special resource harvests

Where a land use permit is issued authorizing the harvest of Crown resources, the following minimum annual rents/fees apply and are not eligible for part-year proration:

- cutting of grasslands: \$25.00 per hectare (minimum of \$50.00)
- grazing of livestock: \$6.00 per hectare (minimum of \$50.00)
- agricultural activities such as growing crops: as calculated using Table A
- tapping of trees: \$0.50 per spile (minimum of \$50.00) plus an annual rent/fee for the area covered by any processing facility as calculated using Table A.
- harvest of peat: \$0.20 per cubic metre for the first five years of operation, increasing to \$0.30 per cubic metre beyond five years, plus land rent/fee for area authorized.

Administrative fees (e.g. issuance of land use permit or lease) shall be applied to all of the above as per PL 6.02.01 Administrative Fees for Public Land Transactions. However, the annual administrative fees of the said policy does not apply to cutting of grasslands; grazing of livestock and agricultural activities.”

The Department calculates applicable fees and rents for public land where market value information is available for different uses of Crown land as follows:

### Agricultural

Land Use Sub-Category	Examples	Lease with option to purchase	Lease with no option to purchase	Licence of occupation	Land use permit
Agriculture:	crop growing, greenhouses, market gardening, animal, bird, or inland fish rearing, etc.	10%	6%	5%	4%

Current efforts are underway with northern communities in Ontario to make Crown land (excluding provincial parks and conservation reserves) available to farmers at market value to support local economic development, in particular the expansion of the beef industry. The *Beef Farmers of Ontario* undertook a study of provincial Crown farmland leasing programs. The report recommended that Ontario consider adopting some of the land access options that are currently available in other Canadian provinces. [Taken from the executive summary of the study “*Cross Jurisdictional Scan of Options for Access to Crown Land for Agriculture in Canada with Implications for the Ontario Clay Belt*” found on the [Beef Farmers of Ontario Website](#)].

The *Beef Farmers* report (July, 2017) reviews land tenure arrangements in British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, and Québec. Relevant statistics on the agricultural use of Crown land were summarized. The process for accessing Crown land in different provinces was described,

the terms of access outlined, rental rates listed, and a framework for comparative assessment of tenure arrangements was developed. The comparison categories included:

- (1) Ministry Administering Disposition of Crown Land
- (2) Typical Tenure Option for Grazing on Crown Land
- (3) Initial Lease/Land Use Permit (LUP) Allocation Mechanisms
- (4) Lease (LUP)-to-Buy Option
- (5) Direct Purchase Option
- (6) Grazing Lease Length
- (7) Rental Rate Determination Process
- (8) Crown Rental Rates
- (9) Market Rental Rates
- (10) Lease Transfer Mechanism.

There is useful information in this study, and it is the only other jurisdictional scan of Crown farmland leasing programs in Canada uncovered in this research. It considers a number of issues and areas of interest for establishing a Farmland Bank which are not explored in this report.

## 2.6 Québec

More than 92 percent of Québec's territory is Crown land. Management of Crown land falls to the [Minister of Natural Resources and Wildlife](#). The Minister can rent, sell, or grant other types of land use rights.

In Québec, nearly 45,000 citizens and private or public organizations have a right to use public land. Nearly 42,000 are lessees (28,000 for vacation purposes, 11,000 for shelters, and 3,000 for commercial, recreation and tourism, or other purposes). There are various lease options for Crown land management by private individuals or firms. These options include renting, special permits or granting other special interests. The *Québec Ministry of Natural Resources and Energy* lists the number of leases by type, but agricultural leases are not mentioned specifically.

In addition to the leases and land use permits, there are about 300 parcels per year that are sold for recreational, residential, industrial, commercial, or other purposes. Applicants use an online form to select interested lots and enter a random draw for new leases. The potential uses listed in the application form include: private, commercial, industrial, communal, and public utility. The tenure types listed include lease, purchase, and permit. The *Ministère de l'Énergie et des Ressources naturelles* also provides an application form for a lease transfer.



Although there are no dedicated Crown farmland leasing programs in Québec, a new or existing farmer may still be able to lease or purchase Crown land suitable for agriculture, but not necessarily directly from the Provincial Government. It would more likely be from “*Regional County Municipalities*” (RCMs) through a unique arrangement wherein the Provincial Government gives control over “intramunicipal” land to RCMs, and RCMs then make decisions over how that land is used. As spelled out on the website:

“In order to respond to the needs of local and regional communities, who are asking to take part in the decisions related to the management and development of their areas, the Department proposed a new management approach for intramunicipal public land. This approach makes it possible to transfer to interested regional county municipalities (RCM) the responsibilities and powers related to:

- (a) Integrated development planning for the territory;
- (b) Land regulation;
- (c) Land management;
- (d) Forest resources management;
- (e) Management of protected natural environments.”

Delegated management agreements presuppose regional consensus on issues relating to the management and development of intramunicipal public land. That consensus is formalized through a *Territory Management Agreement*. The expertise of the Provincial Department, with respect to delegating public land management, is shared with other Government Departments and organizations interested in optimally developing public land with an eye towards regional development.

#### Commission de protection du territoire agricole du Québec (CPTAQ)

The *Commission de protection du territoire agricole du Québec (CPTAQ)* was founded in 1978 with the *Loi sur la Protection du Territoire et des Activités Agricoles (LPTAA)*, to preserve agricultural land and agricultural activities in Québec. It aimed to guarantee that coming generations of farmers would have access to farmland.

The CPTAQ is an independent organization that works in collaboration with the *Ministry of Agriculture of Québec (MAPAQ)*. It can authorize the non-agricultural use, subdivision, inclusion or exclusion of a lot, or cutting of maple trees on agriculture zoned land. The CPTAQ has a built-in provision (article 59) allowing regional bodies (MRC) to develop on agricultural land. It also gives municipalities the power to decide how to use unstructured areas (*ilôts déstructurés*) – which is zoned agricultural land too small or fragmented to be put back into agricultural use - for residential use.

Non-residents cannot, directly or indirectly, make an acquisition of farmland without the authorization of the *Commission*. They must provide an affidavit declaring the reasons for the acquisition of farmland as well as the intended use of the farmland. With such strict oversight protecting farmland, the CPTAQ is regarded as the most important factor limiting “land grabs” by foreign investors in Québec.

## 2.7 New Brunswick

New Brunswick has a total land mass of 7,344,000 hectares, of which approximately 5 percent is considered farmland, but only roughly 2 percent of farmland is used for crop production. The *Crown Land leasing Program* in New Brunswick resides with the *Department of Energy and Resource Development*. Statutory authority for the program is found in the [Crown Lands and Forests Act](#) and the [Crown Lands and Forests Act Regulations](#).

The Government website explains that Crown land leases are issued for various uses falling under these categories: Commercial, Communication, Institutional, Utility, Industrial, Transportation, Municipal Services, Shooting Range, and Camp Lot. Although there is no category for agricultural land use, Crown farmland can be leased under programs with the *NB Department of Agriculture, Aquaculture and Fisheries*. The authority for the *NB Department of Agriculture* to grant farmland leases is found in the [Agricultural Development Act](#), where it states:

### **Grant of Agricultural Lease:**

29. The Minister may grant an agricultural lease to a person for the purpose of carrying out a farming operation on land under the administration and control of the Minister if the person,
- (a) makes an application on a form provided by the minister, and
  - (b) provides the Minister with such documentation and information as the Minister requires, and
  - (c) pays the fee, if any, prescribed by regulation.

The work associated with agricultural leases is undertaken by the *NB Agricultural Development Board*, where section 10 of the *Act* states: “**Powers of Board:** The Board (a) may acquire, hold, deal with, lease, sell or otherwise dispose of land.” The *Act* also grants the Board the power to “undertake research and investigations prerequisite to the formulation of programs and projects;” and “undertake or assist in any projects involving land use or land management and aimed at substantially increasing income and employment opportunities in rural areas.”

The *Act* further stipulates that agricultural leases are not to exceed 20 years unless the Minister grants an exception. The Board has the power to set lease rents, establish the terms and conditions of leases, and establish rules governing subleasing.

For the past 40 years, the New Brunswick *New Land Purchase Program* has helped farmers to access high-quality farms and farmland. The *New Brunswick Department of Agriculture* acts as a “holding company” to facilitate the launch of a new farmer. When farmers identify a farm to purchase, or area of land that he or she hopes to acquire to develop into a farm, the province of New Brunswick will purchase the property and lease it back to the farmer (assuming certain eligibility criteria are met). The program and the farmer enter into a lease-to-own arrangement where 100 percent ownership is transferred to the farmer over a 1 to 6 year period. The eligibility requirements, and a succinct description of the program, are as follows:

**Eligibility:**

The proposed land has not had any agricultural crop produced or harvested during the previous 2 years, excluding unimproved forage land. The business plan must show reasonable chances of viability and must demonstrate that a demand exists for the product(s); The applicant must have acceptable agricultural knowledge and business skills, and an acceptable credit history; The project must fit with the province’s sector strategies (in terms of impact on agricultural land, jobs, export sales, markets, etc.); Acceptable security must be provided for the proposed financing; and The applicant must show an acceptable amount of equity in the business.

**Description:**

Land is purchased by the Agricultural Development Board and then leased for 6 years; financing of land up to 100 percent of enhanced value; Approved land development work can be part of the lease. During years 1 and 2, annual lease payments are deferred (based on the equivalent of the annual provincial lending rate and the lease amount). Beginning in year 3, annual lease payments are made at the beginning of each year; and Client agrees to purchase the land from ADB at the end of 6 years.

Before the approval of a lease by the *NB Minister of Agriculture, Aquaculture and Fisheries*, applicants are required to submit a *Site Development Plan* for approval. The plan must contain the annual objectives that the farmer will be implementing. The relevant specialist will provide applicants with the requirements of the strategy to be included in the lease document. Leases are monitored periodically by staff of the *Department of Agriculture, Aquaculture and Fisheries*.

## 2.8 Nova Scotia

The *Department of Natural Resources* (DNR) oversees and authorizes activities on Crown land in Nova Scotia. Crown lands are considered public assets which can be used for such things as economic development, recreation, and protection of biodiversity. DNR has adopted a proactive approach to land asset management, and has identified that the availability of Crown lands can be an important component for economic and social enterprises, as well as for community development. The [Crown Land Leasing Policy](#) sets out the process for leasing Crown land in Nova Scotia.

One of the instruments used to manage Crown lands are long-term land leases. Leases can be issued in response to an application or as a result of a public tendering process initiated by the DNR. To assist those interested in using Crown land, a user guide has been developed ([Guidelines for the Preparation of Crown Land Lease Applications](#)).

Examples of activities that may be conducted under a Crown land lease for agriculture include “maple syrup production, blueberry cultivation or cranberry harvesting.” The guidance for agricultural leases is found in Appendix “B” of the *Crown Land Lease Application Guidelines*:

### **APPENDIX B – GUIDANCE FOR AGRICULTURE AND WIND-ENERGY APPLICANTS**

The following checklist outlines further guidance for those applying to use Crown land for agricultural purposes and wind-energy development.

#### **Agriculture Use Applicants**

##### *Creating a Development Plan - Project Description*

1. When describing production method processes, Applicants must include intended plans for cultivation and harvesting the resources, such as methods of clearing, burning, harvesting, tapping trees, etc.

## 2.9 Newfoundland and Labrador

Of the 40.57 million hectares of land in Newfoundland and Labrador, approximately 88 per cent are Crown lands. Some of the seabed and beds of freshwater lakes are also Crown lands.

In accordance with the *Lands Act*, the *Department of Fisheries and Land Resources* (FLR) administers development on Crown lands. FLR is responsible for managing and allocating the surface

rights of the province's Crown lands "...in a responsible manner for the social and economic benefit of the residents of Newfoundland and Labrador." The *Crown Lands Division* of the Department processes over 3,000 applications a year.

Statutory authority for leasing Crown land resides with the [Land Act](#) and applicants must follow the guidance contained in the [Guidelines for the Preparation of Applications for Crown Land](#). The *Lands Act* contains sections which allow Crown lands to be allocated in the following ways: leases; grants; easements; or sale. Applications for an agricultural lease require the completion of a [Farm Development Plan](#).

## 2.10 Yukon

The [Agricultural Land Grant Program](#) allows Yukon residents to apply for farmland in the territory. Successful applicants are allotted the land on a conditional lease. It is usually for a period of 7 years. The purpose of these grants is "to meet the land needs of the industry and meet agricultural production." [See "[For the right people with the right plan, Yukon's agricultural branch has land](#)"].

There are two types of leases granted: (1) *Spot Land Grants*, and (2) *Planned Leases*.

### (a) Spot Land Grants

The more complex of the two types of leases, called "*Spot Land Grants*," allow people to select "farmable" land in the Yukon, usually more than 100 kilometres outside of a local municipality. These plots range between 6 and 65 hectares (15 to 160 acres) and must meet certain eligibility requirements, such as soil capability, geography and climate type. *Spot Land Grants* are designed to be used for "mixed farming" with a focus on crops. The grants include a clause in the lease that says 53 per cent of the land "*must be cleared and seeded with a crop suitable for human or animal consumption.*"

### (b) Planned Land Grants

Alternatively, there are *Planned Land Grants*, which rely on a similar process, but usually occupy areas within driving distance (under 100 kilometres) of municipalities, including land in communities. *Spot Land Grants* are not permitted in these areas, which are usually lands that have potential for high demand.

The Government identifies and surveys areas suitable for farming within these high-demand areas, which are made available as *Planned Land Grants*. Applicants for this type of land grant compete with each other. Unlike a *Spot Grant*, these applications require prospective farmers to pay the cost of development up-front.

One of the biggest barriers to land suitability in these application processes in the Yukon is poor soil quality. *Agriculture and Agri-Food Canada* identifies 7 different soil classes with 13 different limitations. In most of Canada, arable land is considered to be Class 3 or lower. In order for a plot of Spot Land to be eligible for the grant, 80 percent of the applied-for plot must have soil Class 5 or better. Most farming in Canada is done on Class 3 or better land; however, since the Yukon has very little Class 3 land available, most grants are Class 4 or Class 5 soils. *Agriculture Canada* defines Class 5 soil type as having “*very severe limitations that restrict their capability in producing perennial forage crops, and improvement practices are feasible.*”

If the agriculture branch finds the proposed site is eligible for a *Spot Land Grant*, the applicant must submit a farm development plan listing the crops or animals that will be grown / raised, expected costs, and projected revenues. The plan is reviewed for viability and, if approved at this stage, goes to the [\*Yukon Environmental and Socio-economic Assessment Board \(YESAB\)\*](#) for review. The review examines potential wildlife conflicts, First Nations and heritage land rights, and potential environmental impacts. The YESAB application is also open to public comment. If the application clears YESAB, then the proposed parcel is surveyed and assessed. The applicant then signs a 7 year lease agreement.

Instead of paying for the land directly, farmers pay through sweat equity, or what the agriculture branch calls “one for one” equity. This means that farmers must make improvements, which equal the dollar value of the property. This includes work like putting in power lines and access roads, clearing land, and developing soil potential. Every dollar (or work) put into improvements goes towards the lessee’s stake in the value of the land. The property undergoes twice-yearly inspections. At the end of the 7 year lease, or whenever the agreed upon development goals are met, whichever comes first, the title of the land can be signed over to the farmer.

## 2.11 Prince Edward Island

As of March 31, 2019, the PEI Government owns 2,359 parcels of land comprising roughly 10,023 acres. Of that amount, approximately 4,820 acres are arable farmland. As of May 1, 2019, the PEI Government leases 1,376 acres of agricultural land to local farmers. Many of these leases are on land which was transferred to the Government from the *PEI Lending Development Corporation* and the *Agricultural Development Corporation* in 1994.

As noted in a “*Supplemental Agricultural Lease Information*,” document prepared by the *Crown Lands Program* within the *Department of Transportation, Infrastructure and Energy*: “*The transfer of the lands to Government were subject to any outstanding leases or agreements, so upon expiration, new leases were entered with the clients, if they so requested.*”

Since 1994, most agricultural leases have been renewed with the same farmers whenever they wished to continue farming the land. When a farmer is retiring or getting out of farming and no longer wishes to lease the land from Government, they often request that a family member or local farmer they know take over the lease.

The *Properties and Surveys Section* of TIE takes guidance from the “*Erosion Control Structures Implementation*” (ECSI) policy directive on the process to be followed when calculating adjustments to agricultural lease rates. Such adjustments are made when implementing erosion control measures under the terms of all new leases, and renewals of existing leases, where crops which are regulated under the *Agricultural Crops Rotation Act* are to be planted.

To the extent that farmland leasing is currently happening in PEI, the primary agricultural policy objective is the prevention of soil erosion, as stated in the preamble to the ECSI policy:

- 4.1 In support of the Government of Prince Edward Island promoting sustainable agricultural practices, the Department of Transportation & Public Works has made it a requirement that the lessees of provincially owned agricultural lands agree to participate in the implementation of measures to reduce soil erosion.

The following section in the *Lease Agreement* makes clear the priority nature of compliance with measures, terms and conditions to ensure sustainable farming practices and soil erosion prevention:

18. That the Lessee shall within one (1) year of the execution of this *Lease Agreement* implement an *Erosion Control Plan* on the leased premises. Said *Erosion Control Plan* must be approved by the Lessor. Failure to complete said plan will be considered a breach of this agreement and shall be considered grounds for the termination of this Lease.

Farmland leasing with a new PEI Farmland Bank would build on this concern to protect PEI soils contained in the current policy objective to “prevent soil erosion” by making the primary objective of PEI Farmland Bank policy “to restore and maintain soil health.”

## 2.12 Summary

The information provided in this section of the report considered how different Crown farmland leasing programs across Canada are designed to accomplish specific policy objectives. Outcomes from those objectives are address the unique problems and challenges facing farmers and the agricultural industry within each respective jurisdiction.

The extent to which specific programs will be applicable to the PEI situation depends on a number of factors, each needing to be assessed independently. Key features distinguish PEI from other jurisdictions, (e.g., limited amount of Provincial Crown farmland, and restrictions associated with the *Lands Protection Act*) which makes it impossible to simply “adopt” any of the examples of programs without making modifications to suit the PEI situation. PEI Farmland Bank policy must be uniquely designed to address the priority problems and challenges that exist in PEI.

There are a number of important ideas from the preceding review of Crown farmland leasing Programs in other provinces that are insightful and helpful for implementing a Farmland Bank in PEI. Those ideas are mostly beneficial in showing the broad range of options and possibilities with program design and offer guidance. There are features of several programs in other provinces that deserve special consideration for possible adoption and incorporation into PEI Farmland Bank design.

**British Columbia:** Similar to PEI, British Columbia does not have vast tracts of farmland, as is the case in Alberta and Saskatchewan. As a result, BC has implemented special measures to protect farmland. Zoned areas of agricultural land (*Agricultural Land Reserves*) recognize agriculture as the priority use and highly-restrict farmland being used for any purpose other than farming.



A more detailed investigation into the history and operation of the *BC Agricultural Land Commission* and ALRs would likely provide additional insight into the interconnected and interdependent relationship between successful farmland leasing programs and other land-related issues such as legislated “farmland purchase restrictions” and “agricultural land zoning.” The clear expectation is that all farmland transactions within the ALR result in the land continuing to be farmed, so leases are only available to applicants who are actively farming and residing within 15 km of the land. This offers an excellent example of how targeted policy “outcomes” require stricter eligibility criteria and far more narrowly-defined lease terms and conditions.

**Alberta:** Crown farmland in Alberta is primarily for “Grazing Leases.” The political climate has traditionally favoured market-driven policy approaches to managing Crown farmland leases. Alberta offers a good example of Crown farmland leasing programs largely devoid of agricultural policy objectives, or any social policy objectives beyond selling land to the highest bidder in an open auction.

**Saskatchewan:** What immediately stands out with Saskatchewan’s farmland leasing program approach is the reliance on very refined selection criteria for participation in the program. To encourage new farmers to enter the industry, preference is given to applicants who are between the ages of 23 and 35. Preference is also given to farms below a certain size within a certain area surrounding the farmland available for lease. The long list of links to specific farmland leasing policies developed by the Saskatchewan Government offers many useful resources deserving further consideration for PEI Farmland Bank policy development.

**Manitoba:** Two things stand out with Manitoba’s approach to protecting and managing Crown farmland: legislation restricting non-resident purchase of farmland to 40 acres (both Crown land and private); and a dedicated *Immigrant New Farmer Program*. Such a Stream under the *Provincial Nominee Program (PNP)* would make sense in PEI. Such an initiative could possibly be tied to “packages” of available farmland in areas of the province where no local farmers have an interest in farming the land. Working in conjunction with a PEI Farmland Bank, such a program could bring new farmers to PEI.

**Québec:** Québec delegates significant provincial powers over what happens to agricultural land to Regional bodies, with representation from a number of communities within a specific region which work together to reach a consensus on a plan for the area. This approach to farmland management has been successful in keeping arable land in agriculture. Part of that model relies on farmland leases with very restrictive conditions, and farmland sales agreements requiring the land to be farmed.

This regional model has also prevented farmland from being purchased by foreign land speculators. Although it is outside the scope of this study, it may be worthwhile to explore the feasibility of having similar mechanisms of collaboration on PEI. Is there a place for a similar model in PEI, involving people with a shared interest in protecting farmland among rural municipalities and communities?

**New Brunswick:** There is very little arable land in New Brunswick, and even less Crown farmland. As a result, NB has offered a quite successful “*New Land Purchase*” program to help new farmers start farming for decades. After finding land that a qualifying person wants to farm, the NB Government buys the property and leases it to the person for 6 years, with a plan to have that person buy the land from the Government at any time during that 6-year period. A similar program may be successful for PEI, and is recommended for a PEI Farmland Bank (see section 6.4).

**Yukon:** An interesting feature of the Yukon approach to Crown farmland leasing programs is the incorporation of price “offsets” for land improvements made from “sweat equity.” Given the poor soil quality in the Yukon, when farmers improve soil health on leased Crown farmland, they accrue value for themselves with the lease which can eventually lead to acquiring title of the land. Given that this study is recommending that “increasing SOM” be the primary policy objective for all Farmland Bank leasing programs, more could likely be learned from Yukon’s experience with this type of lease program, especially regarding how soil improvements are calculated and valued within the lease agreements.

The other provinces (Ontario, NFLD and Labrador; and Nova Scotia) have less Crown farmland available, and although some Crown farmland leasing happens, it is not happening within well-defined programs connecting explicit agricultural policy objectives to leasing, as is the case in other provinces.

### 3. A 20 Year Review of Public Land Discussions in PEI

Over the years, a number of negative trends and systemic problems have been identified in PEI agriculture, many of which relate directly to agricultural production methods and the deteriorating soil health of PEI farmland. A review of the past 20 years of land-related discussions and recommendations from various public *Commissions*, *Task Forces*, and other sources, will provide the necessary historical and contextual knowledge to more accurately determine the most appropriate policy objectives, character, and shape of new PEI Farmland Bank programs.

This review revealed both an increasing awareness and growing consensus, among farmers and all Islanders, that additional Provincial Government action is required to address urgent systemic problems affecting the health of soil and water – problems largely tied to intensive industrial farming methods still being used by most PEI farmers. There have been strong acknowledgements of the worsening situation and looming crisis regarding declining soil health from many successive public consultation processes, *Commissions*, and *Tasks Forces*. The most crucial and urgent recommendations have so far not been acted upon, one such recommendation being the implementation of a farmland banking system.

This section of the report reviews this important 20 year history with a focus on what has been said specifically about protecting farmland, helping new farmers enter the industry, and maintaining and improving soil health. Designing the parameters of a PEI Farmland Bank must take into consideration both the foundational “mandate” and long term “vision” which give goals and program objectives shape and direction.

Determining the most appropriate agricultural and social objectives for a new PEI Farmland Bank begins with a careful review of what has already been researched, analyzed, discussed and decided regarding the challenges and problems associated with current farming practices. What this 20 year historical review reveals is that the industrial farming approach to food production represents a primarily “economic” model of agricultural production. As will be explained in more detail in section 5, the former *PEI Lands Development Corporation (LDC)* made the establishment of “viable economic farm units” the principal objective of the Corporation. This established the character and shape of the legislation, regulations, policies and programs. For example, “land improvement,” was

understood almost exclusively as clearing forests, removing hedgerows, draining marshes, acquiring new and bigger farm machinery, using more chemical fertilizers and pesticide-spraying regimes, and making material improvements to existing structures. Sufficient thought was not given to the negative environmental impacts of many of the changes the LDC promoted in Island agriculture. Those negative impacts have not gone unnoticed.



Photo taken by Ray Brow in Cherry Valley, PEI on February, 2019

The list of land and soil-related issues that define the systemic problems in PEI agriculture, a significant number of which are worsened by decreased SOM, include:

- (a) Increasing loss of SOM and declining soil health; [See: [“Changes in Soil Organic Matter over 18 yr in Prince Edward Island, Canada,”](#) Judith Nyiraneza, Barry Thompson, et al., *Canadian Journal of Soil Science*, 2017, 97(4): 745-756];
- (b) Continued leaching of nitrates into groundwater due to lower Soil Organic Matter that results in a reduction in the water-retaining capacity of the soil;
- (c) Persistent soil erosion, as a result of wind erosion worsening during winters with less snow-cover and more freeze/thaw cycles [See: [“PEI Climate Change Adaptation Recommendations Report,”](#) p. 110];
- (d) Many elderly farmers ready to retire and leave farming with no viable succession plan in place to keep farmland in agricultural production;
- (e) The high cost of farmland, preventing new farmers from entering the industry, or existing farmers to grow and/or diversify their farming operations;
- (f) Weaknesses in the *Lands Protection Act* allowing the increasing concentration of farmland in family-based corporate networks; and
- (g) The absence of an agricultural zoning policy for PEI.

The goal for this historical overview is to: (1) determine the key indicators that have been consistently identified as the primary factors causing the systemic farming and land-related problems listed above, and (2) to identify the key principles, values and long-term goals (vision) that should determine the specific objectives of Farmland Bank leasing programs.

A Farmland Bank offers the PEI Government a powerful way to address many of the above-listed problems. Designing farmland banking programs with targeted objectives, terms and conditions could mitigate the factors causing those problems, or possibly eliminate them altogether with each acre of farmland purchased by the Farmland Bank.

There have been a number of key public consultations, *Commissions* and *Task Force* reports on land issues that used a more holistic framework to measure systemic agricultural problems. They revealed the interconnected nature of agricultural land use, soil health, and farm income security. This more holistic approach was first devised and implemented in the late 1990s, with a recommendation from the *1997 Roundtable on Resource Land Use and Stewardship*, so that is where this review begins. The subsequent reports reviewed in this section of the report are as follows:

1997	Cultivating Island Solutions	Roundtable on Resource Land Use and Stewardship
1997	Report to the Legislative Assembly of Prince Edward Island Respecting the Roundtable Report on Resource Land Use and Stewardship	Standing Committee on Agriculture, Forestry and Environment ( November, 1997)
2003	State of the Environment Report	Department of Fisheries, Aquaculture and Environment (June, 2003)
2008	Island Prosperity: A focus for Change: A White Paper on Governance and Land Use in Prince Edward Island.	A Strategy prepared for Premier Robert Ghiz by Michael Mayne
2009	Growing the Island Way: The Next Chapter for the Agriculture and Agri-Food Economy of Prince Edward Island	Report of the Commission on the Future of Agriculture and Agri-food on PEI
2009	New Foundations ( <i>The Thompson Commission Report</i> )	Report of the Commission on Land and Local Governance

2010	State of the Environment Report	Report by the Department of Environment, Energy and Forestry
2013	The Gift of Jurisdiction: Our Island Province ( <i>The Carver Commission Report</i> )	Report of the Commission on the <i>Land Protection Act</i> (June, 2013)
2013	Provincial Land Use Policies	Land Use Task Force Consultation Document
2013	Principles of Sustainable Development	Prepared by the Environmental Advisory Council for the Task Force on Land Use Planning
2014	Report of the Task Force on Land Use Planning	Task Force on Land Use Planning
2017	The Next Policy Framework for Agriculture (2018/2023): What We've Heard	Consultation Report by the Department of Agriculture and Fisheries, (June, 2017)

### 3.1 1997 - Roundtable on Resource Land Use and Stewardship

In the 1996 *Speech from the Throne*, the Government of Prince Edward Island announced its intention to develop a *Resource Land Use Strategy* for PEI. The Chair, Elmer MacDonald, and the members of the *Roundtable* were appointed for the purpose of developing this Strategy in March 1996. They presented their final report to Premier Pat Binns in August 1997.

The purpose of the *Roundtable* was to develop a resource land use strategy that would identify ways to achieve the following objectives:

- a) Increase the contribution of resource lands and their use to wealth creation in the province;
- b) Maintain and improve the capacity of the lands to generate wealth for future generations;
- c) Minimize the conflicts between the use of resource lands and other land uses, and minimize the impacts on human health and the environment, and
- d) Increase public satisfaction with resource land use.

The *1997 Roundtable* suggested that Islanders must understand, accept, and agree upon a set of appropriate indicators that could measure change, either positive or negative, if they are to participate in developing and monitoring Resource Land Use policy. The following definition of an “indicator” was proposed:

*“An indicator is a measure of change in the state of the economy or the state of the environment, as affected by farming, forestry or other development activity on resource land. The indicator shows whether things are getting better or worse during the interval between an agreed starting point in time and a future goal or objective.”*

With 1997 being the base year, the *1997 Roundtable* recommended that the Government prepare a “*State of the Environment*” report every 5 years, using the indicators developed by the *Roundtable* to measure and report progress in achieving policy and program targets. There was a report after the first 5 year period (2003), but only one subsequent *State of the Environment* report since then, delivered in 2010.

The *1997 Roundtable* took a “long-view” on land-related policy and development issues, believing that good indicators would provide Islanders with the information they would need to formulate informed opinions, and help to direct positive change. A total of 87 recommendations were presented in a 162 page report including appendices. For the purposes of this report, there are 8 of those 87 recommendations of particular relevance to the implementation of a PEI Farmland Bank. A review of the progress made with those recommendations during the past 20 years will help to determine the most appropriate policy objectives and programs needed today. Those 8 recommendations are:

1. We recommend that the responsibility for maintaining soil quality, for controlling erosion risk and for establishing riparian (buffer) zones be vested in the landowner, not the tenant or lessee, and that this responsibility be recognized in law. All programs, policies and legislation implemented by Government and industry groups must respect this principle. This recommendation was made by the Roundtable as a “general” statement meant to highlight the need for the landowner to accept responsibility for soil quality.
4. We recommend that *Agriculture and Agri-Food Canada’s* Charlottetown Research Station place a higher priority on research and demonstration of better soil conservation practices for potatoes, specifically:
  - research into other appropriate cash crops for potato rotations;
  - research into the impact of potato rotation regimes on levels of Soil Organic Matter;
  - research into reduced-tillage potato production; and
  - demonstration of soil conservation practices on private farms. *Agriculture and Agri-Food Canada’s* Crops and Livestock Research Centre in its program overview lists soil and water conservation and sustainable production systems as among its priorities.
6. We recommend that the *Department of Agriculture and Forestry* increase the operating budget of the *Soil and Water Unit* and of the *Soil and Feed Testing Laboratory* by increments of 25 per cent in the fiscal years 1998-99 and 1999- 2000; that funding be targeted to soil conservation and improvement; and be maintained at this increased level.
11. We recommend that the federal and Provincial Governments work with the livestock and potato sectors to implement actions proposed in the *Livestock Industry Strategic Plan* to increase the level of cooperation between the two sectors.

13. We recommend that the industry adopt a mandatory crop rotation standard for potatoes based on the following principle: that potatoes are to be grown no more frequently than one year in three, unless the producer has an alternative plan that will maintain soil quality. Such a plan must be approved by a qualified Government soil engineer.
18. We recommend that organic matter content be adopted as the principal indicator of soil quality for Prince Edward Island and that three per cent be established as the minimum standard of good quality agricultural land. We also recommend that the necessary changes be made to the provincial *Soil and Feed Testing Laboratory* in the fiscal year 1998-99 to enable the use of the method of complete carbon combustion for measuring organic matter.
66. We recommend that Government develop a better system to track the loss of Class 2 and 3 agricultural land to non-resource uses, and that Government take the measures necessary to reduce the current rate of loss by 50 per cent by the year 2000.
71. We recommend that Government retain property it owns in threatened watersheds and actively pursue opportunities to add to its holdings of forested land and wetland in these areas.

These 8 *Roundtable* recommendations were inspired by a desire to achieve a long-term vision of a sustainable and economically-viable approach to farmland use. There was a growing and often-stated concern that intensive farming methods were negatively impacting soil health and the overall environment, but no testing programs were in place at the time to track changes with soil health. The adoption of the SOM indicator led to the launch of the *Soil Quality Monitoring Study* that has been underway for the past 20 years, and continues. More will be said about the findings from this study over the years, and soil health trends in PEI, in a subsequent section of this report.

Reports are one thing, but the real test of a *Commission* or *Roundtable* is whether the Government acts on the recommendations that are made. A *Standing Committee* was struck to evaluate the 1997 *Roundtable's* work and its 87 recommendations, resulting in a “strategic plan” from the Standing Committee to the Legislative Assembly regarding implementation of the *Roundtable's* recommendations.

### **3.2 1997 Standing Committee on Agriculture Report to the Legislative Assembly**

In early October, 1997, Premier Pat Binns requested that the *Standing Committee on Agriculture, Forestry and Environment* assume the lead role in examining the report of the *Roundtable on Resource Land Use and Stewardship*, and that the *Legislative Assembly* become the forum in which the recommendations of the 1997 *Roundtable* would be debated, directions determined, and the



necessary instruments for implementation approved.

The *Standing Committee* examined all 87 recommendations and measured them with the following criteria: advisability, policy implications, additional resources required, timing, and whether consultations would be required. The Standing Committee recommended implementation of all 8 of those recommendations which were previously singled out as being especially relevant to a study regarding the implementation of a PEI Farmland Bank.

The Committee also offered suggestions on how Government should proceed with each recommendation, highlighting various factors and circumstances that would need to be taken into consideration. Those 8 recommendations are restated below, with the *Standing Committee's* comments (in red) provided for each recommendation:

(a) With Recommendation 1 – Making the land owner accountable for land management

What seems clear with this *Roundtable* recommendation – and the *Standing Committee's* support that it be implemented by Government – is a growing awareness of how land was not being treated properly, especially “leased” land. The “mining” of leased Crown farmland was a major weakness of the *PEI Land Development Corporation's* program, as will be explained in more detail in section 5. Making the land owner accountable encouraged the “formalization” of lease agreements to protect the land owner. The *Standing Committee* provided the following observations:

“Taking this step would represent substantial departure from the current practice in land management responsibilities from what currently exists in the Province. Under the current arrangements an owner, in giving up the fee-simple to a tenant, retains only what is, in effect, left over (the residue). This would make the owner accountable for the activities on the land. Because of the enforcement problems associated with the current arrangements, the change recommended by the Roundtable is advisable.”

The Committee report also noted that implementing this recommendation would come with a cost to farmers leasing land:

However, this change can be expected to bring with it two sources of comment:

- a) that there will be additional cost to an owner in preparing a lease arrangement which will ensure that the land leased to another is properly maintained and that the owner is protected. This is not, however, conceptually different than the steps taken by landlords to require damage deposits etc.;
- b) that this will make the registration of leases virtually mandatory.

Here we see a deliberate effort by Government to attach soil conservation measures to the terms and conditions of farmland leasing agreements in order to better define both accountability and liability.

(b) With Recommendation 4 – More research on better soil conservation practices for potatoes

“This recommendation falls outside the provincial department's mandate but the department does play various collaborative roles with AAFC [*Agriculture and Agri-food Canada – Federal Government*]. In this capacity it can act as a catalyst for this recommendation.”

(c) With Recommendation 6 – Increase soil lab testing budget target on soil conservation

“It is imperative that this recommendation be implemented immediately as it impacts on various other recommendations concerning soil quality monitoring and soil conservation, increased financial resources must be in place before any significance activity can be carried out on those other recommendations (e.g., recommendations 7,8,9,18,19 & 20).”

(d) With Recommendation 11: Increase cooperation between livestock and potato farmers

“This could have a very positive impact. The department could focus activity on the development of co-operative projects, in particular Land Lease agreements. These actions would support several of the goals of the Livestock Strategy. In addition, the existing arrangements should be documented and publicized as inspiration to others in both the livestock and potato sectors.”

(e) With Recommendation 13: Mandatory 3-year crop rotation

“A three year crop rotation standard would allow for significant improvements in soil quality on some properties...If the industry adopts a mandatory standard some consideration will have to go into who would enforce the standard and how would it be done.”

(f) With Recommendation 18: Soil Organic Matter be the principal indicator of soil health

“The 3 percent standard for organic matter should be confirmed after the baseline data for soil quality monitoring has been obtained: resources will be required to collect samples and interpret results.”

(g) With Recommendation 66: Better system to track the loss of class 2 and 3 land

“Currently there is no system of tracking the loss of resource lands to non-resource uses, largest of which is suburban housing. However, all of the data required to do so is currently placed on data bases. In effect the tracking recommended is a matter of linking together the

data generated by the Community Affairs and Attorney General subdivision and building permit functions to the soil and land use data which already exist in the Agricultural and Forestry data bases. The common element in this is probably the geo-link system currently used in the subdivision and building permit systems. As a result this component of the recommendation is feasible and advisable.”

(h) With Recommendation 71: Retain sensitive Crown land and add to Crown holdings

“This recommendation is consistent with current efforts to secure lands in the name of the Crown. The impact will be positive. Currently, wetland habitat is acquired with the assistance of dollars from the Eastern Habitat Joint Venture program and the Province's “land acquisition fund” is specifically dedicated to acquiring identified forest and wildlife habitats.”

It is admirable how much ground was covered and the amount of work that was undertaken by the *Roundtable*, and the *Standing Committee* in reviewing the *1997 Roundtable's* 87 recommendations and making its own recommendations to the Legislature. What came out of that process was a plan tied to a precise timeline, with established indicators to measure change, established targets for strategic improvement, and legislative and regulatory measures to enable new measures on a range of land-related matters (i.e., mandatory 3 year crop rotation legislation). The first assessment of progress with this ambitious new approach implemented by the Pat Binns Government came with the first *State of the Environment Report*.

### **3.3 2003 – State of the Environment Report**

The establishment of key “indicators” provided the means for Government to track progress with a range of identified issues relating to soil, water and the entire Island environment. These indicators provided quantitative data on whether established targets for improvements in a number of areas were being achieved. The plan was to prepare, by assessing the current state of a range of key indicators, *State of the Environment* reports every 5 years to measure progress (or regress) on achieving targets.

Given the intrinsic, interconnected nature of many of these key indicators, it is not surprising to learn that issues relating to land and soil management and farming practices constitute at least an element of nearly all of the other identified indicators. A “summary” of those indicators is provided in the first *“State of the Environment Report,”* prepared in 2003:

1. **Drinking Water Quality:** Measured as the concentration of nitrates and the presence of *E. coli* bacteria in private water wells, as well as the number of homes serviced by central water and wastewater systems.
2. **Surface Water Quality:** Measured as the amount of nitrates in three streams and the percentage of total classified shellfish growing areas that are not open for harvest.
3. **Climate Change:** Measured as the rise in sea level at Charlottetown and the amount of greenhouse gases produced.
4. **Energy Use:** Measured as the average monthly household use of electricity, the amount of gasoline consumption, and the amount of wood burned for heating purposes.
5. **Air Quality:** Measured as the sulphur dioxide concentration in Charlottetown, the acidity of rain and amount of particulate matter.
6. **Pesticides:** Measured as the active pesticide ingredient used on row crops, compliance with the *Pesticides Control Act*, public opinion on pesticides, and the number of reported fish kills in rivers.
7. **Waste Management:** Measured as the percentage of solid waste diverted from disposal by burial.
8. **Biodiversity:** Measured as the number of species in Prince Edward Island, the amount of land protected under the *Natural Areas Protection Act*, and the forest cover type. These are proxy indicators.
9. **Environmental Stewardship:** Measured as the number of people driving to work, the amount of citizen participation in environmental stewardship projects, the weeks of casual employment in conservation projects, the number of violations under environmental legislation, and percentage of citizens in compliance with the standards for home heat tank installation.
10. **Soil Quality:** Measured as the amount of potato land in three-year or greater crop rotation, the amount of row crops under engineered soil conservation management, organic matter in soil, and the amount of land in certified organic production.
11. **Land Use:** Measured by the number of farms with environmental farm plans, the percentage of agricultural land cultivated for crop production, and area of forest cover.

The *State of the Environment* report adopted many of the indicators of the *1997 Roundtable*, but created its own framework and categories based on its understanding of an indicator:

A good indicator should meet a number of criteria:

- Should provide links by being related to economic and social concerns and benefits;
- Should be relevant, especially to policy decisions and to the values and familiar issues in the population;
- Should be understandable and easy to interpret by the target audience;
- Should be accurate whether based on scientific, community or traditional knowledge;
- Should be long term and derived from information that is collected in a comparable manner from year to year and which will be available in the future; and
- Should be outcome based and measurable where possible.

These criteria guided the selection of the indicators in this report. Many of the indicators recommended in the report of the *Roundtable on Resource Land Use and Stewardship in 1997* meet these criteria and many are included in this report” (p. 3).

The interconnected nature and interdependence of all of the above-identified indicators must be understood to have a truly sustainable and healthy environment. For the purposes of identifying policy priorities for the programs and policies of a PEI Farmland Bank, the indicators of particular importance are 1, 2, 6, 10 and 11. Indicator 10 comprises 4 separate indicators of soil health:

- 1 - The amount of potato land in 3 year or greater crop rotation;
- 2 - The amount of row crops under engineered soil conservation management;
- 3 - The amount of organic matter in soil; and,
- 4 - The amount of land in certified organic production.

It is insightful to read what the *2003 State of the Environment Report* had to say for each of these 5 indicators (1, 2, 6, 10, and 11):

Indicator 1: Drinking Water Quality

The '97 *Roundtable* called for a reduction in nitrates for both drinking water and surface ground water. By 2002 both indicators had worsened:

**Objective:** To have all wells below the 10 mg/L nitrate guideline recommended by the Guidelines for Canadian Drinking Water Quality.

**Status and Trends:**

Year	Number of Wells Tested	Mean Nitrate Level (mg/L)	% of Wells Exceeding 10 mg/L
1984-85	792	3.2	N.A.
1995-96	1,227	3.5	N.A.
2000	2,410	3.6	3.5%
2001	3,447	3.7	4.9%
2002	3,111	3.9	5.2%

Indicator 2: Surface Water Quality

**Objective:** To maintain nitrate concentrations below 2.9 mg/L and below levels that cause eutrophication.

**Status and Trends:**

**Mean Nitrate Concentration (mg/L)**

Period	Mill River	Dunk River	Morell River
1971-75	0.77	1.46	N.A.
1976-80	0.70	N.A.	0.24
1981-85	1.23	2.24	0.29
1986-90	1.26	2.26	0.37
1991-95	1.43	2.32	0.44
1996-00	1.67	3.40	N.A.
2001-02*	2.78	4.73	1.00

Indicator 6: Pesticides

In 2002, there was an increased focus on the environmental impact of farm pesticides, mainly due to the increase in the number of recent fish kills from pesticide run-offs. The *State of the Environment Report* included that metric as a separate indicator.

Year	1994	1995	1996	1997	1998	1999	2000	2001	2002
<b>Number of Fish Kills*</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>8</b>	<b>5</b>	<b>0</b>	<b>9</b>

## INDICATOR: Pesticide Use

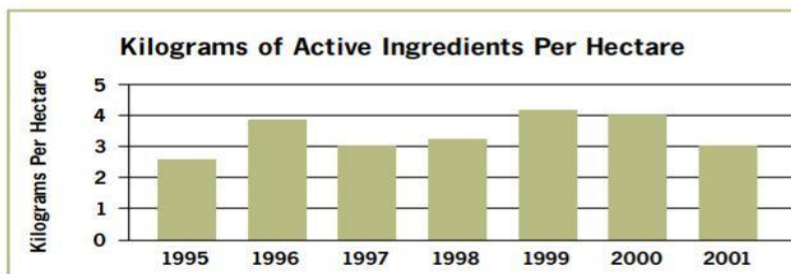
**Description:** Active ingredient used per hectare is measured in kilograms (1 kilogram equals 2.2 pounds; 1 hectare equals 2.47 acres).

**Importance:** 90% of pesticides sold are used on row crops, primarily potatoes. Total sales are influenced by amount of land under potato production, and disease and pest status. Pesticides can have a negative effect on the environment and on human health and safety.

**Objective:** To reduce pesticide use, and in particular the application of high toxicity products by 25% by 2003 and 50% by 2011, as compared to the baseline year (2000) when pesticide use was 4 kilograms per hectare (kg/ha).

As a result, information was collected and presented in terms of the amount of pesticides used on a “per hectare” basis. In the next *State of the Environment Report* discussed subsequently in this report, a different approach was taken, with only a presentation of the total provincial sales data for commercial and domestic pesticides. Here's what was found in 2003:

Year	1993	1995	1996	1997	1998	1999	2000	2001
kg/ha	2.8	2.6	3.9	3	3.2	4.1	4	3



No pesticide sales data has been made available to Islanders by the PEI Government since early 2015, although the data continues to be collected annually. The most recent [Report](#) available is for 2014 pesticide sales data. With such an important issue, the PEI Government should collect, process, and make this information public more expeditiously. Data collection should be structured to provide insight into the areas of PEI experiencing persistent and unacceptable levels of pesticide accumulation in water and soil not meeting national safety guidelines and acceptable standards. Provincial sales data for pesticides does not provide information on application rate trends for agricultural pesticides of most concern. This information would be useful to better inform Farmland Bank land management

strategies, especially regarding areas showing high pesticide levels requiring a transitional phase to return the soil to a pesticide-free status and build SOM.

### Indicator 10: Soil Quality

Here's what the report offered by way of highlights regarding the soil quality indicator:

Prince Edward Island soil is not inherently fertile, but can be managed to be productive. Soil quality ranks alongside water quality as a major environmental issue. Soil erosion is a threat to soil and water quality as well as the economic viability of agriculture. Efforts are being made to improve soil management through conservation practices encouraged by financial incentives, the *Agricultural Crop Rotation Act*, and other measures in the *Sustainable Resource Policy*. In 2001, 40 percent of potato land was in a rotation of less than three years and, therefore, potentially not in compliance with the *Agricultural Crop Rotation Act*. **In 1999-2001, 68 percent of soil samples had an organic matter content of 3 percent or greater. The objective is to have 90 percent of samples at 3 percent organic matter or greater by 2010.** As well, a target has been set to have a minimum of 2,025 organically managed hectares (5,000 acres) by 2006. In 2001, there were 607 hectares (1,500 acres) under organic production. (p. 8)

### Indicator 11: Land Use

The *State of the Environment Report* provides statistics on the number of hectares of land in agricultural use and then provides an “interpretation”:

Year	1900	1935	1980	1990/92	1994/97	2000
Hectares	177,903	186,283	268,804	280,017	275,471	263,225

**Interpretation:** The percentage of land in agriculture has declined slightly over the past 20 years, but the proportion of agricultural land that is cultivated for crop production increased from 56 percent in 1981 to 67 percent in 2001. **This increase, which took place primarily during the 1990s, is indicative of intensification of production to meet the increased processing capacity. Cultivation of land for crop production has implications for soil and water quality since cultivated land is more susceptible to erosion.** Land in permanent forage or pasture or perennial crops may not be as lucrative in economic terms, but it is beneficial to the agricultural ecosystem.

Although this comment would suggest that a maximum use of agriculture at 263,225 hectares is preferable to the 280 thousand acres in production in the 1990s, a specific target for an ideal amount of farmland under cultivation was not identified or proposed. The report did, however, raise concerns about what proportion of that total acreage has been used in a given year to grow potatoes. It noted



that although 60 percent of the almost 26,000 hectares of potato production in 2001 was following a minimum 3-year rotation, that meant that 40 percent was in a rotation of less than 3 years, and in non-compliance with the *Agricultural Crop Rotation Act* enacted in 2002 to “...ensure that adequate soil management occurred to protect the agricultural land base and to minimize impact to the environment from the Island's biggest environmental problem – soil erosion.” (p. 50).

The key indicator of soil health recommended by the *1997 Roundtable*, and subsequently adopted and implemented by the Government, was a program to provide ongoing measurement of the percentage of SOM in PEI soil. The first 3 years of testing produced the following results:

“Organic matter of 3 percent or above is considered desirable for cropping practices and soil characteristics. **Approximately 32 percent of samples do not meet this level.** Intensive row crop production tends to reduce organic matter. The majority of potato land is in the 2.6 percent SOM to 3.0 percent OM range. The higher levels of organic matter are found on sites in pasture **or where particular management practices are in place to build organic matter.**” (p. 52)

The report went on to confidently predict that: “*Mandatory three-year crop rotation has been legislated. This will positively impact on the amount of organic matter in the soil.*”

The many new initiatives such as the 3 year crop rotation legislation originated from the recommendations of the *1997 Roundtable* and soil quality testing program, and represented a multifaceted approach to land and agricultural development. Concrete measurable indicators formed the basis of tracking progress toward a more sustainable approach to agricultural development and land use strategies in PEI. Many different environmental programs and plans were put in place with an eye to achieving sustainable, long-term benefits for all Islanders. That approach underwent significant realignment after the Liberal Party - under Robert Ghiz - became Government in 2007.

### **3.4 2008 - Island Prosperity: A Focus for Change**

After the election of the Liberal Government in 2007, a strategy document was prepared for the Premier by Michael Mayne, who was at the time employed with the *Office of Biosciences and Economic Innovation*, titled: “[Island Prosperity: A Focus for Change.](#)” The document acknowledged that intense pressure on PEI's land and water is an enduring issue as a result of various competing interests:

“As an Island with controlled access by land and sea, we have a strategic and under-leveraged potential for a high level of biosecurity. But as Canada’s smallest, most rural and most densely settled province, the Island’s bioresources from land and sea are under intense pressure from competing resource land uses, traditional production approaches, disease and invasive species.”(p. 15)

Although the strategy document does mention a number of problems facing our primary resources of land and water, as well as the significant challenges in the agricultural sector, especially what the document describes as problems with “traditional agriculture,” for the most part, the strategic way forward for agriculture proposed to address the current situation was presented in general terms.

The document suggested a shift away from mass production of commodities to a new market-focus approach growing specialized crops for new pharmaceutical and nutraceutical products for sale globally - a “bioscience” vision for PEI agriculture:

“In an increasingly health-conscious, convenience-oriented consumer market, an agriculture sector that can deliver new, differentiated, niche, premium food products and functional foods will succeed and prosper. Over time, potential exists to build a bioscience-based value chain featuring high-value nutraceutical and biopharmaceutical products based on unique Island bioresources” (p. 17).

The document did not address current land and farm issues or discuss environmental problems resulting from intensive farming practices in PEI, nor did it suggest any policies or programs to address other systemic problems and negative trends within the sector (decreasing number of farmers; increasing average age of farmers, low economic returns, and increasing input costs). That work was undertaken a year later by the *Commission on the Future of Agriculture and Agri-Food on Prince Edward Island*.

### **3.5 2009 – Growing the Island Way: The Next Chapter for the Agriculture and Agri-Food Economy of Prince Edward Island**

The Ghiz Government established the *Commission on the Future of Agriculture and Agri-Food on Prince Edward Island* in the spring of 2008, giving it the mandate “...to assess the state of agriculture in the province, articulate a vision for the future of the Island’s biggest industry, and develop an action plan to achieve that vision.”

Over August and September of 2008, the *Commission* heard 23 formal presentations from industry and Government representatives, received 6 written submissions, and heard 5 staff presentations, along with separate consultations with commodity organizations.

The final report titled “[Growing the Island Way: The Next Chapter for the Agriculture and Agri-Food Economy of Prince Edward Island](#)” characterized the state of agricultural in PEI at the time as unsustainable, unable to be competitive, and incapable of providing a viable way forward for PEI's agricultural industry. Trends by that time were revealing a dramatic consolidation of the number of farms. The report noted that between 1981 and 2006, the number of farms in PEI dropped from more than 3,000 to 1,700 farms. (p. 8)

The *Commission* adopted a framework to contrast 3 different “waves” or pivotal periods of time when major shifts in the development of PEI agriculture happened and changed the fundamental approach and methods used in primary food production. The report provided a critique of the industrial agricultural model of cash-crop production for processors selling and competing in global commodity markets. It concluded that such an approach is no longer economically feasible or environmentally sustainable and proposed a “third wave” or “new agriculture” as a way forward for PEI agriculture.

As the report put it:

“Over the past 40 years, PEI has followed a national – and indeed international – trend in which small, mixed-product farms have consolidated to form larger, more specialized, family-owned farm businesses. In this report, these are characterized as the first and second wave of agriculture, from an agrarian to industrial model. Signs are emerging, however, of a third wave, a post-industrial, “new agriculture,” **one that takes advantage of local strengths while embracing postindustrial, knowledge-based innovations and environmental sustainability.**” (p. 7)

In tracing the transition from an agrarian farming approach to industrial agricultural methods, the report noted:

“The trend was toward fewer but more specialized farms, along with a concentration of processing and retail, declining economic viability, and environmental degradation.”

A strategy was proposed by the *Commission* which incorporated 3 broad themes: (1) competitiveness, (2) sustainability; and (3) collaboration. Here is how the *Commission* defined these concepts:

“Competitiveness means becoming more innovative, knowledgeable, adaptable, and profitable. Sustainable means preserving our soils and waters for future generations. Collaboration means developing healthy relationships with fellow producers, the markets, the community, and Governments. Building healthy relationships is critical to achieving this vision.” (p. 4).

The *Commission* reported that it had heard from many farmers that the relationship between producers and the Government-funded agricultural research system in PEI was in dismal condition, something that was also a key concern of the *1997 Roundtable*:

“There is effectively no working relationship between *Agriculture and Agri-Food Canada’s* Research Centre in PEI and the industry. *Agriculture and Agri-Food Canada’s* investment in scientific expertise at the Charlottetown Crops and Livestock Research Centre has declined by over 50 percent in the past decade as various rounds of restructuring of the Research Branch nationally have decimated its research capacity. There is no process by which producers have a voice in determining research priorities.” (p. 18).

Members of the *Commission* felt strongly about this issue and made the following recommendation:

**Recommendation 13:** AgriFood Canada and the Province of Prince Edward Island, establish a new industry-led, cluster-based operating model for agri-food research and technology transfer in PEI that includes the resources of the *Charlottetown Crops and Livestock Research Centre*.

Although the *Commission* did not specifically mention a Farmland Bank, it did draw attention to the fundamental problems facing PEI agriculture that a Farmland Bank could address – problems which the *Commission* believed could prevent a successful “third wave” in PEI agriculture if left unsolved:

“Without young, energetic farmers to take over existing farms, the industry will suffer, and new technologies and innovations will not be introduced to meet the challenges of this ever-changing sector. **A key issue is access to capital to facilitate the intergenerational transfer of farms**” (p. 22).

### 3.6 2009 - New Foundations: Report of the Commission on Land and Local Governance

As part of its mandate, the *Commission on Land and Local Governance (Thompson Commission)* was asked to undertake a review of past consultative activities on local governance and land use. As noted in the introduction to the final report:

“The terms of reference of the *Commission* on Land and Local Governance indicated that the work of the Commissioner would entail a review and analysis of existing studies and reports and the results of past consultative activities on the subject of PEI’s local governance system and land use framework. **The *Commission* produced a document titled “Land Use and Stewardship” in 1997. Many of those recommendations have not been implemented, but not because they are without merit.**” (p. 1)

The *Thompson Report* offered a full review of the *87 Roundtable* recommendations, recognizing the significance of the earlier implementation of measurable “indicators” and the importance of properly situating his own work within the context of the analysis and work of previous bodies:

“The *Roundtable on Land Use* introduced the concept of indicators and suggested that, if Islanders are to participate in developing and monitoring resource land use policy, they must understand, accept and agree on a set of appropriate indicators. The *Roundtable* proposed the following definition of an indicator:

*An indicator is a measure of change in the state of the economy or the state of the environment, as affected by farming, forestry or other development activity on resource land. The indicator shows whether things are getting better or worse during the interval between an agreed starting point in time and a future goal or objective.*”(p. 15).

An extensive amount of work was done by the *Thompson Commission* to research the status of those indicators at the time in order to see if the projected targets were being met with the particular policies, programs, and measures in place since 1997.

Below are the *Thompson Commission* updates for 8 particular recommendations from the *1997 Roundtable* which are relevant to this study, especially with respect to clarifying priority policy objectives for Farmland Bank programs, and lease terms and conditions. Both the original 1997 recommendation and the *Thompson Report* update (red) are provided.

2. We recommend that the responsibility for maintaining soil quality, for controlling erosion risk and for establishing riparian (buffer) zones be vested in the landowner, not the tenant or the lessee, and that this responsibility be recognized in law. All programs, policies and legislation implemented by Government and industry groups must respect this principle. This recommendation was made by the *Roundtable* as a “general” statement meant to highlight the need for the landowner to accept responsibility for soil quality. **A review of programs, policies and legislation introduced since the *Roundtable* reported [in 1997] indicates that this principle is recognized and respected by Government at least.**
4. We recommend that *Agriculture and Agri-Food Canada’s* Charlottetown Research Station place a higher priority on research and demonstration of better soil conservation practices for potatoes, specifically: • research into other appropriate cash crops for potato rotations; • research into the impact of various potato rotation regimes on levels of Soil Organic Matter;

- research into reduced-tillage potato production; and • demonstration of soil conservation practices on private farms. *Agriculture and Agri-Food Canada's Crops and Livestock Research Centre* in its program overview lists soil and water conservation and sustainable production systems as among its priorities. **There is no evidence that these areas of research have expanded or that they will expand in the future.**
6. We recommend that the *Department of Agriculture and Forestry* increase the operating budget of the *Soil and Water Unit* and of the *Soil and Feed Testing Laboratory* by increments of 25 per cent in the fiscal years 1998-99 and 1999- 2000; that funding be targeted to soil conservation and improvement; and that it be maintained at this increased level. **Budgets have remained fairly constant since this recommendation was made.**
  11. We recommend that the Federal and Provincial Governments work with the livestock and potato sectors to implement actions proposed in the *Livestock Industry Strategic Plan* to increase the level of cooperation between the two sectors. **There is no evidence that this recommendation was implemented.**
  13. We recommend that the industry adopt a mandatory crop rotation standard for potatoes based on the following principle: that potatoes are to be grown no more frequently than one year in three, unless the producer has an alternative plan that will maintain soil quality. Such a plan must be approved by a qualified Government soil engineer. ***The Agricultural Crop Rotation Act* came into effect in 2001. One of its objectives is “to preserve soil productivity”. It states in part that: “...no grower shall plant and no landowner shall permit regulated crops to be planted on any area of land greater than 1.0 hectare at any time for more than one calendar year in any three consecutive calendar years”. There are however exceptions to this rule. If a grower’s approved management plan allows for a different crop rotation or if the regulated crop is to be grown on land that was in sod for a significant period of time, the rotation can be shortened so that a regulated crop can be planted legally more often than one year in three. There is even a section in the Regulations (section 6) that allows a grower to “deviate from a management plan”. The *Act* is enforced by the *Department of Environment, Energy and Forestry* and the *Department of Agriculture* is responsible for approving management plans. To date, no charges have been laid successfully under the crop rotation sections of the *Act* and evidence shows that fewer potato producers are registering management plans with the *Department of Agriculture*. The report of the *Commission on Nitrates in Groundwater* recommends that the *Act* be enforced more stringently and that there be no exceptions allowed to mandatory three-year crop rotation. Consultation with Government officials indicates that this and other matters raised in the Report are currently being considered by *Executive Council*. Commission on Land and Local Governance. In 1997, on average, potatoes were grown 1 year in 2.4 years. There is no evidence that the *Act* has led to an increase in the area of land in three year rotation in the case of potato production or that has had any impact on the average length of the potato rotation. Over this period, the acreage in potato production has declined by approximately 20 percent, and this may have had an impact on the average rotation. (My underline emphasis).**

18. We recommend that organic matter content be adopted as the principal indicator of soil quality for Prince Edward Island and that three per cent be established as the minimum standard of good quality agricultural land. We also recommend that the necessary changes be made to the provincial Soil and Feed Testing Laboratory in the fiscal year 1998-99 to enable the use of the method of complete carbon combustion for measuring organic matter. In response to this recommendation and the two that follow, the *Department of Agriculture* released the “Prince Edward Island Soil Quality Monitoring Report 1999-2000”. The report presents results and analysis from three years of data collection. Its stated purpose was to develop baseline data and to determine if the indicators of soil quality proposed by the *Roundtable* were suitable. The soil quality monitoring project is ongoing. *Commission on Land and Local Governance* and data for the 1998-2006 period have been analyzed. Although the results have not been published, some preliminary conclusions can be drawn: • Organic matter, phosphorus content and cation exchange capacity are good indicators of soil quality; soil acidity is not; • The 3 percent standard for organic matter is an indicator of good-quality agricultural land; • The 3 percent level cannot be maintained if potatoes are grown more frequently than one year in three and if the rotation does not include a forage crop; • Spring plowing and winter cover both have a positive impact on organic matter content; and • Organic matter levels are dropping but not enough data are available to conclude that this is a trend.
66. We recommend that Government develop a better system to track the loss of Class 2 and 3 agricultural lands to non-resource uses, and that Government take the measures necessary to reduce the current rate of loss by 50 per cent by the year 2000. This recommendation was not implemented. It is important to note that 90 percent of the Island’s land base is classified as either Class 2 or 3 agricultural land. While farmers and farm organizations are committed to preserving the agricultural land base, successive Governments have judged that there is no support for a total ban on subdividing agricultural land for development purposes.
71. We recommend that Government retain property it owns in threatened watersheds and actively pursue opportunities to add to its holdings of forested land and wetland in these areas. No direction was given by Government to the Land Use Coordinating Committee as a result of this recommendation. Its successor, the Provincial Land Review Subcommittee, has not received any direction in this regard either. No effort has been made to purchase land in threatened watersheds. Among the reasons given by officials within Government are the following: a) the various partners, including non-Government organizations, have not made this a priority; b) land in these watersheds tends to be very expensive; c) not much land is available to purchase; and d) the threatened watersheds aren’t priorities on Government’s ‘protected areas plan’ which is where efforts to purchase are concentrated.

In a section of the Thompson Report titled “Weaknesses attributed to the Current Legislative Framework,” we read:

“For decades much of the discussion and decision making on development has taken place behind the closed doors of Ministers’ offices and the *Executive Council* Chamber, rather than through the public process which occurs in many municipalities.” (p. 24)

The issues listed below pertain to the exercise of Government jurisdiction in roughly 90 percent of the province where there is no *Land Use Plan*. Of the 16 issues in the list, the following are of particular interest to this Farmland Bank study:

“Special planning areas can be established or modified by order of the *Executive Council* without the requirement for any public consultation or prior notification, and these can supersede or suspend a municipal official plan;

With the sweeping powers granted to it under the *Planning Act*, *Executive Council* can develop or modify regulations at a weekly meeting of Cabinet with no public input or public consultation, and without the guiding framework of a provincial land use policy

Simply put, the current framework consists of thirty-one official plans on 10 percent of the Island and a somewhat disjointed set of rules for the remaining 90 percent. These rules are not connected to a provincial policy, because there is none. While many submissions to the *Commission* called for a provincial land use plan, none proved very helpful in laying out the path from the present to the desired state.” (p. 27)

At least 3 provinces have successfully tackled the issue of agriculture land zoning – British Columbia, Québec, and Ontario. In British Columbia, the *Agricultural Land Reserve* (ALR) was established in 1974 as a means of protecting agricultural land, which was being lost at the rate of 6,000 hectares (15,000 acres) per year. The ALR functions as a provincial land use zone, covering 47,000 km<sup>2</sup> (11.6 million acres), within which agriculture is recognized as the priority resource use. Farming is encouraged and non-agricultural uses are regulated. Landowners wishing to subdivide land within the ALR or use it for non-farm purposes must apply to the [Agricultural Land Commission](#) for permission to do so. Though the ALC legislation imposed new restrictions on landowners, no compensation was paid by the British Columbia Government. (p. 37)

Presently, across most of PEI, a farmer can sell, subdivide or develop land with few restrictions, other than those contained in the [Subdivision and Development Regulations](#). Farmland sold to a non-resident or to a corporation must be registered under the *Land Identification Program*, and its resource use is thereby protected for at least 10 years. (p. 37) The land owner can then apply to the *Island Regulatory and Appeals Commission* (IRAC) to have the land reclassified from agricultural use to allow development. The decision on each application is made by *Executive Council* with no public disclosure of the rationale for allowing agricultural land to be developed. A review of *Executive Council Orders* over the past decade reveals a significant acreage of farmland lost to agriculture as a result of such application approvals.



The *Thompson Report* went a long way to systematically identifying land-related problems in PEI agriculture and proposed bold measures to address them. Knowing there was a strong public interest in protecting PEI farmland, and soil health, and that there are inevitable costs to address these systemic problems, the *Commission* recognized that the need for public compensation to farmers, in one form or another, would be necessary to move forward with many of the required measures:

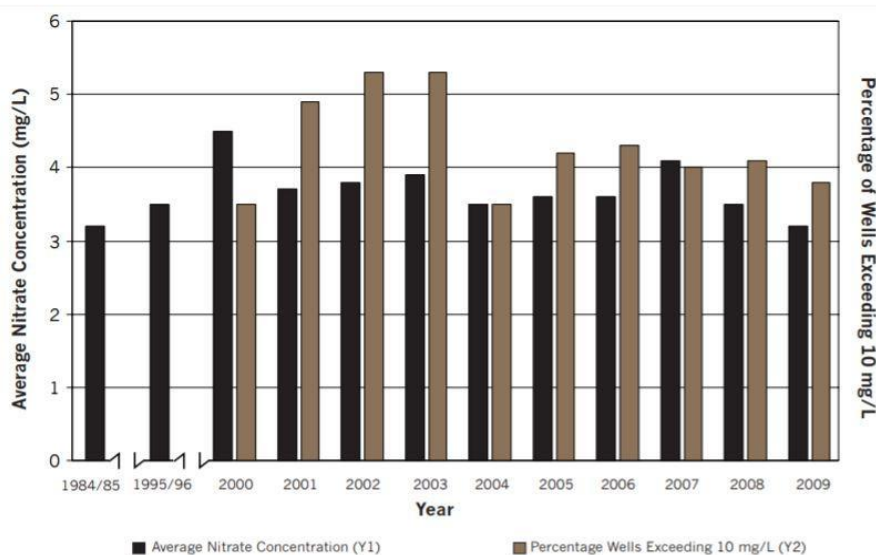
“It is in the public interest to compensate farmers financially for measures they take to protect the environment, whether these are mandatory or voluntary.” (p. 2)

### 3.7 2010 – State of the Environment Report

The second – and last – *PEI State of the Environment Report* was undertaken in 2009 and made public in 2010. As with the 2003 *PEI State of the Environment Report*, many of the indicators recommended in the 1997 *Roundtable on Resource Land Use* were included. Listed below is information taken from the 2010 *State of the Environment Report* pertaining to roughly the same 8 “indicators” used earlier in section 3.2.

#### Indicator 1: Drinking Water Quality

The established objective or “target” was to have an average nitrate concentration in groundwater of 3 mg/L or less. The immediate objective was to have no wells test over 10 mg/L. The following chart shows the status (black is average nitrate levels; brown is the percentage of households over 10 mg/L).



Given that these are “averages,” it is likely that there were much higher levels in concentrated potato growing areas. The data showed higher levels of nitrates in surface water in those areas, based on the

locations of the 4 rivers tested for nitrate surface water contamination.

**Indicator 2: Surface Water Quality**

**Nitrate Concentration in Four Test Rivers (mg/L)**

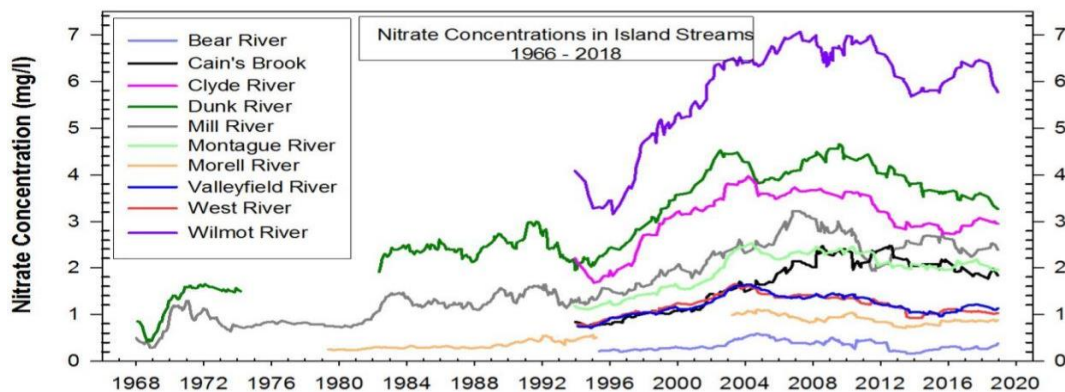
Period	Mill River	Dunk River	Wilmot River	Morell River
1971-1975	0.77	1.46	NA	NA
1976-1980	0.77	NA	NA	0.24
1981-1985	1.23	2.24	NA	0.29
1986-1990	1.26	2.26	NA	0.37
1991-1995	1.43	2.32	3.6	0.44
1996-2000	1.67	3.4	5.08	NA
2001-2005	2.72	4.16	6.7	0.97

The most recent nitrate data available for the *2010 State of the Environment* report is 5 years old. More recent data shows that there was a significant worsening in nitrate levels in surface water from 2005-2010, especially in the 3 rivers running through areas growing potatoes for french fry processing. In the case of Wilmot River, the level was twice the recommended amount established as the *Canadian Aquatic Life Guideline*. There has been some improvement since 2010. The following chart on the PEI Government [website](#) provides data for streams up to 2018.

**Objective:**

To maintain nitrate concentration below the Canadian Aquatic Life Guideline of 2.9 mg/L.<sup>4</sup>

**Status and Trends:**



There are also some notes provided to explain how changes in agricultural potato acreages affect nitrate levels. Since it takes approximately 8 years to show up in the data, the higher acreages of the 1990s are reflected in the mid-late 2000s. Additional measures to reduce erosion, and the use of new technologies to apply fertilizers in a more precise and targeted manner, are also mentioned as contributing factors for a modest decline since 2010. However, a number of streams remained well

over the guideline for aquatic life, and the Government report expressed the need for vigilant monitoring to prevent future problems:

In the past, increases in potato production have resulted in increasing nitrate levels. If the production of potatoes or other high-nitrate-leaching crops increases, stream nitrate levels may also increase in the future.

The overall declines in stream nitrates that have been observed are a step in the right direction however they are not enough to properly address the issue of anoxia in estuaries or nitrates in drinking water.

PEI has an obligation not only to Islanders, but to all Maritimers, to reduce the release of nitrates into our environment and water. A recent [Study](#) found that 95 percent of the nitrates emptying into the Northumberland Strait are coming from PEI, 91 percent of which is agriculturally-sourced: 57 percent of that 91 percent is attributed to potato production.

#### Indicator 6: Pesticides

The “indicator” for measuring farm pesticide use did not set a target for the amount of usage precisely, but aimed at general reduction.

##### **Importance:**

The majority of pesticides sold in the province are used on row crops (primarily potatoes). Pesticides can have a negative effect on the environment and on human health and safety.

##### **Objective:**

To encourage the responsible use of pesticides and, in particular, to support the use of more environmentally friendly lower-risk products.

Sales data was presented from 1993-2008 (2003-05 are missing):

#### **Status and Trends:**

Year	1993	1995	1996	1997	1999	2000	2001	2002	2006	2007	2008
Insecticides kg/ai	108,000	88,000	58,400	58,677	86,220	60,899	43,489	35,004	48,032	30,609	27,779
Herbicides kg/ai	104,000	103,000	101,900	106,789	119,945	129,552	119,951	111,237	82,526	82,515	96,003
Fungicides kg/ai	390,000	515,000	893,600	722,502	848,340	899,658	667,862	605,829	605,829	517,158	556,769
Total	602,000	706,000	1,053,900	886,218	1,054,505	1,090,109	814,103	736,387	736,387	630,282	680,551

More detailed information on the rates of application of pesticides in specific areas of the province is not available, nor is “application per acre” data on a year-to-year basis. As mentioned previously, the last province-wide pesticide sales data made available to the public was for 2014. The data shows the total kg of active ingredient was 1,019,297 kgs, which is an increase of 338,746 kgs in 6 years. It is also worth noting that in the data time frame there were 10,000 fewer acres of potatoes planted, suggesting higher applications per acre.

More investigation into pesticide use, and better testing and reporting on a more frequent basis, are needed to better understand increases in the use of pesticides during specific periods, such as between 2008 and 2014.

**Table 20**  
**Area, production and farm value of potatoes, annual (1)**  
**Prince Edward Island**

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
92,500	85,000	86,000	86,600	85,700	82,900	85,000	85,800	87,000	84,200
89,000	82,000	86,000	86,000	83,700	82,900	84,700	85,300	86,700	83,200
280	300	300	285	290.1	301.7	298	291.3	296.7	284.4
24,920	24,600	25,800	24,510	24,284	25,009	25,240	24,850	25,723	23,664
24,469	24,224	25,532	24,319	23,794	..	..	..	..	..
10.18	9.4	10.86	11.72	10.82	..	..	..	..	..
249,212	227,673	277,361	284,983	257,470	..	..	..	..	..

There is no current data available to the public on the present status of pesticide use in PEI agriculture. Decreasing SOM creates a need for higher doses of chemical fertilizers, which in turn creates an increased likelihood of accelerated groundwater and surface water contamination from chemical fertilizers and pesticide leaching, as a result of reduced structure and water-retention capacity in the soil (See: “[Soil Organic Matter Can Decrease Leaching Potential of Pesticides](#)”).

#### Indicator 10: Soil Quality

The soil quality indicators used in the 2010 *State of the Environment Report* were exactly the same as recommended by the 1997 *Roundtable* and used in the 2003 report: (1) the frequency of row crops (2) the area of row crops under engineered soil conservation management structures (3) the organic matter in soil and (4) the area of land in certified organic production. Below is what was said about 3 year crop rotation for potatoes:

“Progress has been slower than anticipated. Government continues to support sustainable soil management rotations where row crops are grown no more frequently than once in every three years or where a soil management plan, approved by a management specialist, is in place.” (p. 67)

Here is what was said about SOM levels:

In 1999-2001, 68 per cent of samples had an organic matter content of three per cent or greater. In the 2006-2008 sampling period (on the same sites) this figure decreased to 48 per cent. Where potatoes were grown more frequently than once every three years in the crop rotation, Soil Organic Matter levels dropped to below three per cent. When potatoes were grown once in every three years, and forages or cereals were incorporated into that rotation cycle, Soil Organic Matter levels remained above three per cent. Soil organic matter levels are decreasing province-wide. This trend can be reversed if fewer potatoes are grown, or if forages, cereals or oilseed crops are included in the three-year crop cycle. (p. 69)

### Indicator 11: Land Use

One of the indicators measuring land use was the number of acres of land in agricultural crop production.

#### **Description:**

Percentage of total agricultural land cultivated for crop production

#### **Importance:**

Cultivation of land for crop production has implications for soil health, soil resilience<sup>18</sup> water quality and erosion.

#### **Status and Trends:**

Year	1981	1986	1991	1996	2001	2006
Hectares in agricultural use	283,145	272,549	258,985	265,330	261,594	250,859
Hectares in crop production	158,347 (56%)	156,656 (57%)	154,168 (59%)	170,434 (64%)	175,563 (67%)	171,296 (68%)
Hectares in potato production*	NA	25,988	31,488	43,770	43,256	39,512
Number of farms	NA	2,833	2,361	2,217	1,845	1,700

The significant drop in the number of farms stands out in the data, but what isn't detectable is explained in a further note – the increasing percentage of land producing potatoes each year:

**Interpretation:**

The amount of land in agriculture has declined slightly over the past 25 years but the proportion of agricultural land that is cultivated for crop production increased from 56 per cent in 1981 to 68 per cent in 2006. In other words, less land is being farmed, but the remaining farm land is being put under more intensive cultivation.

Cultivation of land for crop production has implications for soil and water quality since cultivated land is more susceptible to soil erosion. Land in permanent forage or pasture, or perennial crops, may not be as lucrative in economic terms, but such a practice is beneficial to the agricultural ecosystem and its health.

### **3.8 2013 - The Gift of Jurisdiction: Our Island Province; Report of the Commission on the *Land Protection Act***

On November 13, 2012, the *Executive Council* of Prince Edward Island established a *Commission of Inquiry* to review the Prince Edward Island *Lands Protection Act*. Horace Carver, Q.C., was appointed Commissioner under the *Public Inquiries Act* with the mandate to inquire into, examine, conduct research, consult with Islanders, and make recommendations on the *Land Protection Act*. The issues discussed in Carver's final report concerning agricultural land, policies to protect farmland, as well as the urgent need to implement some kind of farmland banking system in PEI, are of interest and importance to this study.

The most important issue in the *Carver Commission Report* was whether the land holding limits (1000 acres for an individual; 3000 acres for a corporation) should be increased or kept the same. At the time of the study, the widespread assumption (which is inherently the logic of the industrial model of agriculture competing in global markets) was that in order to be (and remain) competitive, it is necessary to increase efficiencies with improved "economies of scale" to reduce costs and increase profits. In plain terms, the financial hardships of Island farmers, especially within the processing potato sector, fuelled the belief that if the *Lands Protection Act* would allow farmers to acquire more land and increase production, they would be able to earn a decent living and remain solvent as farm businesses.

It was this view presented at the *Commission's* public hearings that led to a deeper investigation into whether there was any evidence to support the assumption regarding the financial merits of “economies of scale” in PEI potato farming. Since no evidence to justify increasing land limits was presented by those arguing that profits increase with farm size, Carver conducted his own inquiry into the matter. Finding no solid evidence to support this widely-held belief, Carver recommended that the aggregate number of arable acres establishing limits in the Act not be increased, based on provincial and industry strategies not calling for increasing farm size, and the majority point of view expressed to the *Commission* that the *status quo* should continue. He made the following comment:

“Bearing all this in mind, the question must therefore be asked: If none of the provincial and industry strategies mentioned above calls for increasing farm size as a way to improve farm profitability, enhance rural development, strengthen tourism, or promote environmental sustainability, on what basis can increasing the aggregate land holding limits be justified?” (p.21)

Carver links that question to findings from the *PEI AgriAlliance* (a group newly formed in 2010) which had put forward a “road map” for PEI agriculture, with a decided focus on promoting the processing and value-added food chain. Carver cited information and analysis from that report which called for a different way forward for PEI agriculture – an approach that supported elements of the approach first put forward by Michael Mayne in his strategic plan submitted to Premier Ghiz (e.g., adoption of new farming technologies, and new crops for nutraceutical/pharmaceutical markets) and integrated into the agricultural sector by the *Agricultural Commission's Report*.

The main issue Carver grappled with was whether the *Lands Protection Act* should be changed to either increase land holding limits, keep them the same, or perhaps even lower them. Carver situated his considerations and comments on agricultural land use policy within the agricultural policy framework and analysis that was being put forward at the time by the *PEI Department of Agriculture*, farm organizations, and food industry stakeholders and organizations like the *AgriAlliance*. As Carver put it:

“In reviewing these strategic initiatives, the *Commission* arrived at the following conclusions:

1. The linkages between land ownership and property rights on the one hand, and rural development, tourism, and environmental sustainability on the other hand, are direct and apparent; in fact, they are interconnected and inseparable;

2. According to the Provincial Government's current economic development strategy, **the traditional approach of mass production of food for mass markets is becoming increasingly obsolete;**
3. The profitability of Island potato farms is of great concern to both industry and Government, although the factors causing the decline are not fully understood; and
4. The industry-Government alliance is promoting a strategy based on innovation, product diversity, profitability and partnerships.

Questions Regarding the Strategies: The 1,000 and 3,000 acre limits were by far the dominant issue in public meetings held by the *Commission*. Calls for increasing the limits came mainly from the potato industry, through the *Federation of Agriculture* and the *Potato Board*. Not all farmers and not all agricultural organizations called for increasing the limits however. The *National Farmers Union* opposes any change to the *Lands Protection Act and Regulations*. Among non-farm groups and individuals, the vast majority favoured the status quo." (p. 21)

In examining the question of farm size, Carver made a number of important observations. For example, "...the evidence shows that as farms have gotten bigger, soil quality has generally declined. (p. 29)." He raised a number of valid questions about the impact of larger farms on the health and viability of rural communities:

"There is no evidence that concentrating land in the hands of fewer and fewer people will create the kind of wealth that will sustain rural communities. All indicators point in the opposite direction. But these topics go well beyond the *Commission's* mandate. They require further research and a dialogue between the people and their elected officials." (p. 57)

At the time of the *Carver Commission*, the *National Farmers Union (NFU)* and the *PEI Federation of Agriculture (PEIFA)* held quite different views on whether the aggregate land limits for individuals and corporations should be increased (the Federation argued for an increase; the NFU held that limits should remain the same). There was nonetheless a broad consensus between the 2 farm organizations on many other land-related issues. A list of 10 "shared values" was included in the final report. As Horace Carver stated: "...let them [Government and all Islanders] see where these two farm organizations stand in agreement" (p. 17). Three of those shared values are of particular relevance to the implementation of a Farmland Bank in PEI, numbers 4, 6 and 9:

4. Some form of Government-supported farmland banking system is needed to enable more individuals to get into farming;
6. Farmers must be encouraged to adopt better crop rotation practices, through technical and financial assistance and better enforcement of the *Agricultural Crop Rotation Act*; and



9. Large-scale purchase of land, also known as ‘land grabbing’, would be harmful to the interests of Prince Edward Island and must be guarded against.

Special attention was drawn to this overriding and shared concern that farmland be protected with a new farmland banking system for the agricultural sector:

“The message from the public, expressed clearly to the *Commission*, is that some way must be found – and soon – to keep farmland in food production and to allow Island farmers to acquire the land they need to grow food. Too much land is being taken out of production and away from the control of Island farmers. *As stated clearly by both the Federation of Agriculture and the National Farmers Union, a new land banking system is a priority for the agricultural sector.*” (p. 50)

Carver recommended that the land limits remain the same, but provided insightful commentary on how attention should be turned to developing an agricultural policy to make smaller farms – or large farms that have reached maximum arable land holdings – economically-viable and ecologically-sustainable:

“The *Commission* believes Islanders want their Government to come up with a set of laws, agricultural policies and programs – including financial and technical assistance – that is designed around the land limits as they currently exist. Of what ongoing value is the gift of jurisdiction if our Government cannot set out and achieve such a goal?” (p. 57)

The *Carver Commission* report made many excellent recommendations, based on well-researched reasoning, that have not yet been implemented. It remains an important document that needs to be revisited in conjunction with the formulation of policies for a Farmland Bank and agricultural sector that address the economic and environmental problems currently facing the sector.

### **3.9 2013 – Principles of Sustainable Development**

*The Environment Council of PEI* submitted a set of guiding principles to the *Task Force on Land Use* which the Council prepared especially for use in the development of a comprehensive *Provincial Land Use Policy*. There is much in this document that can also help guide *Farmland Bank Policy* development.

“To help inform the *Land Use Policy Task Force* in the development of new provincial land use policies, the *Environmental Advisory Council* has identified *a set of guiding principles to direct decision-making, protection and sustainable development of our land and resources*. These guiding principles have been developed following consultation with key stakeholders across the Island.” (p. 1)

Along with measures that ensure that the interests of this and future generations are safeguarded, the document explained how translating any vision into action requires ensuring:

- a. Sustainable development is the core principle underpinning the decision-making process;
- b. Critical issues are identified through discussion with key stakeholders;
- c. People and communities are at the centre of sustainable development planning;
- d. Policies and programs are integrated so that they are mutually reinforcing;
- e. Funding and grant schemes compliment policy design and planning objectives;
- f. Spending plans and budget agendas are aimed at achieving key sustainable development outcomes with realistic planning horizons;
- g. Short-term decisions are not contradictory to long-term objectives;
- h. The needs and opportunities of all parts of Prince Edward Island are identified;
- i. The root causes and consequences of problems are addressed and the risks of inaction are recognized;
- j. Successful examples of sustainable development are made mainstream as soon as possible;
- k. Sustainable development is integrated into education and training programs; and
- l. Public understanding and awareness of the meaning of sustainable development and its day-to-day implications is increased.

These are all important considerations to keep in mind as the process to implement a PEI Farmland Bank goes forward.

### **3.10 2013 - Provincial Land Use Policies: Land Use Task Force Consultation Document**

The *Task Force on Land Use Policy* prepared a [Draft Document](#) offering some possible provincial land use policies to stimulate public discussion and garner feedback before making final recommendations to the Provincial Government. This document was intended to encourage dialogue on how best to implement policies. It presented a number of “Statements of Provincial Interest,” with accompanying comments on the goals and objectives of policies designed to support those statements of provincial interests. Of particular importance for this study is the provincial statement on agricultural land. One of the goals in the draft consultation document was a very strong statement of support for protecting agricultural land:

“Our agricultural land nourishes us and is a major economic driver of our economy. The future of agriculture rests in the top few centimetres of soil. Island soils require careful nurturing to provide their optimum economic and social return. **It is therefore in the provincial interest to stabilize the agricultural land base, and offer certainty to farmers in land use decisions.**” (p. 8)

## Goal 2: Protect Prime Agricultural land

**OBJECTIVES:** (a) Protect agricultural land by regulating the subdivision and development of prime agricultural land;

- i. Identify agricultural land classes that are not normally open to further development or subdivision. Define prime farmland considering soil type, slope, topography, surface drainage, natural features, surrounding uses, access to utilities and services;
- ii. Restrict residential subdivision on agricultural land; and
- iii. Acknowledge possible need for secondary housing for persons engaged in the economic activity of the farming enterprise (parents, children, workers).” (p. 8)

### 3.11 2014 - Report of the Task Force on Land Use Planning

The final report of the *Task Force on Land Use Planning* informed Government that it “...heard repeatedly that farmers feel forced to sell land to provide their retirement funds. Agricultural land cannot serve as a pension plan. Other tools need to be developed to address succession planning and retirement planning within the agricultural industry.” (p.8) The report went on to declare:

“It is in the provincial interest to:

- a) Ensure people have the opportunity to engage in decisions that affect their quality of life;
- b) **Protect the quality and quantity of the Island’s water and ensure it is healthy and sustainable for current and future generations;**
- c) **Maintain and improve soil quality;**
- d) Protect the quality and quantity of the Island’s natural areas, both on land and in aquatic areas;
- e) Protect and manage coastal areas to safeguard their environmental, economic, historic and aesthetic values, and to protect public safety;
- f) Identify and protect the rural character and significant views of Prince Edward Island;
- g) **Protect the agricultural land base and offer certainty to farmers in land use decisions, so we have viable farms for the long term;**
- h) Increase the diversity, quality and connectivity of the forest;
- i) Protect our marine environment and industries;
- j) **Encourage safe, healthy, vibrant and sustainable communities;**
- k) Promote the efficient use of existing infrastructure before expanding or developing new infrastructure” (p.17).

The *Task Force* made a formal recommendation to Government to adopt these *Statements of Provincial Interest* and *Provincial Land Use Policies* as regulations under the *Planning Act*. They expressed the view that Islanders agree it is important to protect the environment, public safety, and

land that is important for our resource industries, and that we have “a responsibility to make choices that sustain these resources for future generations of Islanders.” (p. 31)

The *Task Force Report's* primary focus was on the need for an Island-wide framework for land planning with roles for municipalities and regions (which it recommended should be established). It stressed that: “Regional plans and municipal official plans must meet the spirit and intent of the Statements of Provincial Interest and Provincial Land Use Policies.” Four of the above-stated “Provincial Interests” (b, c, g, and j, highlighted in the above list) are especially important for the development and implementation of a Farmland Bank in PEI. One of the 10 recommendations the *Task Force* submitted to Government in its report was:

**9. The Task Force recommends the provincial government explore farmland preservation tools to keep farmland in food production.**

The protection of agricultural land is a key public interest and the costs of protection should be supported by the public, not farmers alone.

Other jurisdictions have taken steps to protect farmland and there are different tools to consider. The Task Force recommends that farmland preservation tools be considered, such as land trusts, land banks, land swapping, taxation initiatives, transfer of development rights, conservation design or clustered development, and incentives for lot consolidation.

Ensuring the health of PEI soils was the second goal of the *Task Force's* recommended land use strategy. It is an expanded version of what first appeared in the draft report:

**Goal 2: Maintain and Improve Soil Quality**

- 2.1 Develop and follow best management practices for soil conservation to prevent erosion by wind and water; recommend soil management practices necessary to meet soil quality indicators;
- 2.2 Ensure adequate crop rotation and soil residue levels to maintain Soil Organic Matter;
- 2.3 Minimize nitrate loss to groundwater and minimize phosphate build-up in soils;
- 2.4 Cooperate with neighbouring landowners since field consolidation may be required to facilitate erosion control structures (berms, grassed waterways, strip cropping, contour rows).

Another key goal of the *Task Force* strategy concerned the protection of Agricultural Land:

**Goal 6: Identify and Protect Agricultural Land**

- 6.1 Identify arable land; include agricultural reserve zones in official plans where appropriate;
- 6.2 Require minimum separation distances for development adjacent to agricultural land; acknowledge possible need for secondary housing for persons engaged in the farming enterprise (parents, children, workers);

- 6.3 Protect agricultural operations by maintaining the option to expand or diversify farms and allow for the development of related industries, while respecting compatibility with existing land use and infrastructure;
- 6.4 Regulate intensive agricultural operations by citing them with care for existing land uses, and prevent environmental contamination;
- 6.5 Official plans should respect the [Farm Practices Act](#) and provide protection for normal farm practices; best management practices for manure management should be followed to prevent environmental degradation.” (p. 24)

These comprehensive recommended goals for a *Land Use Strategy* pay tribute to the work that was done by both the *Thompson* and *Carver Commissions*, unfortunately, many of those recommendations have yet to be implemented.

### **3.12 2017 - Canada Agricultural Plan (2018-2023) Consultations Report**

It is also important to place the implementation of a PEI Farmland Bank within the recently renewed 5 year *Canadian Agriculture Partnership (CAP) Agreement*. CAP is an initiative among *Agriculture and Agri-Food Canada (AAFC)* and provincial and territorial Governments that outlines policy and program priorities for the agriculture industry across Canada. It replaces the [Growing Forward 2](#) initiative (2013 - 2018).

In the lead up to the signing of the new 5 year [Canada Agriculture Program \(CAP\) Agreement](#), the *PEI Department of Agriculture and Fisheries* initiated a public consultation process to solicit input from clients and stakeholders on what should be in the agreement. To help the Department plan for the next policy framework (2018 - 2023), information was collected from an [Evaluation](#) of the Department’s *Growing Forward 2 (GF2)* programs, meetings with stakeholders, an industry engagement session, and an online public feedback survey (English/French).

The consultation report offered some interesting comments and observations about where PEI agriculture should be heading on a go-forward basis. Concerns about the positive benefits of confronting and adapting to expected climate change was prominent in the discussion:

“Carbon sequestration could assist in meeting climate change goals. Programming could encourage carbon sequestration through supporting appropriate farming practice.

#### Potential Environmental Sustainability and Climate Change Activities:

- Support for climate change adaptation projects
- Support for research on ways to reduce greenhouse gas emissions

- Support for research on variety development which reduces greenhouse gas on a larger scale
- Support for research which is tailored to a specific farm or area on PEI
- Hiring experts to research, synthesize, and disseminate environmental and climate change research which has been conducted in other regions
- Support for a mentoring program to build experience and transfer knowledge related to environmental and climate change best practices
- Development of models to capture rain water for future use
- Support which encourages environmentally friendly practices. “ (p. 9)

Concern was also raised that the predominance of the “bigger is better” logic driving many federal and provincial agricultural programs does not adequately take into consideration the special needs of smaller farms:

“Small farms: The needs for small farms are different from larger commercial operations. As such, there should be programs which support smaller-scale operations. Start-up programming and other resources are beneficial. Feedback indicated that this represents an investment in rural communities and a means of building the trust of the public.” (p. 11)

A noticeable “gap” between agricultural research and local farm research needs and priorities was once again highlighted as a problem, as was the case in previous consultations with farmers:

“Although there is a large breadth of agriculture research, it is not necessarily regionally specific. Furthermore, consumers and farmers are not always aware of the applicable research, therefore, research is not often adequately transferred to commercialization on the farm.” (p. 8)

The consultation document is especially important because there is a considerable degree of flexibility within the 5 year framework. Although many of the same project activities which occurred under the *Growing Forward 2* initiative remain under the CAP, there are also new focus areas that include:

- Activities to promote community food security;
- Activities to promote environmentally sustainable perennial crops;
- Activities to promote public trust in PEI’s agriculture and agri-food sectors; and
- Activities to encourage the participation of under-represented groups, including (but not limited to) Indigenous peoples, women, youth, and persons with a disability.

It should be noted that the *PEI AgriAlliance* underwent something of a transformation since the time it first put forward the *2013 Road Map for PEI Agriculture* discussed by Carver in his report. *Food Island Partnership (FIP)* was formed in March 2015 after the amalgamation of the *PEI Culinary Alliance* and the *PEI AgriAlliance*. At that time, a 3 year strategic plan was developed and launched

on April 1, 2015. The intent of the organization was to focus on: (1) company and product development; (2) enabling applied research to support value chain integration; and (3) building the reputation of the Prince Edward Island *Food Brand*.

That [3 year strategic plan](#) is ambitious in its objective of expanding the food processing sector in PEI. However, it says little about the direct linkages between such expansion and the implications for primary food production and agricultural policy.

The *Agri-Food Alliance* was first proposed by the *Commission on Agriculture and Agrifood* in 2009, and came into being in 2010. An “appendix,” outlining what the proposed AgriAlliance should look like, was included in the *Commission's Report (Growing the Island Way)*. Here is part of what was proposed:

“The role of the *Prince Edward Island Agri-Food Alliance* is to serve as a facilitator and catalyst for the development and implementation of multi-partner strategies and initiatives that build the agriculture and agri-food economy of Prince Edward Island. The *Alliance* will coordinate the implementation of the *Report of the Commission on the Future of Agriculture and Agri-Food* on Prince Edward Island and will provide accountability for results achieved.” (p. 42).

The *Agri-Food Alliance* was supposed to “coordinate the implementation of the *Report of the Commission on the Future of Agriculture and Agri-Food*,” and provide accountability for results. However, it appears the evolution of the organization into the *Food Island Partnership* has, given the direction outlined in its most recent 3 year strategy, shifted the focus to food processing. There is no mention of soil or farm-related issues and/or programs in the strategy document.

The vision inherent in the following 2 statements made by the *Commission* identifying majors concerns - which gave rise to the recommendation that an *AgriAlliance* be established – seems quite different from the vision now inspiring and driving the FIP forward with plans and priorities:

“A 'vicious circle' has taken hold, characterized by declining profits, consolidation, and an intensification of operations that is causing negative environmental impacts and losing farmers the respect of the community. Without profit or pride, the next generation of farmers, or “new entrants,” is turning away from the industry.” (p. 5)

“The PEI agri-food industry must become a centre of knowledge in sustainable agriculture, emphasizing soil health, nutrient cycling, systems thinking, and environmental protection across all crop and livestock production. The industry must expand research and technology transfer efforts in reduced input and organic agriculture, with an emphasis on commercial farming operations.” (p. 33)

The vision statement for *FIP* (which absorbed the *Agri-Food Alliance*) is:

### Vision

The vision for FIP since inception in April 2015 has been and will continue as:

*To establish Prince Edward Island as an internationally recognized place of origin for premium food products and a destination for culinary excellence.*

### 3.13 Summary

Over the past 20 years in PEI there has been a consistent thread running through land-related discussions. It is a twofold concern (1) to better protect PEI farmland, and (2) restore the health of PEI soils. There is now a much better understanding of the intrinsic linkages between decreased SOM and many other persistent environmental problems, as a result of many years of data collection, research, and analysis of the contributing factors to those environmental problems.

Throughout the various reports reviewed in this section, we hear time and again recommendations to improve soil health, bring nitrate levels within acceptable ranges in ground and surface water, and decrease pesticide use in food production. But for the most part, these concerning negative agricultural trends have been allowed to worsen as a result of intensive late-variety potato production for the french-fry market (along with the proliferation of soybean production as a rotation crop with potatoes).

This is the current context within which a new Farmland Bank is to be implemented. These significant challenges facing PEI farmland and the agricultural industry - which have been identified as priority concerns by scientists should guide the formulation of Farmland Bank policy and program design.



## 4. The Saskatchewan Land Bank

### 4.1 Background and Purpose

The *Saskatchewan Land Bank Program* was proposed by the provincial NDP during the 1971 election campaign. Under leader Allan Blakeney, the NDP won 45 seats to the Liberals' 15 seats. True to its promise, the new Government created the *Saskatchewan Land Bank Commission* in 1972.

Under the voluntary program, the Government bought farms - land and buildings - from farmers of retirement age, giving them money on which to retire. The land was then leased to new farmers who paid rents that were pegged to grain prices and productivity.

Farmers also had the option to free up capital by selling the farm to the land bank, then leasing it back. When a tenant farmer reached age 65, he or she could pass on the lease to children or grandchildren who qualified for the program. In this way, the land could continue to be farmed by the same family.

One of the primary goals of the *Saskatchewan Land Bank* was to give young people an incentive to stay on the land. By leasing rather than buying, young farmers could begin farming without a large cash outlay or help from their families. The program also offered farmers a viable buyer for their land, which may not have otherwise been possible in an era of rural depopulation and depressed grain prices.

In 1983, the Progressive Conservative Government of Grant Devine repealed the *Land Bank Act*, bringing it to an end. In the 10 years the *Saskatchewan Land Bank Program* was operating, the province had purchased almost 1.2 million acres of land. As of 2001, it still held 760,431 acres.

Devine's Government introduced a new program for farmers called the *Saskatchewan Farm Purchase Program*. Interest rates were hovering around 20 percent, and the new program offered farmers who bought land an interest rebate of 8 per cent in the first 5 years, and 12 per cent in the next 5 years.

## 4.2 Statutory and Structural Aspects of the Saskatchewan Land Bank

Almost immediately upon election, the NDP Government of Allan Blakney went to work developing the *Land Bank*. The new *Minister of Agriculture*, Jack Messer, presented his vision for a new *Land Bank* to Cabinet in December, 1971, and after a series of 13 public meetings across Saskatchewan, legislation was enacted in April, 1972.

The *Saskatchewan Land Bank Program* derived its statutory authority from the [\*Land Bank Act\*](#) described as “*An Act to facilitate the Acquisition and Disposition of Farm Land in Saskatchewan.*” It established a *Land Bank Commission* as a Crown Corporation charged with a mandate to enforce the provisions of the *Land Bank Act* and manage the *Land Banking Program*. A two-fold “purpose” of the *Land Bank* was presented in the *Act*:

### PURPOSES OF ACT

#### Purposes

3 The purposes of this Act include the provision of assistance:

- (a) to residents of Saskatchewan to enable them to establish or maintain family farms in Saskatchewan by increasing the opportunities for them to acquire land for farming;
- (b) to increase the opportunities for owners of farm land in Saskatchewan to dispose of their farm land at fair and just prices.

1972, c.60, s.3; R.S.S. 1978, c.L-2, s.3.

The *Commission* was empowered by the legislation to “...purchase, lease, accept by way of gift or otherwise acquire any chattels or any land that is used or is capable of being used for farming and that the commission considers necessary in carrying out the provisions of this Act.” (section 9)

## 4.3 Key Elements of the Saskatchewan Land Banking Program

What distinguished the *Saskatchewan Land Bank* from the province’s regular Crown farmland leasing programs is found in the word “acquisition.” Despite the fact that Saskatchewan had substantial public farmland holdings at the time the *Land Bank* was established, the particular problems plaguing agriculture and negatively affecting farmers, and farm families, could not be solved with a Crown farmland leasing program. The key problems were (1) increasing market pressures, (2) high debt loads, and (3) poor returns to farmers. These factors resulted in a lack of some farmers needed to expand their farm operations through the purchase of adjacent land owned by farmers wishing to sell. Farmers wishing to sell, and farmers wishing to buy, were both unable to move forward.

According to Lynn Gidluck [See: "[The Saskatchewan Land Bank: An Experiment in Land Reform, 1971-82](#)," found in *Farm Communities at the Crossroads: Challenge and Resistance*, eds., Harry P. Diaz et. al., *Canadian Plains Research Center*, 2003] this situation came about from (1) the post-depression crisis in agriculture leaving many grain farmers in Western Canada unable to earn a decent living from farming, and (2) the historical settlement strategy of the Federal Government resulting in too many small, non-viable grain farms:

“In their effort to attract as many settlers as possible and to stretch the land resources as far as they could be stretched, Ottawa encouraged the development of thousands of farms that were too small to be economically viable. By the time a farm family had improved its small holding and was able to expand to a more economic unit, many of the neighbours were in a similar position. Intense competition for land resulted and the only solution was displacement – the moving out of some settlers whose land could be purchased or rented by those who remained. (*Royal Commission on Agriculture and Rural Life*. 1955: 38).” (p. 150)

This Federal Government strategy to settle thousands of small farmers in Saskatchewan with modest acreages steadily gave rise to increasing land prices and land speculation. The Land Bank's key objective was to offer an option for farmers to sell their farmland at fair market value to the *Land Bank*, so the Government could then lease that land to nearby farmers. By offering both a fair market price to the farmer selling, and long-term leases designed to ensure the land would remain in agriculture under the control of the farmer leasing from the Government, both of the problems identified above were addressed.

Once established, the *Land Bank Commission* purchased land offered voluntarily on the market at competitive prices. The *Commission* then leased land back to farmers on the basis of need, guaranteed tenure, with lease options to purchase the land after 5 years.

Budget restrictions prevented the *Land Bank* from purchasing all of the land offered. In the first 2 years of the program, 3,300 farmers applied to sell their land to Government. Government had a budget sufficient to purchase the land from roughly 1/3 of these applications. The Government was compelled to devise a priority list in its selection criteria for purchasing farmland:

1. Farmers who were 65 years or older;
2. Farmers between the ages of 55 and 65 who, due to income problems, wished to utilize existing capital to improve their family's standard of living. Farmers in this situation were given the opportunity to lease the land back from the Government;

3. Farmers in poor health, unable to operate their farms;
4. Farmers who wished to transfer to some alternative type of employment in order to enhance the family's living standard; and
5. Family transfers in which neither the parent nor the son/daughter had sufficient net worth to permit the transfer to take place in such a way that the parents could have a financially secure retirement, and the son/daughter a reasonable level of income.

The fair market price offered to farmers for land was established by appraisers with the *Land Bank Commission*, and was calculated by taking the average sale price of 3 recent sales of land of similar quality and type within 8 miles of the land to be purchased by the Government.

“As an instrument for intergenerational transfer of farmland, the Land Bank played an important role. In its ten years of operation, the Land Bank helped to establish close to 4,000 young farmers on 1,195,882 acres of farmland. If any criticism can be laid on the program it is that it helped only a small segment of the population that was in need of a vehicle or mechanism to help transfer assets between generations. The Government was able to accommodate only 30 percent of over 12,000 farmers who applied to lease land. As a result, the Land Bank proved to be a very popular and effective, but limited, alternative.” (Gidluck, p. 161)

With 70 percent of the farmers applying to lease land not getting their applications approved, many farmers were obviously unhappy with the land banking system. This helped the Conservative Party win Government. When Premier Grant Devine came into power, he almost immediately shut down the *Land Bank* and repealed the legislation.

#### **4.4 Summary**

The *Saskatchewan Land Bank* era has much to offer by way of program design. The use of preferential selection criteria was used out of necessity in Saskatchewan, which ultimately left 2/3 of the applicants applying for the program dissatisfied. Care must be taken in PEI to ensure a clear communication strategy that highlights the need for programs that “target” very specific populations (e.g., “new farmers” “immigrants becoming new farmers” “retiring farmers”) as well as agricultural policy goals (e.g., soil restoration). Once the public and farmers understand the policy objectives of the *Farmland Bank* there should not be unrealistic expectations, especially from farmers wanting to lease land but do not meet the preferential qualifying criteria.

## 5. The PEI Land Development Corporation (LDC)

### 5.1 Background and Purpose

The *PEI Land Development Corporation (LDC)* came into existence in 1969 under the Liberal Government of Alex Campbell. The inspiration and genesis of the legislation and newly-founded Crown Corporation was the 15 year Federal/Provincial *Comprehensive Development Plan (CDP)*. To understand the key policy objectives established in the *Land Development Corporation Act* (initially titled the “*Agricultural Development Act*”) it is first necessary to comprehend the broad development plan objectives for all sectors of the PEI economy and public institutions.

The Federal/Provincial CDP sought to modernize both the social and economic institutions of Prince Edward Island. The thinking of the day, when it came to the preferred agricultural vision and development strategy, was that “bigger is better” and to attain competitive “economies of scale” in a modern and increasingly global marketplace it would be necessary to eliminate many smaller mixed-farming family operations and consolidate those land holdings, resulting in far fewer farms.

The *Institute of Island Studies* captured the essence of the approach in a document prepared for a symposium on the future prospects for PEI agriculture held in 1996:

“And while earlier politicians directed efforts to stemming the tide away from the farm and helping stabilize incomes, the *Prince Edward Island Development Plan* of the 1970s and 80s introduced an industrialized model of agriculture. According to the Plan, the historical pattern of land ownership [in the province] is badly adapted to the needs of modern technology....” It was believed the resource could not sustain more than 2,500 viable farms. That objective, along with increasing efficiency and production, underlined the agricultural development strategy. Major efforts, including the *Family Farm Program*, were introduced to modernize and expand the industry.” ( [Agriculture on PEI: Sunset industry or economic cornerstone?](#))

The strategy was to consolidate agricultural land holdings through the Government acquisition of many smaller farms. The land would then be leased or sold to other farmers to expand their land holdings in the hope of becoming more economically viable. In other words, the key purpose infused into the mandate and activities of the *Land Development Corporation* was to increase the size of farms, make them more industrial (e.g., more mechanized, with bigger and more machinery and warehouses) and capable of producing higher yields with robust applications of chemical fertilizers and agricultural pesticides.

Historians have commented on the significant push-back from rural communities that saw small local schools closed in favour of much larger schools, and many small mixed-farming operations disappear with rural outmigration. At first, rural Islanders were suspicious, and there was little “uptake” with the Government’s Program.

After abandoning the language of “consolidation,” a new “Family Farm Program” was announced in 1972 offering subsidies and grants for farmers. Program uptake improved with the introduction of subsidies, and the new language focusing on supporting “family farms” that was adopted to sell the program. The essential goals, nonetheless, remained the same – consolidation of farms and the industrialization of agriculture with the adoption of new technologies, increased use of synthetic and chemical farm inputs, and expansion of industrialized mechanization.

An informative visual presentation on the *Comprehensive Development Plan*, put together by the [GeoREACH Lab](#) at the *University of Prince Edward Island*, offers the following observation about the strategy employed to sell the CDP’s aims and ambitions for PEI agriculture:

“...by November 1972 it was proposed that the original document laying out the *Comprehensive Development Plan* be amended to include the *Family Farm Program* as a separate sub-program under agricultural developmental, and that the Program be granted a total budget of \$5.5 million for Phase I of the Plan. By 1977, 767 grant offers had been made under the *Family Farm Program*, and funding was increasingly taken from other programs and put into the Program.”

[ [Link to Slide](#) ]

“After the introduction of this program, Campbell, politicians, and planners moved away from talking about encouraging the consolidation, rationalization, and commercialization of PEI farms and focused instead on increasing the profitability and viability of existing farms, especially smaller enterprises.” [ [Link to Slide](#) ].

The key policy objective, as stated in the LDC's 1973 *Annual Report*, was clearly spelled out as consolidating agricultural lands “*for the purpose of increasing farmer and agricultural sector income*”:

“To conserve, develop and assist in improving the use of lands in Prince Edward Island in relation to its capability and in accordance with the public interest, both now and in the future, **but with the primary objective of consolidating good agricultural lands for the purpose of increasing farmer and agricultural sector income**” (my bold emphasis).

This policy aimed to achieve 7 specific goals:

- 1) To acquire farmland held by people who may be elderly, in ill health, or non-resident;
- 2) To acquire farm units that are too small for efficient agricultural production or that are too small for the adoption of new technological processes of production and marketing;
- 3) To assist in the consolidation of farmlands into economic units, which will permit increased inefficiencies of production;
- 4) To assist in the establishment of young farmers on economic units;
- 5) To provide credit to farmers for acquisition of Corporation lands;
- 6) To remove lands from agriculture whose best use is not agricultural production;
- 7) To generally improve land use in the province in relation to the capability of the land resources.

Although the primary focus of the LDC was on agricultural land, the *Land Development Corporation Act* was subsequently amended to allow the purchase of non-agricultural land as well.

## 5.2 The Legislative and Regulatory Framework of the LDC

The LDC derived its legislative authority and mandate from the *Land Development Corporation Act* and *Regulations*. The “purpose” of the *Act* was cited in the previous section, but other elements of the legislation and regulations are also worth noting:

### (a) The Land Development Corporation Act

The *PEI Land Development Corporation Act* established a Crown Corporation with all the same powers as a company established under the *Companies Act*, “...except where the *Companies Act* was inconsistent with the *Land Development Corporation Act*.” The *Act* established that the Corporation would comprise a chair and 5 other members, as follows:

- (1) Two representatives of the *Department of Agriculture*;
- (2) A representative of the PEI Lending Authority; appointed by the *Board of the Lending Authority*; and
- (3) Three representatives from the agricultural industry in PEI appointed by the members of the Corporation.

In addition, the *Act* empowered a member of the *Farm Credit Corporation* (FCC) to serve in an advisory capacity, and empowered the Board to appoint a General Manager of the LDC, to be paid out of the funds of the Corporation. Also to “establish such staff as is necessary for the work of the Corporation.” (s.8h) The *Act* empowered the LDC to purchase both land and buildings, or to receive same as “gifts” and to dispose of land. Section 8(d) of the *Act* stipulated that the LDC Board could:

“...subject to the regulations, dispose of its real property by sale, lease or otherwise to any person in accordance with such terms and conditions as may be specified by the Corporation, and for such purposes as are set forth in the *Act*.”

The *Act* generally provided the Corporation with all the powers necessary to operate and function independently, including the power to make rules and regulations governing the Corporation's overall administration. The LDC had powers to borrow from both the Provincial and Federal Governments, or any other party, to enter into agreements, and to provide or demand securities, all of which was outlined in the *Act*. These same standard legal provisions would need to be in a PEI *Farmland Bank Corporation Act*.

There are a few provisions of the *Act* that warrant mention, including section 10 which reads:

“The Corporation may make grants by way of cash or kind, or provide such other incentives to farmers as the Lieutenant Governor in Council may approve for the purpose of improving farmland and buildings, and generally for advancing and improving the agricultural industry.”

This power was both broad and flexible, allowing the LDC to enter into specific agreements that suited the particular circumstances of the farmers, and the specific parcels of farmland involved in the agreement. The objective was to establish a certain number of economically-viable farming enterprises by consolidating farmland into fewer farming operations, essentially eliminating hundreds of family farming homesteads not deemed viable as sole sources of income for families. Although the LDC had powers to do almost anything by way of buying, selling, and leasing land, including providing grants and incentives to improve the land, its focus was on the physical and economic transformation of a key Island economic sector, not on the protection of the soil and the environment.

Improvements understood in this context – and from the historical record of what actually happened – reveals that the kind of improvements that were made had to do primarily with infrastructure – new buildings to better accommodate storage requirements from increased farm size, increased production per farm units from chemical inputs and synthetic fertilizers, and various measures aiming to transform agricultural land to better accommodate industrial agricultural farming methods. A powerful example is grants that were provided for the removal of hedgerows (to combine many small fields into fewer large fields) which, as we now know, contributed to an increase in erosion.



The *Act* also empowered the LDC to convey land deemed unsuitable for agriculture to other departments for management:

“Where, in the opinion of the Corporation land it owns should be withdrawn from agriculture, fishing, forestry, wildlife, industry or tourism, it may convey the land to any other department of the province.” (s. 10)

The *Land Development Corporation Act* offers an excellent first-draft version of what would be required for a new PEI *Farmland Bank Corporation Act*. However, it is critical to understand that the powers required to run a successful Crown Corporation are not the really important provisions of the legislation. Rather, it is the purpose(s) stipulated in the *Act*, and the policy objectives and goals outlined as the means to achieve the purpose(s) spelled out for the Corporation. How that mandate gets translated into specific programs and lease terms and conditions is further revealed in the kind of regulations attached to the legislation.

(b) The Land Development Corporation Act Regulations

The *Land Development Corporation Act Regulations* reveal the extent to which the entire LDC Program was aimed at the transformation of the agricultural industry to make it a more economically-viable sector of PEI's economy. Again, it is made especially clear in the LDC regulations that “improvements to the land” had nothing to do with soil health, or mitigating the negative impacts of industrial agriculture. Consider for example numbers 3 and 4 of the regulations:

- (3) The funds that are expended by the Corporation for the construction of or improvements to buildings, land clearing, drainage or other permanent improvements may be added to the cost of the land to the Corporation.  
**Agricultural expenditure**
- (4) The Corporation may expend funds for seed, lime or fertilizer and other similar improvements to establish farm lands for grazing, controlling erosion, providing weed control and other similar purposes.

Here we see that land improvements under the LDC were about acquiring and concentrating land (clearing, drainage) and constructing and improving buildings. The management of lands by the LDC employed new farming practices heavily reliant on the application of farm chemicals (e.g., applications of chemical fertilizer rather than using manure or other organic enhancements; application of herbicides to control weeds and to kill-down of potato vines at harvest).

A lot can be learned from a careful review of the LDC regulations, but the most important thing to note for the purpose of this study is that very broad and flexible powers are needed to accommodate the unique features of specific farming situations, and the circumstances with each particular parcel of land under consideration for purchase, management and lease for a Farmland Bank Program. The PEI Government gave the *Land Development Corporation* sweeping powers to effect changes to programs as needed. Consider, for example, what section 6 of the Act said:

**Advancement of agricultural use**

- (6) The Corporation may make policies regarding the formulation, adoption, establishment and administration of plans or programs which will advance agriculture in the province and make policies regarding
- (i) improvements made or to be made to any farm lands or farm buildings of farmers,
  - (ii) agreement made with farmers relating to such improvements,
  - (iii) security that may be taken for funds, materials or labour supplied by the Corporation to a farmer,
  - (iv) the payment of grants by way of cash or kind or regarding other incentives to farmers,

These same legislated powers are needed for a present-day Farmland Bank Program to address a range of intractable systemic problems negatively affecting farmers, rural communities, the economy, the environment, and the productive capacity and health of soil.

These statutory powers allowed Government to work closely with farmers to develop specific farm plans. Entirely different purposes and goals are required now than those pursued by the LDC. The LDC was not only a land-transaction hub run by Government; it was the core administrative and policy instrument implementing a planned transformation within PEI agriculture. A similar corporate model is needed today; however, an entirely different philosophy, focus, and vision is needed to effectively address the challenges facing PEI land and agriculture. Whereas, under the LDC, grants were once provided to remove hedgerows, it is now prudent for the PEI Government to offer grants for hedgerows to be reintroduced as a soil conservation measure.

### **5.3 Strengths and Weaknesses of the PEI Land Development Corporation**

The principal policy objective of the *Comprehensive Development Plan* and the *Land Development Corporation* was “economic” in nature. With an economic focus, combined with the lack of general cultural awareness at the time of the potential harm to the soil and environment that can be caused by industrial agriculture, little thought was given to the potential negative ecological impacts of the rapid

transition from small mixed-farming operations to much larger farms, and industrial farming methods, growing row crops such as potatoes intensively.

Farmers were removing hedgerows to create larger fields to better accommodate larger machinery and become more efficient. Neither Government planners, nor farmers, nor the general public, were considering how these agricultural and landscape changes would steadily increase rates of soil erosion and decrease rates of SOM. As Horace Carver noted in his final report, “*A Gift of Jurisdiction*”:

“On the downside, particularly in the early days of the LDC, no restrictions were put on how the land could be used. As a result, farmland was sometimes ‘mined’ and left in a depleted condition. The lack of follow-up to monitor land stewardship was a major weakness of the LDC model. (*A Gift of Jurisdiction*” p. 49)

This is a key observation by Mr. Carver: “*The lack of follow-up to monitor land stewardship was a major weakness of the LDC model.*” Again, the focus was on establishing farms as economically-viable and successful business units to build PEI’s main industry; it was not on protecting the quality of PEI soil.

The success of the LDC – and it was quite successful in achieving its objectives – was once held up as a model by an American author (Charles Little) in an article titled “[Farmland Conservancies: A middle-ground approach to agricultural land preservation](#),” [*Journal of Soil and Water Conservation*, October, 1980]. He highlighted the way in which the objectives of the *Land Development Corporation* required support from other land-related provincial policies such as the regulation of agricultural land to non-residents. This is an important observation:

“Taken together, the activities of the Prince Edward Island *Land Development Corporation*, the early work of the *Rural Development Council*, and the provision in provincial law regulating land sales to nonresidents suggest a means by which many interrelated agricultural land use problems can be dealt with creatively, sensitively, and comprehensively at the local level.” (p. 207)

## 6. Lease Programs for a PEI Farmland Bank

Agricultural land policies designed to address significant soil health issues, that continue to exacerbate many other long-term environmental problems in PEI, must also be designed to bring other targeted economic and social development benefits. A Farmland Bank provides an instrumental means whereby the PEI Government can offer concrete and direct assistance to farmers to adopt new technologies and practices (including new crops with new markets) while also allowing the implementation of measures to restore soil health and protect agricultural land. It will be the concrete program “goals” that will ultimately determine if the aims and objectives enshrined in a sustainable vision for PEI land and soil is on target to being achieved.

There are numerous “objectives” that can be established for a given program. In fact, most programs achieve multiple objectives, with an equal number of outcomes. However, for the purpose of program design, there should be one primary objective that guides the strategic planning and program implementation process uniquely capable of ensuring the realization of the particular long term “vision” which the primary objective embodies.

In the days of the LDC, that vision was to consolidate farms with the policy objective to make farming more economically-viable. Of course, there is a direct relationship between soil health and crop yields, as between crop yields and farm income. Focusing on the objective of increasing farm income over the past decades has led to a serious deterioration of both soil health and the capacity of the nutrient-depleted soils to produce high-yields. Nor has it resulted in an economically prosperous sector of the PEI economy, at least not at the farm gate.

The industrialization of agriculture brought a greater need for chemical fertilizers, which increased farm input costs, and reduced net farm income. Of course a key objective of a new Farmland Bank must also be to increase farm income; however, for the purpose of program design, the same mistake can't be made again: the intimate relationship between restoring soil health and being able to sustain a viable and lucrative agricultural sector in PEI must be clearly understood and take precedence in all planning. Therefore, the primary objective needed for today's vision is to restore soil health, while also ensuring that farmland is farmed, supporting new farmers, and assisting retired farmers to sell their farms. This gives rise to the need for specific and targeted goals for different programs.

## 6.1 Determining the Agricultural Policy Objectives for a Farmland Bank

Many policy objectives for a Farmland Bank have already been mentioned in previous pages of this report. Nonetheless, it is helpful to list them separately to get a better sense of what different programs within a PEI Farmland Bank might look like, e.g., programs designed to realize targeted objectives.

It may be that one particular leasing program will achieve a number of policy objectives, but not all. Some objectives may require tailor-made terms and conditions. With that in mind, the main policy objectives of programs in a PEI farmland banking system governing the management and use of land would be to:

- (1) Allow farmers - especially retiring farmers wanting to exit farming –a means to sell their land to the Farmland Bank at fair-market value.
- (2) Allow the Provincial Government to encourage the entry of new farmers by offering Crown farmland leases on either a long term lease arrangement, or a lease-to-own agreement.
- (3) Allow the Provincial Government to ensure all land in the Farmland Bank is protected as agricultural land.
- (4) Allow the Provincial Government to ensure full compliance with all environmental, legal and regulatory conditions affecting Farmland Bank land use (e.g., compliance with 3 year crop rotation; buffer zone and slope regulations).
- (5) Allow the Provincial Government to prioritize those agricultural farm practices and models with leasing guidelines that include preferential selection criteria for leasing, (e.g., farmers of a younger age; farmers with environmental farm plans designed to increase Soil Organic Matter, or are willing to leave damaged soil in pasture for extended periods; and farmers with agreements with neighbouring livestock farmers to have manure added to the land), and
- (6) Allow the Provincial Government to promote an increase in the number of certified organic farms in PEI.

These abilities enable a Farmland Bank to encourage various trends and initiatives within the sector, including new farming opportunities, allowing more and younger farmers to begin farming, as well as the ability to encourage the introduction of new and potentially more lucrative types of farms suitable for Prince Edward Island to emerge. The *Food Island Partnership* has the potential to create new markets for new nutraceutical and biological products from new crops. Further strengthening collaboration and partnerships between farm organizations and the FIP would benefit all parties.

A comprehensive review of the past 18 years of data collected since the Binns Government first began the *Soil Management Quality Study* in 1999 reveals a steady decline in PEI farmland soil health. There have been periodic warnings and alarms sounded about the dire consequences of continuing to do nothing to arrest and reverse the steady downward trend toward soil desertification, but more must be done towards addressing this problem. The mechanism best able to now enable the PEI Government to take action is a Farmland Bank.

Despite the many significant advances in protecting soil from erosion in PEI over the years, one of the primary causes of erosion (e.g., the loss of SOM) has not been adequately addressed, especially with potato processing growers. The competitive nature of the corporate global french fry market, and razor-thin margins for potato farmers, is pressuring farmers to seek higher yields from soils that have less and less SOM and biological nutrients, just to remain solvent as farm businesses.

With less SOM, there is less water retention, less nutrient retention, the need for more chemical fertilizers, more leaching of nitrates and pesticides into groundwater and run-off into ponds and streams, less biological activity in the soil required for healthy food production and more compaction and less aeration in the soil. With less water retention capacity in the soil comes a call for more water extraction for irrigation from groundwater, PEI's only source of fresh drinking water.

As the *2008 Agricultural Commission* rightly explained, PEI needs to move beyond an industrial model of farming. The model can't remain growing one cash crop, such as potatoes, as inexpensively as possible, in order to produce the highest yields possible, using minimum crop rotation and intensive, frequent tillage practices simply because farmers are under pressure to extract as much for as little cost as possible.

Regardless of what positive things are being done by many farmers, the SOM results from the Soil Quality Study after 18 years are alarming [See: "[Changes in Soil Organic Matter over 18 yr in Prince Edward Island, Canada](#)," Judith Nyiraneza, Barry Thompson, et al., *Canadian Journal of Soil Science*, 2017, 97(4): 745-756]:

“From cycle 1 to cycle 6, the percentage of the total land area with >4 percent SOM declined from 19.2 percent to 0.8 percent, and the percentage of the total land area with 3.1 percent–4 percent SOM declined from 71 percent to 24 percent”.

Cycle 1 began in 1999, with cycle 6 being the last tests in 2017. Recall that when this study began it was found that only 68 percent of PEI soil was at 3 percent SOM. This prompted the implementation of the [Agricultural Crop Rotation Act](#) to address declining soil health. The target was to have 90 percent of all agricultural land at 3 percent SOM by 2010. The last report released in 2018 states that PEI farmland with 3 percent SOM declined to 24 percent, with 3 percent considered the minimum amount of SOM required for agriculture, especially cash crops like potatoes.

Even more indicative of the severity of the problem is the fact that PEI now has no farmland with 4 percent SOM or greater – having lost all 19.2 percent of that nutrient-rich grade of soil in less than 20 years. This statistical rate of SOM decline is more than a concern, it is an emergency demanding an immediate and effective political response. Structured properly, with the appropriate policies and programs, a new PEI Farmland Bank can make a significant contribution to addressing the problem of declining SOM.

A scientific explanation for the significant continued decrease in SOM was offered by the PEI Soil Scientists doing the study:

“The declining SOM in PEI can be attributed in part to **low residue return and intensive farming operations**. Factors such as frequent soil tillage help accelerate **SOM oxidation**, coupled with the risk of soil erosion due to the nature of coarse-textured soils and to a sloping landscape with slopes up to 12°.” ([Edwards et al. 1998](#))

SOM oxidation creates and releases CO<sub>2</sub> into the atmosphere – the exact opposite process from capturing carbon from the atmosphere for “plant food” and storing it in SOM. The “intensive farming operations” here refer to the potato processing sector, often combined with soybean production in the crop rotation cycle. The long growing season required for the particular varieties of potatoes needed for french fries contributes to farm practices (such as no winter cover crops) which fail to restore sufficient SOM to the soil and further contribute to erosion and the loss of SOM:

“*Cool winter cover cropping would help hold the soil in place and thus mitigate soil erosion while adding organic matter to the soil, but the cold and short growing season and a late-maturing processing potato variety (Russet Burbank) limits catch-crop growth after the potato harvest*” ([Zebarth et al. 2015](#))

Obviously, the continued decrease of SOM in PEI farmland is an urgent Island-wide problem. A Farmland Bank can help set a new course by making the restoration of soil health the paramount agricultural objective in the management of land purchased, then leased and/or eventually sold. As stated in the final sentence of the Abstract for the above-cited 18 year study of SOM in PEI: *“This long-term study highlights the need to put in place strategies to increase levels of SOM to sustain PEI soil productivity.”*

## 6.2 Economic Benefits of Increasing Soil Organic Matter

There are both measurable short-term and long-term economic benefits to increasing SOM in PEI agricultural land that come from multiple environmental improvements. By making the improvement of soil a constituent element of all leasing agreements, the province will be making a tangible contribution to increasing the productive capacity and sustainability of farmland. In this way, farmland purchased at a given price will accrue in value over time as SOM and overall soil health increases the productive capacity of the soil.

Although it is possible to quantify the economic value of improvements, considerable work would be required to factor all the relevant variables into the equation. Key indicators would include how increased SOM: (1) increases water-retention capacity in the soil; (2) decreases wind and soil erosion; (3) increases the amount of CO<sub>2</sub> sequestration; (4) increases crop yields; and (5) decreases the amount and cost of chemical fertilizer applications and pesticides as a result of having healthier soil.

It is possible to measure changes in the percentage of SOM, and from that data (using an appropriate formula) calculate specific economic benefits. Studies have been undertaken to measure the depletion of both nutrient-retention and water-retention capacity for each 1 percent drop in SOM. Loss of SOM, not only reduces crop yields but also reduces the water infiltration capacity of soil, leading to increased run-off and erosion. Erosion, in turn, reduces the organic matter content by washing away fertile topsoil, and increases damaging sediment in streams, ponds, rivers and estuaries.

Although these environmental problems are well-known in PEI, what may be less appreciated is the intimate connection between these environmental problems and the increased economic costs to



farmers as a result of decreased levels of SOM in the soil. The recent demand for more water to irrigate crops is not unrelated to significantly reduced rates of SOM; it is not coincidental that it is the farmers in heavily-cropped areas growing potatoes for Cavendish Farms who are calling for more irrigation.

An article by the *Natural Resource Defence Council* titled "[Organic Matter Can Improve Your Soil's Water Holding Capacity](#)," calculated the amount of additional water retained from an increase of 1 percent SOM based on a number of assumptions:

"We want to know how much an increase of 1 percent organic matter would increase the water holding capacity of the soil. If an acre of soil is 820,264 kg, then 1 percent organic matter would be 8,202.6 kg/acre.... If we make the assumption that organic matter holds 10 times its weight, or 82,026 kg (180,836 lbs) of water. There are 8.3454 lbs in a gallon, so that is 21,668 gallons of water."

21,668 additional gallons of water per acre from a 1 percent increase in SOM is significant.

Loss of carbon content in the soil limits the soil's ability to provide nutrients for sustainable plant production, either giving lower yields or requiring more chemical fertilizer to achieve similar yields. Less organic carbon means less food for the living organisms present in the soil, thus reducing soil biodiversity. There are many other factors that must be considered when discussing exactly what is required for healthy soils capable of producing maximum crop yields in a sustainable manner. However, a meta-analysis of the relationship between crop yields and SOM highlights the fact that it is SOM that provides the structure and possibility for many of those other factors to come into play and flourish. [See: "[Global meta-analysis of the relationship between Soil Organic Matter and crop yields](#),"]. From the study:

"As the global population increases, the pressure to increase crop production has resulted in expansion of land areas for agriculture and the uses of irrigation and fertilization. But a trade-off is a degradation of land and water quality including the loss of Soil Organic Matter. Rebuilding that organic matter holds the promise of improving fertility, water, nutrient retention and soil structure, which in turn will promote better drainage and aeration with a minimal loss of topsoil from erosion. This could all add up to long-lasting crop productivity with less reliance on mineral fertilizers."

### 6.3 The Lease “Terms and Conditions” Required to Achieve Program Objectives

During the years when the *Saskatchewan Land Bank* was operating, there were many more farmers who were wanting to sell their land to the Government than it could afford to buy – roughly 1/3 of all applicants. As a result, a “preferential list to rank applicants” was created, settling the matter of who met the greatest number of the criteria, or the most important criteria, to qualify for the program.

Given a number of unique circumstances currently facing PEI, which will be discussed in more detail in the final section of this report, it is advisable for PEI to establish its own ranking criteria for participation in the Farmland Banking Program. In Saskatchewan's case, the ranking was only for purchasing land. If the primary objective of increasing SOM is to be achieved, there will also need to be a similar ranking criteria established for leasing land (e.g., a mixed operation with a clear plan of restoring SOM would rank before a farmer wanting more land to grow Russet Burbank potatoes for Cavendish Farms).

Regardless of how lessees are selected, the terms and conditions in the lease agreements must ensure continuous monitoring of soil health conditions at all stages of the lease terms. Value can be attached to remedial farm practices on Crown farmland, and as was seen in the previous jurisdictional scan (section 2) lease rates can be adjusted accordingly, depending on the number and type of improvements made to the land by the farmer holding the lease.

As with the LDC in its day, provision for the issuance of grants should also be incorporated into legislation and programs to cover the cost of improvements deemed necessary or desirable for farmers lacking the means to ensure such necessary soil remediation happens. As in the days of the *Land Development Corporation*, in some circumstances, that could require purchasing buildings as well as land. Such purchases would then be made available for either the *New Farmer Program*, or *New Immigrant Farmer Program* (see below).

It is beyond the scope of this study to explore all the possible terms and conditions of different lease possibilities - and accompanying monitoring and testing requirements to ensure compliance with those terms and conditions - however, a statement in the research article made public with results from testing over an 18 year period has provided something of a blueprint for the possible soil

enhancements and farm practices that would increase Soil Organic Matter in PEI soils – there are a limited number of options:

“Maintaining adequate SOM in a soil is essential for sustainable production systems. The results from this long-term study show that **the current rotation systems in PEI are not sufficient to maintain SOM and that further efforts are needed to reverse this trend toward declining SOM.** Organic **amendments such as compost and** manure have been reported to increase soil nutrients and improve soil productivity in low-residue cropping systems ([Grandy et al. 2002](#); [Carter et al. 2004](#); [Carter 2007](#); [Nyiraneza et al. 2009](#)). **Maintaining or adding crop residues** enables the soil to resist wind and water erosion and helps the soil retain more water and essential plant nutrients ([Karlen et al. 1994](#)). **Crop residue retention** was previously reported to offset SOM decline ([Kapkiyai et al. 1999](#)). In the same study, **manure application** in combination with maize stov retention also reduced SOM decline by 49 percent ([Kapkiyai et al. 1999](#)). **Growing perennial forages** was found to increase SOM ([Nyiraneza et al. 2009, 2010](#)). To improve soil and agroecosystem health and reverse SOM decline in PEI, growers could consider **incorporating straw and forage biomass into soils** in the short term. In the long term, accurate and reliable means of achieving those goals need to be put in place through the adoption of a powerful combination of best management practices, such as **new rotation systems that increase soil C inputs**, the **incorporation of manure and compost**, the **intensive use of cover cropping, conservation tillage, and crop diversification.**”

Soil experts and Agrologists know best what particular “combination of management practices” would be most appropriate with specific parcels of land and farm situations. At minimum, PEI farming practices must be in full compliance with the crop rotation law, and soybeans must be removed from the list of crops that can be grown in a 3 year rotation cycle with potatoes.

The whole intent of having 2 years in the 3 year cycle is to restore SOM – soybeans don’t restore, but, like potatoes, take more nutrients out of the soil than they put back. The increasing intensification and demand on soils from nutrient-depleting crops is measurable:

“In 2011 the majority of cropland (96.2 percent) in Prince Edward Island was reported as field crops and hay (Table 1). The proportion of field crops (including potatoes) increased from 59.7 percent in 2006 to 65.0 percent in 2011. Conversely, the proportion of hay decreased from 37.2 percent to 31.2 percent.” [**Source:** Statistics Canada, [Census of Agriculture, 2006 and 2011](#) ].

The increase in the number of acres of soybeans has been a major contributing factor to the rapid decline in SOM with potato farms in PEI, as the scientists who undertook the SOM study explain:

The SOM decline in PEI can also be explained by additional changes in cropping systems, such as the declining number of livestock operations, the clearing of forest land acreage in western PEI, and the significant increase in soybean acreage in recent years (B.L. Thompson, 2016, personal communication, *PEI Department of Agriculture and Fisheries, Charlottetown, PE*). Between 2005 and 2015, total cattle and hog numbers decreased by 24 percent and 54 percent, respectively (*PEI Department of Agriculture and Fisheries 2016*). During the same period, soybean-seeded acreage increased by 447 percent across the island (*PEI Department of Agriculture and Fisheries 2016*); soybean is another low-residue crop that is not expected to increase C inputs.

Again, this economic problem of needing alternative cash crops that are sustainable, connects with the need to have agriculture research to assist these endeavours to establish new and more lucrative rotation crops. Using 2 high-nutrient depleting crops (potatoes and soybeans) in a 3-year crop rotation will continue to deplete SOM.

#### **6.4 Different Types of Lease Programs**

Every lease agreement with a PEI Farmland Bank should be designed to take into consideration and address the unique factors associated with specific parcels of land. If the condition of the soil is very poor, additional terms and conditions can be built into the lease agreement to address that issue. A particular farm or parcel of land may call for a certain type of farming (e.g., perennial pasture for a number of years to restore SOM with severely depleted soils), and as noted previously, adjustments can be made on lease rates accordingly.

Despite the unique characteristics and conditions with each parcel of PEI farmland that may require special consideration, for the purposes of program development and delivery, it is nonetheless possible to “categorize” potential lessees based on a number of factors and to address targeted agricultural objectives.

##### **(1) New Farmer Program**

Some Canadian jurisdictions offer Crown land leases as part of a “New Farmer Program.” That is currently not a component of PEI’s [Future Farmer Program](#). A Farmland Bank would offer such a program, specifically designed to assist new farmers to enter the industry, establish a farm, and become a profitable business. Depending on (1) the type of farming operation, (2) the projection for profitability for specific farms, and (3) the long-term business and environmental farm plans put into

place, such a *New Farmer Lease Program* could be offered on both a lease-to-own basis (similar to the program in New Brunswick) or strictly on a long-term lease basis with no firm obligation to purchase.

A *New Farmer Program* could provide farmland to new farmers in one of two ways: (1) lease land that has already been purchased by the Farmland Bank; (2) purchase land identified by a new farmer. The latter option would help those unable to afford to purchase the land. The Farmland Bank would purchase the land, then lease that land to the farmer on a long-term lease basis, with “first option” rights for lease renewal and/or purchase, as happens with the *New Farmer Program* in New Brunswick.

### (2) Existing Farmer Program

There are many valid reasons why existing farmers may want or need to lease land, chief of which is the lack of capital to purchase land. Given the different needs of existing vs new farmers, an existing farmer program would assess each application to determine whether a particular parcel of land or farm would fit within the qualifying conditions established by the policy objectives. Whether, for example, additional farmland enabled better crop rotation (not an increase in primary crop production) for an existing farmer would be an important consideration.

### (3) Immigrant Farmer Program

It is possible to have an *Immigrant Farmer Stream* under the *Provincial Nominee Program* that would welcome new farmers from other countries. Such a program would offer leased land, and could target specific types of farmers to further encourage a diversification of the agricultural sector in PEI. The percentage of farms that are organic in PEI was one of the indicators of soil health in the *1997 Roundtable Report*, and a target was set to significantly increase the amount of organic farming in PEI over time. Offering Crown farmland in conjunction with a new PNP *Business Investment Farmer Stream* could help to expand organic farming in PEI or fill needs for specific niche crops.

#### (4) Capitalization Program

A unique leasing option provided under the *Saskatchewan Land Bank* Program involved buying farmland and leasing it back to the farmer on a long-term lease basis, with first option to buy back the land at any time. In this way, capital was provided to facilitate other kinds of farm improvements and increase farm solvency. Such a program may be of value in PEI in select cases, especially for unique situations where, for example, a farmer wants to engage in a process of transitioning to organic farming. As is well known, it takes a few years to build up soil health and farmers experience drops in yields when transitioning to growing food organically until soil health is restored, and it takes 3 years without chemicals to become certified. Capital from this kind of lease program would make such a transition strategy financially viable.

### **6.5 The Impact of Making SOM “Increase” the Primary Objective of Program Design**

Regardless of how many different programs are established, each offering a unique opportunity for people to consider applying to lease farmland, all Farmland Bank leases should be designed to achieve the goal of increasing SOM. Specific elements of a farm management plan would be tailored to suit the unique circumstances of each applicant and land lease; however, the possible ways of increasing SOM have already been noted and include:

- (1) Adequate crop rotation with appropriate crops;
- (2) Adding organic amendments such as compost and manure;
- (3) Growing perennial forages;
- (4) Using conversational tillage methods;
- (5) Incorporating straw and forage biomass into soils;
- (6) Cover crops; and
- (7) Crop diversification.

Some combination of the above practices would need to be incorporated into all Farmland Bank lease agreements and farm plans.

## **7. Funding a PEI Farmland Bank**

Given the cost-per-acre of PEI farmland, establishing a Farmland Bank will obviously require a significant investment. It is easy to conclude such a venture would be a considerable drain on public funds, therefore it should be established either as a private or private/public entity. However, a careful examination of the benefits and liabilities of different institutional and funding models reveals that the preferred funding option is public in support of a PEI Farmland Bank being a Crown Corporation.

Such a Crown Corporation should be structured as a Government economic development agency operating on a nonprofit basis. A funding strategy is proposed at the end of this section of the report. But first, a discussion of the benefits and weaknesses of different institutional models and options will help support the recommendation to make a PEI Farmland Bank a public Crown Corporation owned entirely by Islanders.

### **7.1 Public or Private?**

With an acre of PEI farmland costing as much as \$6,500, the need to establish a public repository of agricultural land presents itself as a formidable financial challenge. PEI's debt is already significant, and efforts to achieve balanced budgets and not run annual deficits don't initially suggest it would be fiscally-responsible for the PEI Government to fully-fund a Farmland Bank.

This issue was debated during the *Carver Commission* hearings. In the end, Mr. Carver acknowledged there were credible concerns on both sides of the debate. Although he was careful to say that he was not endorsing an approach presented to the *Commission* by UPEI Professor of Economics, Dr. Tim Carroll, Carver did include an Appendix in his report outlining Carroll's suggested approach. The model would require no investment of public funds for the purchase of farmland, but would only see public funds cover the cost of the administration of the Island Farmland Trust.

### **7.2 Farmland Trust: The Carver Commission Recommendation**

The *Carver Commission* final report included a short section titled "Other Issues," the first of which was "Land Banking.

” After providing a brief overview of the *Land Development Corporation*, the report noted: “*It now seems that the original mandated objectives [of the LDC] are as relevant today as they were almost fifty years ago, and perhaps even more so.*” (p. 50)

The *Carver Commission* identified a strong consensus among presenters that some type of farmland banking system must become a priority initiative of Government:

“The message from the public, expressed clearly to the Commission, is that some way must be found – and soon – to keep farmland in food production and to allow Island farmers to acquire the land they need to grow food. Too much land is being taken out of production and away from the control of Island farmers. As stated clearly by both the *Federation of Agriculture* and the *National Farmers Union*, a new land banking system is a priority for the agricultural sector” (p. 50).

As envisioned by the *Commission*, the *Island Farmland Trust* would provide a vehicle whereby Islanders, and other investors, could buy land from retiring farmers, and others wishing to exit the industry.

It is important to note that the *Carver Commission's* recommendation for a public/private Farmland Trust model for land banking was proposed in the event that the PEI Government decided it could not afford to establish a land banking system as a fully-public endeavour:

“***If the provincial Government decides it cannot do it alone through a structure like the LDC, then perhaps it can use its legislative powers to set up the ‘Island Farmland Trust’.*** (p. 50, my emphasis).

In other words, there was a generally-held belief that the preferential option would be to make a PEI Farmland Bank completely public; however, if it is not affordable, explore a private/public partnership.

It may be the case that there is room for both a “*Farmland Trust*” and a “*Farmland Bank*” in PEI, where the Farmland Bank is a Crown Corporation and the Farmland Trust is a non-Governmental and nonprofit corporation.

An organization in BC called the *Land Conservancy* undertook a study of 31 *Farmland Trusts* throughout North America and the U.K. The report from that study provides an excellent blueprint for what setting up a Farmland Trust in PEI would entail.



*The Land Conservancy (TLC)* is a provincial land trust with a broad mandate to conserve nature, heritage landmarks, and agricultural lands throughout British Columbia. TLC's agricultural mandate is to protect farmland for sustainable, local food production. *The Land Conservancy* has title or holds covenants on farmland, arranges long-term farm leases for new farmers, and provides information and education to farmers, local food groups, and communities.

It is beyond the scope of this study to further explore the idea of having both a Farmland Trust and Farmland Bank in PEI; however, reading the following excerpt from the executive summary of the above-noted study, it is easy to imagine a similar provincial nonprofit organization (akin to the *Island Nature Trust*) serving 3 regional nonprofit *Farmland Trusts* across the Island (1 in each county), each with broad county representation from communities, organizations, and residents with an interest in the long-term security of PEI farmland. The following information from the BC study gives an overview of what the 31 Farmland Trusts encompassed:

The Land Conservancy of BC – a provincial land trust with a broad mandate to conserve nature, heritage, agriculture, scenery, and recreation – is currently the only organization which claims a goal of ‘protecting farmland for farming’. Since 2007, *TLC* has presented itself as BC’s farmland trust. This function requires further definition and development within the context of provincial and regional strategies for farmland preservation and sustainable food production.

*A Review of Farmland Trusts: Communities Supporting Farmland, Farming, and Farmers* offers information to help you form a farmland trust or adapt your current land trust mandate to include preservation of agricultural land. It describes farmland trusts and why they are important (Sections 1 and 2), and includes information about:

- Structure and Governance (Section 3)
- Strategic Planning (Section 4)
- Farmland Trust Activities (Section 5)
- Financial Sustainability (Section 6)

Farmland trust examples are provided to support each discussion. Every section closes with a set of conclusions specific to the topic.

Section 7, Final Conclusions and Recommendations offers overall conclusions and recommendations to establish provincial, regional, or local farmland trusts. Section 8, Resources lists annotated sources of information and ideas for further exploration.

Collaboration agreements between these new Farm Trusts and the Farmland Bank would see much of the Trust farmland turned over to the Farmland Bank for management and leasing, but strictly under terms and conditions established by the Farmland Trusts to best suit local and regional needs.

### 7.3 A PEI Farmland Bank Public Bond Issuance

A Bond issue would be another approach to funding an Island farmland banking system. For both ethical and financial reasons, many Islanders would support protecting and preserving PEI farmland; assisting elderly farmers to retire; assisting new farmers to enter the industry; and achieving targeted agricultural, environmental, economic and social policy objectives and improvements. Islanders should be given a chance to buy Bonds – or some such financial instrument – with a communication strategy that informs all Islanders that a PEI Farmland Bank will rely on a systemic model of farmland management that will address SOM depletion, and many other environmental problems.

It's worth recalling how a \$40 million dollar windmill project was made possible in 2007 through a PEI Bond. The *PEI Energy Savings Bonds Program* provided an opportunity for Islanders to invest in the *Eastern Kings Wind Farm*. The PEI Government was permitted by the *Canada Revenue Agency* to issue *PEI Energy Savings Bonds*, which qualified for self-directed RRSPs. The province was able to quickly sell its full complement of Bonds to Islanders, enabling the province to fund the project and keep ownership in the public domain.

The sentiments expressed by the Minister responsible for the windmill energy project at the time, Jamie Ballem, make just as much sense for a PEI Farmland Bank today:

“All of these economic and environmental benefits make *PEI Energy Savings Bonds* popular for people who want their investment dollars to not only earn them money, but also to support something they believe in,” said Minister Ballem. “The Bonds are a safe, secure investment that allows Islanders to plan for their future while keeping their investment money in PEI to support a project that will benefit this province for years to come.”

(*Government News release*, January 11, 2007”

<http://www.gov.pe.ca/educ/news.php3?lang=E&newsnumber=4968>).

Concerning the fertility of the Island’s agricultural land and the connections between decreasing SOM, decreasing soil structure, increased erosion, increasing leaching of chemical fertilizers, herbicides, pesticides and fungicides, increased nitrate contamination, and shellfish die-offs in Island aquifers, it would not be an overstatement to say that actions taken now to finally address these disturbing negative trends - made possible through a properly-designed farmland banking system - will benefit this province not just “for years to come,” but for many generations to come. Without healthy, productive soil, it will be impossible to produce healthy food and earn a decent living from farming.

*PEI Energy Savings Bonds* had a guaranteed return of 5 percent annually for 5 years. Either the purchaser or the owner of the Bond had to be a Prince Edward Island resident, business or organization. The minimum purchase was \$500 and the ownership limit was \$10,000 per calendar year. They could be purchased at *Island Credit Unions* across the province or at the *Provincial Treasury*.

The made-in-PEI Bond caught the attention of the *Globe and Mail*, which published a story in March, 2007 titled, "PEI Sells Wind-Power Bond."

“The idea behind the bonds was to ‘make this wind development one that islanders really own,’ said Jamie Ballem, PEI’s Minister of Environment, Energy and Forestry. ‘While other wind projects have been developed by private investors from outside the province, we wanted this one to be ours,’ he said.’ The project was initially financed through the provincial treasury, so the money gleaned from the bond issue is actually being used to pay down that debt,’ Mr. Ballem said. He said the success of the bond issue is partly because of public concerns over the environment, but it also reflects the thirst of islanders to invest in local public projects. ‘There’s a pride in ownership. For once, we’re doing it ourselves. We’re not getting an investment firm or a big pension fund coming in.’”

Although the 5 percent yield on *PEI’s Energy Bond* issue was considerably higher than the interest paid on *Canada Savings Bonds* – which was at that time, slightly more than 3 per cent – the PEI Bonds could only be cashed in at the end of the 5 year term, while CSBs were more liquid.

#### **7.4 Low-interest Government Loans**

The PEI Government lends money for a variety of reasons, to a variety of entities, using a number of different programs and funds. Those programs and funds are managed through 2 Crown Corporations: (1) *Island Investment Development Inc.*, and (2) *Finance PEI*. A summary overview of each agency shows that either one of these 2 lending agencies could potentially contribute to the establishment of a publicly-owned and controlled PEI Farmland Bank.

##### **(a) Island Investment Development Inc.**

*Island Investment Development Inc.* (IID) is a Crown Corporation reporting to the *Minister of Economic Growth, Tourism and Culture*. The objects of IID are:

- (a) raise capital in foreign and domestic markets;
- (b) provide financing to projects of significant economic benefit to the province;
- (c) promote the province as a destination for offshore investments;
- (d) attract entrepreneurial expertise and skilled labour to the province.

IIDI not only provides loans to businesses in the private sector, but also to other Crown Corporations, such as *Slemon Park Corporation*. Section 5(b) of the [\*Island Investment Development Act\*](#) clarifies the “powers” of IIDI, one of which is to: “*Assist in the establishment, expansion or reorganization of any enterprise or industry.*”

The establishment of a Farmland Bank meets the criterion stipulated in section 5(b) of the *Act*, and may provide a source of funding. Section 5(h) of the *Act* empowers IIDI to “...*enter into contracts with any person or any agency of the Crown in right of Canada or of any province.*” At the end of 2017/18 *Island Investment Development Inc.*'s loan portfolio was \$154,487,356 with \$217,524 in loans written off during the year.” (p. 17, IIDI 2017/18, *Annual Report*).

Unlike many loans made by IIDI to private businesses with significant risk – some of which are eventually written off as losses – there would be no risk to the Provincial Government to lend to the Farmland Bank, given that the Bank could provide full value security for purchased land on loans. It is likely that the value would accrue over time. If, for example, the Provincial Government had implemented the farmland banking recommendation made by the *Carver Commission* in 2013 and invested \$100 million in farmland at the time, that same land would be worth more than \$200 million today.

As well, the interest that would have been earned on money loaned to private businesses would be covered with income from lease rates charged by the Farmland Bank. Those rates would likely be on par with IIDI lending rates. IIDI Lending to the Farmland Bank really doesn't cost the PEI Government or taxpayers anything: it's essentially transferring public “liquid assets” (cash in the bank) into material assets (farmland) which is likely to have a greater rate of appreciation in coming years, and would be a prudent investment decision.

The 2017/18 *IIDI Annual Report* shows *Island Investment Development Inc.* had assets of more than \$295 million. About 2/3 of that came through Immigration Programs run by the *Provincial Nominee Program* and a *Federal Immigration Program* called the *Prince Edward Island Century 2000 Fund*. (CBC, February 4, 2010, “\$200M in single year for P.E.I. immigrant program”). In addition, despite the *Investor Stream* ending in 2018, roughly \$17 million will continue to come in to general revenues

as “failed deposits” for several years. Supporting a Farmland Bank with a substantial low-interest loan would be fully secure, and Islanders would likely support using PNP revenues for such a purpose.

(b) Finance PEI

Another potential Government-lending source for a Farmland Bank is *Finance PEI*. Section 7(d) of the *Finance PEI Act* – where *Finance PEI* derives its authority - provides *Finance PEI*'s essential mandate as:- “...to provide loans and credit assistance to sectors of the Prince Edward Island economy identified by the Government as being of strategic importance for economic development;” and 7(e) says an objective is “to assist in the planning and implementation of economic development projects sponsored by the Government.”

## **7.5 Establishing and Funding an Initial Land Acquisition Target for a Farmland Bank**

The high cost of farmland in PEI presents a challenge for establishing a farmland banking system. The cost for an acre of prime PEI farmland has increased significantly in the past 5 years. Yet, without a significant repository of farmland from across the Island, a Farmland Bank would be completely ineffective. If a Farmland Bank is to have the capacity to operate and achieve its objectives, there must be a funding plan to support reasonable land acquisition targets. The 2013 *Carver Commission* noted that:

“A quick look at Island real estate websites shows that farmland is offered for sale for between \$1,000 and \$2,500 an acre, depending on the size and location of the parcel, with good potato land going for as high as \$3,500 an acre.” (p. 50)

In the few years since that statement, the cost of an acre of PEI farmland has risen dramatically, with prime farmland (especially land suitable for potatoes and proximate to Cavendish Farms) commanding as much as \$6,500 per acre. This reality has not only made it much more difficult for people interested in farming to purchase land; it also makes the challenge of funding a PEI Farmland Bank more daunting.

Although prime PEI farmland has been recently listed as high as \$6,500 per acre in areas such as Prince County, it is considerably cheaper in other parts of the province. The *Farm Credit Corporation's* most recent summary of farmland prices in PEI by county (2018) shows the range of prices in each county based on 90 percent of sales:

<b>Prince Edward Island farmland regions</b>			
Region	% change	Value \$/acre*	Value range**
1 Prince	6.7%	\$4,586	\$2,000 – \$5,500
2 Queens	0.4%	\$3,634	\$2,300 – \$5,000
3 Kings	7.1%	\$3,176	\$2,000 – \$4,800

\*FCC reference value \$/acre.  
 \*\*The value range represents 90% of the sales in each area and excludes the top and bottom 5%.

The average price per acre for all 3 counties is roughly \$3,800. Assuming that agricultural land will be purchased by a Farmland Bank on a roughly equal basis in all 3 counties, targets for the acquisition of land would be set for each county on the following basis: the percentage of the total annual budget allocated to the Farmland Bank that would be spent in each county would be determined by calculating the total farmland acreage in each county and dividing those numbers by 33.3 percent.

The most appropriate budget for the first year of operation for the Farmland Bank – when the focus will be almost exclusively on purchasing farmland and building a repository for future lease and/or sale agreements – should be determined on the basis of: (1) the average price of farmland; (2) how much farmland is currently, or likely to be, available for sale in each county, (3) the available funding to purchase that farmland based on equal targets in each county; and (4) farms needing the most soil repair.

At an average cost of approximately \$4,000 per acre, \$100 million would purchase 25,000 acres. With this as an initial target for farmland acquisition, this funding could be acquired in the following manner:

\$60,000,000 from *Island Investment Development Inc.*, or *Finance PEI*, or a combination of both, and;

\$40,000,000 raised through a public Farmland Bank Bond issue similar to that issued to raise funds for the Windmill development back in 2007.

The Windmill project in 2007 was first funded by the Province prior to the issuance of the *Energy Public Bond*. Similarly, given the urgent need for the establishment of a farmland banking system that can quickly acquire suitable farmland, the Government should issue loans to a *Farmland Bank Crown Corporation* to provide a source of capital for immediate purchasing of agricultural land.

## 8. The Administration of a Farmland Bank

Considerations concerning the administration of a Farmland Bank are determined by the particular model adopted for the initiative. If, for example, the PEI Government was to establish by statute a new *Farmland Bank Crown Corporation*, then the responsibilities associated with the mandate and activities of the farmland banking system would lie primarily with the Board of Directors of the Crown Corporation. It would also be possible to add new responsibilities to one or more Government Departments to administer a Farmland Banking Program, with some new staffing and resources, and the programs would run as any other agricultural and Crown land leasing program. If the latter model was to be adopted, the question of administration for the purpose of this study becomes less important, as the administrative structure and lines of authority are already established within Government.

For numerous reasons outlined below, given the challenges PEI is facing regarding land issues, it is the recommendation of this study that a Farmland Bank be established as a new Crown Corporation, with some unique features.

### 8.1 Establishing a Farmland Bank Crown Corporation

It will be important that a new *Farmland Bank Crown Corporation* be structured as a not-for-profit corporation. Although Crown Corporations are not regarded as nonprofit organizations by the Federal Government (*Canada Revenue Agency*), there are still benefits, including tax rebates, that accrue from being structured and operated as a not-for-profit organization. The following is from the *Canada Revenue Agency* website:

#### **Agents of the Crown:**

For purposes of a Section 259 rebate, agents of the Crown will be considered to be organized for nonprofit purposes if their enabling legislation states that they are organized solely for a non-commercial public purpose. Agents of the Crown are Governments and are thus excluded from the definition of nonprofit organization in subsection 123(1). However, for purposes of Section 259 rebates, nonprofit organizations include prescribed Government organizations. A "prescribed Government organization" is a specified Crown agent or an agent of Her Majesty in right of a province that would be a nonprofit organization within the meaning of subsection 123(1) if the definition of that expression were read without reference to "a Government".

The *PEI Energy Corporation* is a good example of how a Crown Corporation that is structured as a nonprofit can access Federal grant dollars. Recently, the *PEI Energy Corporation* received a \$300,000 grant from *Natural Resources Canada* under a “Transportation and Alternative Fuels” program.

As a Government entity, the *Farmland Bank Crown Corporation* would also be able to access borrowing rates lower than those available to private industry.

Legislation for most Crown Corporations stipulates a minimum and maximum number of Board members, usually somewhere between 3 and 8 people. A nonprofit *Farmland Bank Corporation Act* should stipulate whatever maximum number is required to accommodate the broadest spectrum of organizations in PEI with a primary interest in land, and should include:

- 2 people from the *Department of Agriculture and Land*
- 2 people from the *Department of Transportation, Infrastructure and Energy*

And at a minimum, a representative from each provincial farm organization should be on the Board:

- Federation of Agriculture*
- National Farmers Union*

...and representatives from other community-based organizations such as the *Federation of PEI Municipalities*; *PEI Coalition for the Protection of PEI Land*, etc., to be determined by the Board.

## **8.2 Establishing Collaboration Agreements with the Department of Agriculture and Land and the Department of Transportation, Infrastructure and Energy**

Like other Crown Corporations, a Farmland Bank would receive its mandate and powers from a new statute (e.g., *Farmland Bank Corporation Act*) with accompanying regulations, and would be governed by a *Board of Directors*. The day-to-day operation of the Corporation would be the responsibility of an Executive Director, or Chief Executive Officer/General Manager, and a small staff – primarily people with competencies in administration, accounting, and planning.

A Farmland Bank would need to have a very close working relationship with both the *Department of Agriculture and Land* and the *Department of Transportation, Infrastructure and Energy*. The lion's share of the hands-on work involved with the administration of the Farmland Bank would, in fact, be



undertaken by staff in these 2 departments.

Wherever Crown farmland leasing programs exist – as was the case with both the LDC and the *Saskatchewan Land Bank* systems – the management of those lease agreements usually falls to the *Department of Agriculture and Land*. The reasons for this are mostly obvious, but worth reviewing to get a better sense of the scope of activity that would be required by the *Department of Agriculture and Land* in support of a Farmland Bank.

When an Island farmer submits an application to sell land to the Farmland Bank, a proper assessment of the value of the property would need to be undertaken. This would include soil tests to measure a number of factors (e.g., phosphorus levels) but especially the percentage of SOM. This data would be used to better evaluate the true value of the land, and determine the best farm management strategy to build SOM and restore and/or maintain the health of the soil. The productive value of soil as measured by the level of SOM should, over time, provide a fairer and more consistent market valuation of PEI farmland, with the multi-year projected costs of remedial measures factored into the price calculations as appreciation value to the lessee.

Making the primary policy objective of lease agreements to increase SOM on depleted farmland will require an increase in the amount of soil testing. The resources that will be needed will be limited initially, but will need to increase in proportion to the amount of farmland that is purchased, managed, and subsequently leased or sold. It is worth recalling that the *1997 Roundtable* recommended doubling the soil testing budget over a 2 year period to better track whether measures were improving the soil health situation. Other recommendations aimed at increasing soil testing resources and research on soil health have been made since then, but have not yet been acted upon by the Provincial Government.

The hands-on, day-to-day work of the Farmland Bank will need to be undertaken by staff trained in the administration of lease agreements and various agriculture-related sciences and professions. A full assessment of what combination of professions like land planners, agrologists, lab technicians, etc., is beyond the scope of this study.

## **9. Consultations with the Mi'kmaq**

From the outset, the Farmland Bank should initiate a dialogue with the Mi'kmaq to ensure that they are fully aware of the plans and objectives of the Farmland Bank. With well-defined public policy objectives aiming to restore soil health and decrease environmental impacts from agriculture; keep PEI farmland in agriculture; assist new farmers to start farming, facilitate farmers without farm succession plans to retire, etc., these many long-term benefits should garner support for this important initiative from all Islanders, including Mi'kmaq Islanders.

A Farmland Bank that is structured as a Crown Corporation will need to address issues associated with asserted and established Mi'kmaq rights under section 35 of the *Constitution Act*, 1982, including, if and where appropriate, any Crown duty to consult the Mi'kmaq that may arise.

## 10. Summary and Recommendations

Although it is beyond the scope of this report to elaborate on the interrelated linkages between issues directly related to implementing a Farmland Bank and other land-related issues, it is important to recognize that there is not only an interconnectedness between these issues, but also an interdependence. Provincial laws, regulations and policies relating to other land-related policy and program objectives can either help or hinder a PEI Farmland Bank to achieve outcomes and meet its objectives. It has been noted in previous sections of this report how laws governing who can own farmland in a number of provinces work in tandem with farmland leasing programs and lease terms and conditions.

A Farmland Bank – like PEI's agricultural industry itself – would not be an “entity unto itself,” as was nicely expressed by the *2009 Commission on Agriculture*:

“Agriculture is not an entity unto itself, of course, but an integral part of broader society. Agricultural profitability requires that all of the links in the agrifood value chain find strategies to ensure long-term economic health, and especially at the primary production level where return on investment has been inadequate for farm viability.” (Growing the Island Way, p. 11)

There is little use establishing a PEI Farmland Bank if, for example, the [\*Lands Protection Act\*](#) can be circumvented, and farmland can be purchased by corporations by simply acquiring farmland belonging to other legal corporations without having to first obtain Government approval, or even having to notify Government of the transaction.

There are many individuals and corporations both within and outside Prince Edward Island willing to pay above-market prices to acquire prime PEI land, so legislative protection of farmland is required. The *Lands Protection Act*, and other legislation such as the *Planning Act*, must work in collaboration with a new PEI Farmland Bank to protect farmland, restore soil health, and contribute positively to the future development of PEI's agricultural industry and the protection of PEI natural resources.

It will also be important to enforce a stricter policy regarding foreign-ownership of PEI farmland, as several other jurisdictions have done. A PEI land zoning policy has been recommended numerous times by a number of reputable *Commissions* dealing with land issues over the past 20 years and

should be implemented. Until such time as a comprehensive Island-wide land zoning policy is in place to prevent the further loss of arable farmland, the PEI Government should, as an interim measure, implement an Island-wide *Agricultural Land Zoning Policy* to prevent any further loss of PEI's limited agricultural land. The *Lands Protection Act* was, after all, about "protecting" land – including farmland – for future generations:

“Perhaps it is time for the province as a whole to explore all the tools available that would contribute to the purposes of the *Lands Protection Act* including property rights, land taxation, tax credits, land mapping, management plans, land banking and regulations.” (*A Gift of Jurisdiction*, p. 33)

If increasing SOM is made the primary objective of all lease programs, finding commercially-viable rotation crops that increase SOM, while also providing a reasonable financial return to the farmer, is of crucial importance. This calls for a change in agricultural research priorities, with more provincial collaboration with *Agriculture and Agri-food Canada (AAFC)*, and more research of relevance to local needs. New crop varieties are needed and those real-time needs should be supported with field trials of potentially lucrative and more sustainable crops.

Unless such a collaboration linking “real-time research” to “real-time problems and challenges” is undertaken in conjunction with other provincial agricultural strategies, such as farmland leasing programs, it is unlikely the objectives of a Farmland Bank will be fully achieved.

This study has made one thing abundantly clear. Unless a farmland banking system is implemented in conjunction with a multifaceted agricultural and environmental strategy, designed to bring about a progressive transformation in PEI agriculture with new approaches that no longer deplete SOM, and cause erosion and environmental contamination, such an endeavour will be of little benefit to farmers or Islanders in the long run.

The significant rate of decline in the health of PEI soil in the past 20 years highlights the urgency of the situation and puts the current challenge in perspective. To aspire to have 90 percent of farmland with 3 percent organic SOM by 2010 as a target, after discovering only 68 percent of farmland was at 3 percent in 1999; then to find that by 2017 there is no longer any 4 percent SOM or higher soil left of the 19.2 percent of PEI farmland in that category in 1999, and that there is now only 24 percent of PEI farmland with 3 percent SOM, makes a strategy to address this situation a policy priority.

A farmland banking system is a powerful vehicle for the implementation of many of the recommendations that call for a new direction in PEI agriculture; a path forward away from intensive farming practices. It is unsustainable to continue to extract more nutrients and water resources in pursuit of ever-greater yields in the hope of being competitive in global commodity and retail markets given the negative environmental impacts caused by those intensive methods.

The following recommendations are founded on an assumption that such a truly transformative vision and strategy will finally be vigorously pursued by the current PEI Minority Government after more than 20 years of serious discussion and strong recommendations have failed to bring about the needed changes.

Most of the following recommendations have already been suggested within the preceding sections of this report, embedded in the evidence and arguments supporting them. Nonetheless, it is useful to put them in the more formal style of recommendations, drawing explicit attention to what actions Government must take if the recommendations are to be adopted. Where appropriate, some additional information is also provided in support of the recommendation.

The following recommendations will be grouped as “Farmland Banking” and “Farmland-Bank Related.”

## **10.1 Farmland Bank Recommendations**

### **Recommendation 1: That a PEI Farmland Bank be Publicly-Controlled and Publicly-Funded**

A number of factors, conditions, and concerns identified in this study favour a recommendation that a PEI Farmland Bank be publicly-controlled. A new Crown Corporation should be set up as a nonprofit economic development agency. It would need all the legislative and regulatory authority required to ensure the delivery of programs and services best able to achieve the policy objectives stipulated in the legislation and regulations.

The principal factors influencing a recommendation that a Farmland Bank be both publicly controlled

and publicly funded pertain to the need to ensure the long-term protection of PEI's limited agricultural land, and to strengthen both rural communities and PEI's agricultural industry. There appears to be strong and public support for greater protection of PEI's natural resources, especially land and water.

There is also concern among Islanders with the failure of previous Governments to address environmental problems caused principally by industrial farming practices that deplete SOM. That in turn causes increased soil erosion, increased nitrate and pesticide run-off and leaching, and the perception that intensive irrigation from deep water wells and holding ponds is now the only way to produce high-yield potato crops in Island soils.

In order for the PEI Government to properly utilize the potential of a Farmland Bank to achieve a range of agricultural and environmental policy objectives, it is necessary that the Farmland Bank operate as a nonprofit organization. Such a model not only supports broad community involvement (composition of the Board) but as a nonprofit Crown Corporation focused on addressing Island-wide, systemic problems affecting both the environment and the economy, the Farmland Bank programs would meet the conditions for the Crown Corporation to be categorized as an economic development agency of Government. That would allow the Farmland Bank to qualify for funding from various Federal Government sources, including the *Atlantic Canada Opportunities Agency* (ACOA), and the *Canada Agricultural Program* (CAP).

### **Recommendation 2: Adopt a Two-fold Strategy to Publicly-fund a Farmland Bank**

Section 7 of this report provided the background and rationale for setting an initial target of 25,000 acres to be purchased by a Farmland Bank. Contingent on availability, the land would be purchased on an equal percentage basis as a percentage of the farmland in each county. The financing required to purchase 25,000 acres is calculated on the basis of \$4,000 per acre. Financing would come from 2 sources:

- \$60,000,000 in low-interest loans from *Island Investment Development Inc.*, or *Finance PEI*; or a combination of both, and,
- \$40,000,000 to be raised through a public Bond offering similar to that issued to raise funds for the Eastern Kings Windmill development in 2007.

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**Recommendation 3: Establish a Collaboration Agreement between the Farmland Bank and the Department of Agriculture and Land and TIE**

Although the management of a *Farmland Bank Crown Corporation* would lie with a Board of Directors, Executive Director and a small staff, the lion's share of the work would fall to the *Department of Transportation, Infrastructure and Energy* and the *Department of Agriculture and Land*. This work would include: assessing land values; determining the appropriate terms and conditions of lease agreements with particular parcels of land; administration of the process and file for each land parcel; working with farmers to develop business plans and environmental farm plans to be tied to the lease agreements; and monitoring compliance with the lease terms and conditions; etc., For the sake of both clarity and the smoother operation of a farmland banking system, a detailed collaborative agreement between the *Farmland Bank Crown Corporation* and each of these two Departments should be developed. Authority for such an agreement could be provided within the new *Farmland Bank Corporation Act*.

**Recommendation 4: Establish an Interim Farmland Purchasing Program**

PEI needs to implement an actual farmland “banking” system, primarily because the PEI Government currently has title to a very limited amount of arable land. Other provinces have large tracts of agricultural Crown land to lease to farmers, allowing them to implement farmland leasing policies and programs offering significant assistance to many farmers, the agricultural sector, rural communities, and the environment. The first priority for the PEI Government should, therefore, be to establish an interim *Farmland Purchasing Program* with a short-term mandate of acquiring farmland, and fostering succession plans with farmers wanting to sell to the PEI Farmland Bank.

When considering all the logistical, administrative, legislative, regulatory, staffing, and budgeting requirements to establish a Farmland Bank, not to mention the design and launch of its programs, it will take some time to get a Farmland Bank up and running. The legislative and administrative framework required to purchase land - and then either retain and manage, lease, or sell it under certain terms and conditions - presently exists within the Department of TIE, so the purchase of available farmland to build a repository in anticipation of a fully-established Farmland Bank can begin immediately.

A couple of additional people to work within the *Department of Transportation, Infrastructure and Energy* in conjunction with the *Department of Agriculture and Land* would likely suffice. A program that would invite farmers currently wanting to exit farming to submit an application for possible purchase by the Farmland Bank would need to be developed and rolled out. Until such time as the necessary policies, resources and administrative supports are in place to manage a full-fledged Farmland Bank, no leasing of any farmland acquired in an *Interim Farmland Purchase Program* would take place.

### **Recommendation 5: Restrict Agreements to “Leasing” for the First Five Years**

With the need to begin to purchase and accumulate farmland to ensure it remains in agricultural production, or assist new farmers to get established – or meet any of the other objectives of the Farmland Bank - it would be prudent for programs to be limited to “lease only” options for the first 5 years. This condition was put in place when the *Saskatchewan Land Bank* was established, despite the province's vast Crown farmland holdings.

Focusing solely on acquiring land and leasing it out to farmers will ensure an annual net increase in the amount of PEI Crown farmland until an adequate repository is acquired. It will also allow for the implementation of remedial lease terms and conditions on more land over greater periods of time, thereby more effectively protecting and restoring the health of PEI's farmland.

### **Recommendation 6: Establish a Priority Ranking Criteria for Farmland Purchases**

In consideration of the need to begin to accumulate farmland to build Farmland Bank holdings, it is unlikely that requests to purchase farmland at “fair market value” from all potential applicants can be accommodated. A preferential farmland “purchase criteria,” similar to what is outlined below is suggested:

- (1) farmers 65 years or older;
- (2) farmers between the ages of 55 and 65 who, due to inadequate income, need to access capital to keep farming, make farm improvements, and improve their family standard of living. Farmers in this situation are provided the opportunity to lease the land back from the Government immediately after purchase;
- (3) farmers in poor health, unable to operate their farms; have no succession plan and wish to exit farming, and,



- (4) family transfers in which neither the parent nor the son/daughter have sufficient net worth to permit the transfer to take place in such a way that the parents could have a financially secure retirement, and the son/daughter a reasonable level of income.

### **Recommendation 7: Establish a Priority Ranking Criteria for Farmland Bank Leases**

Crown farmland leasing programs in other provinces and territories have established some criteria to decide who should be granted a lease, if there are multiple parties interested in the same parcel of land. In some instances, public auctions are held, and the farmer who offers the most for the parcel gets to purchase the land. Such an approach would not make sense for a PEI Farmland Bank, given the multiple policy objectives that farmland leasing would aim to realize. Those objectives must remain the priority criteria upon which lease-granting decisions are made.

Although it is beyond the scope of this study to suggest a priority ranking criteria in any detail, given the stated purposes for a PEI Farmland Bank, it seems logical to assume that the following would be on the list:

- (1) The lease will establish a new certified organic farmer or encourage the expansion of existing certified organic farmers.
- (2) The lease will support a new farmer to begin farming, someone who could otherwise not afford to purchase land and begin farming.
- (3) The lease will allow an existing farmer to make improvements to soil quality with commitments written into the management plan and agreement to improve SOM (e.g., improved crop rotation; organic soil enhancements, etc.).
- (4) Preference is given to the applicant with the least travelling distance.  
[The LDC regulations provided this discretionary power in section 5(2)]

One of the proposed indicators established with the *1997 Roundtable*, and commented on in the first *State of the Environment Report*, was the target set for an increase in organic farming:

“As well, a target has been set to have a minimum of 2,025 organically managed hectares (5,000 acres) by 2006. In 2001, there were 607 hectares (1,500 acres) under organic production.” (p.8)

As can be seen from the following chart taken from page 70 of the *2010 State of the Environment Report* - 12 years after the *1997 Roundtable* - PEI achieved that target by 2009.

Year	2001	2003	2005	2007	2009
Hectares under organic production	607	655	586	1,100	2,000
Number of organic producers	30	28	34	56	59

There have been no further *State of the Environment Reports* since 2010; however, a PEI Government web page titled [Agriculture in PEI](#) provides some more up-to-date data on the number of certified organic farmers and the amount of land being farmed organically:

*“Organic production continues to expand across Prince Edward Island. In 2019, there are 47 producers registered in the province under the PEI certified Organic Producer Cooperative (with a total organic acreage of 10,000).”*

These stats reveal that there has actually been a decline of 12 organic producers, and 10,000 acres is a little over 4,000 hectares. Giving a priority ranking to organic farmers would offer a means to encourage the expansion of organic farming, and make progress toward achieving updated targets in keeping with the strategy initially promoted by the *1997 Roundtable*.

### **Recommendation 8: Make “Soil Organic Matter” the Primary Indicator for Program Design**

This recommendation is in keeping with the findings from the previous review of problems relating to the deteriorating health of PEI farmland over the past 20 years. The SOM indicator would be used to assess both the (1) soil health of all land parcels considered for purchase, lease or sale (2) the most suitable type of lease program for each parcel of land, and would provide (3) a truer means of determining the economic value of the land on the basis of the percentage of SOM and nutrients in the soil.

### **Recommendation 9: Explore a “Land Management Agreement” with Slemon Park**

The PEI Government is the sole shareholder of *Slemon Park Corporation* which makes it a Crown Corporation. The assets of *Slemon Park Corporation* include roughly 600 acres of surrounding farmland that is currently being leased to farmers. It is important that all Crown farmland be subject to the same farm management and leasing policies, and be subject to the same monitoring to ensure compliance with those policies (e.g., lease terms and conditions to improve SOM). A collaboration

and land management agreement between a new PEI Farmland Bank and *Slemon Park Corporation* [and any other Provincial Crown Corporation owing farmland] should be explored to ensure consistent Government policy with all Crown farmland leasing.

## 10.2 Farmland Bank-Related Recommendations

### Recommendation 1: That Government Implement a Provincial Land Zoning Policy

Government has received many strong recommendations over the years to implement a provincial land zoning policy, yet no such policy is in place. This was the main story reported by the media when the *Thompson Commission Report* was released [See: "[P.E.I. commission recommends comprehensive land-use policy for province](#)," Journal Pioneer, June, 2010].

“Prince Edward Island has been advised for the fourth time since 1973 to adopt a comprehensive policy on land use. A report released Thursday by the *Commission on Land Use and Local Governance* says a consistent and comprehensive land-use policy must be struck to enable sustainable and consistent development while also protecting the environment. The report by former provincial court judge Ralph Thompson states that in areas outside municipalities, decisions of individual landowners prevail over the public interest.”

In the absence of such a comprehensive Provincial Land Zoning policy, the PEI Government should implement a farmland zoning policy to protect agricultural land. To do this, the PEI Government would first need to declare PEI farmland a “resource”. Such an official legal declaration puts the zoning of farmland under provincial control.

### Recommendation 2: That the Lands Protection Act be Amended to further Restrict Non-Resident Purchase of PEI Farmland

By declaring PEI land a *resource* and implementing a Provincial Policy to keep designated farmland in agriculture, it would then be possible to amend the *Lands Protection Act* to further restrict the sale of agricultural land to non-residents without a plan for the purchaser to move to PEI and farm that land. Horace Carver noted in his final report that the *Act* does not currently protect against creative land speculators gaining title to PEI's limited agricultural land:

“Since the definition of ‘resident’ is a person who resides in the province for 183 days per year, non-consecutively, it is conceivable that offshore interests could acquire large tracts of land through the use of creative planning. For example, students attending university or college here for a couple of years could each buy up to 1,000 acres of land. Or someone could assist them with the purchase. In addition, the *Act* offers no protection against the purchase of farmland by individuals who have no intention of keeping it in agricultural production.” (p.31)

The PEI Government has since strengthened residency requirements. Since May, 2016, residents must now live in the province for 365 days over 24 months.

Currently, the law on PEI gives *Executive Council* the discretion to allow the sale of up to 1,000 acres to individuals, and 3,000 to corporations, regardless of whether they are residents or non-residents. It will make little sense implementing a Farmland Bank if measures are not taken to ensure that title to farmland remains with farmers, and PEI agricultural land is protected from development or purchase by non-residents or residents who are not interested in farming.

A quick review of other Canadian provinces reveals that in comparison to Prince Edward Island, a number have greater restrictions and lower legislated “maximums” for how much agricultural land non-residents can own. Below is a summary outline of land purchasing restrictions for several provinces:

**Alberta**

- Non-Canadians and foreign-controlled entities can own 20 acres of agricultural land.
- Alberta Government can grant exemptions.
- An entity needs to be majority-owned by Canadians (versus wholly owned) to be considered Canadian.
- Canadian pension plans have purchased farmland in Alberta.

**British Columbia**

- No restrictions on foreign ownership except in *Agricultural Land Reserves* where purchase of farmland by non-residents is not permitted, except under certain exceptions.

**Manitoba**

- Non-Canadians and non-100-per-cent-owned Canadian entities can own no more than 40 acres of farmland.
- Manitoba Farm Lands Ownership Board can grant exemptions.
- Pension plans cannot purchase farmland in Manitoba.

**Québec:**

- Non-Québec residents must seek authorization from the *Commission de protection du territoire agricole du Québec* to acquire more than 10 acres of farmland.

**Prince Edward Island**

- Non-PEI residents can own no more than 5 acres without seeking approval from *Executive Council*, which can approve individual and corporate applications to purchase farmland from non-residents up to the respective maximums stipulated in the *Lands Protection Act*;

- Non-resident corporations need not have any Canadian directors and officers to apply to purchase PEI farmland;
- Land holding maximums are 1,000 arable acres for individuals and 3,000 for corporations.

The *Lands Protection Act* should be amended to require that agricultural land not be sold to non-residents unless there is a business and farm plan in place (e.g., possibly in conjunction with a new PNP program to attract new farmers, similar to *Manitoba's Farmer Investment Program*).

If PEI farmland needs to be sold and local farmers do not, or cannot, purchase that land, it should be purchased by the PEI Farmland Bank and made available for lease to local or new farmers rather than allowing it to be sold to non-residents, or residents not interested in farming. Currently any resident can purchase 1,000 acres of farmland without any scrutiny by Government whatsoever. The time may have come for this to change, and for the PEI Government to impose stricter regulatory controls over PEI farmland.

### **Recommendation 3: That Soil Organic Matter Tests be Undertaken with all Farmland Bank land Transactions**

If the primary objective of lease programs is to improve the health of the soil, and specific measures are included in lease agreements to ensure soil restoration and an increase of SOM, then regular testing of all parcels owned and/or leased by the PEI Farmland Bank would need to be a constituent part of all programs.

### **Recommendation 4: That Funding be Increased for Soil Health Research and Testing**

There have been good recommendations made in the past which were officially “adopted” (at least in principle); however, the necessary resources to move forward with the increased research and testing was never supported with funds. Providing the necessary funding to meet the needs of the Farmland Bank (and farmers) is crucial on a go-forward basis.

Government should consider commissioning studies to establish a more precise means of measuring the economic value that accrues from the combined benefits of increasing SOM (e.g., increased nutrient value, decreased erosion, run-offs, fish-kills, and increased water retention lessening the need for irrigation to achieve greater yields).

**Recommendation 5: That the PEI Government direct the Department of Environment, Water and Climate Change to begin Work on a “State of the Environment Report Immediately.”**

*State of the Environment* reports should have been happening every 5 years, to give Islanders periodic updates on the key indicators relating to the environment should be re-established. With regularly-updated information on key environmental indicators the PEI Government will be able to track whether environmental health indicators are improving or worsening. With this information, Islanders will be better able to inform Government on policy and programs. A report was produced in 2003, but the only *State of the Environment Report* since was in 2010.

PEI collects and reports information on annual pesticide sales data; however, no data has been released to the public since 2014. A full exploration of up-to-date data on the current status of the key indicators measuring environmental health was not able to be undertaken with this study.

It is imperative that more attention be paid to the continuing condition of soil, water, and the entire environmental farm policy, especially given the ongoing worsening of soil health, and the negative impacts of that on other environmental indicators caused by low SOM. It is likely that soil health and water quality parameters have continued to decline since the last measurements were collected, given that the same industrial methods of farming are still widely practiced in PEI.

The latest data released on SOM levels is from 2017, reporting that PEI now only has 24 percent of its agricultural land with 3 percent SOM and no more 4 percent SOM. With at least two more crop years since those soil SOM test results, it is possibly even lower today. Good Farmland Bank policy should be based on clearly defined agricultural objectives, which are founded on good information and the most current scientific data on the state of the environment. Governmental departments should be forthright in providing that update.

## 11. Concluding Observations and Next Steps

This study has been as much about determining the critical issues related to Island soil and farmland as it has been about the more practical elements requiring consideration when implementing a Farmland Bank. A farmland banking system can do much more than land transactions: it can influence and improve the viability and health of our primary agricultural industry in PEI and help to revitalize rural communities by encouraging new farms.

Swift action must be taken to restore the health of PEI soils. Scientists studying PEI soils have provided a list of possible measures to increase SOM, which the PEI Government has posted [online](#) as *Best Management Practices*:

In order to reverse the trend of decreasing organic matter levels within PEI soils, best management practices (BMP) should be implemented.

### **PRACTICES THAT CAN HELP BUILD OR MAINTAIN ORGANIC MATTER**

- Additions of livestock manures, green manures, and soil amendments to fields
- Reduce the amount of primary and secondary tillage operations as much as possible
- Incorporate forages and grasses into rotations, and maintain growth throughout rotation as long as possible
- Keep soil covered during the winter months by delaying time of plowing and using cover crops following row crop harvest
- Maintain living roots as long as possible within the rotation to promote soil microbial activity
- Minimize use of fall tillage, but when necessary, use conservation tillage techniques late in fall to keep crop residues on soil over the winter to mitigate soil erosion and runoff
- Increase use of nurse crops or companion crops during the growing season of row crops to decrease soil erosion

New rotation crops are needed besides soybeans, and much more research is needed to find suitable alternative crops with both environmental and economic benefits to both heal the soil and increase income for farmers. New approaches must begin to displace the dependence on growing late-variety potatoes for the french fry markets, especially in potato-growing areas with the most damaged and depleted soils.

With clear policy objectives important to the sustainability of agriculture in PEI, and supported by Islanders, the model that best suits the demands of the current circumstances and provides the greatest security for the long-term protection of PEI's agricultural land, is to establish a new *Farmland Bank Crown Corporation*. It should be structured as an economic development agency and nonprofit

corporation. Clear and unambiguous legislation would establish – like the LDC *Act* – an overriding objective for all programs that would focus on true “land improvement” by making the restoration of soil the primary objective.

Unlike the programs funded under the former PEI *Lands Development Corporation*, today's Farmland Bank must be based on an action strategy called for by the recent recommendations of soil scientists who outlined measures that will lead to the restoration of PEI soil, and the diversification of agriculture away from models demanding intensive nutrient extraction. Those models have largely failed to provide farmers with sufficient income to make farming a livelihood.

Implementing a PEI Farmland Bank is by no means a small endeavour. A “minimalist” approach could be taken with a very limited infusion of money. But with little farmland to work with, there would be little effectiveness, and a Farmland Bank would not achieve sufficient change to reverse the negative trends described throughout this report.

An immediate infusion of capital to fund an interim program is strongly recommended. Transferring “liquid” assets (revenue that came to the PEI Government primarily through the PNP) to a Farmland Bank project aiming to protect PEI farmland, allows the PEI Government to hold essentially the same current value and security on the books, while making the important and transformative work of a new Farmland Bank possible.

Although complex on the one hand, setting up a Farmland Bank is quite straightforward on the other. Provincial Crown farmland leasing programs in other Canadian jurisdictions offer policy and program documents - many of which have been provided as links in this report - and can be modified to suit the PEI situation.

What is required at this critical juncture in the evolution of PEI agriculture is a Government willing to take a bold and “maximum” approach to restoring the health of PEI soil, water, and the entire environment. A truly sustainable vision for PEI's future is what Islanders dream about. A Farmland Bank can be the vehicle that begins to make that happen. If the current rate of soil degradation and environmental decline continues for much longer, a Farmland Bank will be of little value to PEI.



### 11.1 Logical Next Steps Needed to Move the Process Forward in a Timely Manner

The recommendation to implement a PEI Farmland banking system made by the *Carver Commission* in 2014 had a strong consensus of support from Islanders, as well as from both provincial farm organizations (*Federation of Agriculture* and the *National Farmers Union*).

More recently, there have been strong political commitments made to move quickly to implement a Farmland Bank to address numerous and long-standing challenges within PEI's agricultural sector and rural communities.

With strong support for a PEI Farmland Bank, and the urgent needs, the most expeditious process possible should be adopted by Government to move things forward with the implementation of a PEI Farmland Bank. The following steps are suggestive with a concern to move the Farmland Bank implementation process forward immediately:

1. Establish a *Legislative Working Committee* tasked with the mandate to seek a consensus on the essential core elements of a PEI Farmland Bank, using this report and its recommendations as a guide. The committee would report back to the *Legislative Assembly* with a *Farmland Bank Implementation Plan*, discuss and amend the plan as required, and finally seek support from the *Legislative Assembly*.
2. Extensive public consultations should not be required, given the already-noted strong public support for a Farmland Bank, and the mandate given to both the Government and Official Opposition Party to implement one. However, a consultation/feedback period of a couple of months should be provided to allow for public comment and input and/or suggested modifications to the *Farmland Bank Implementation Plan* adopted for public discussion by the *Legislative Assembly*.
3. The *Legislative Working Committee* may amend the initial plan based on public feedback and/or organizational input, and then present a "final" version for consideration and endorsement to the entire *Legislative Assembly*.

4. At that point, an *Implementation Committee* should be struck, comprising staff from the *Department of Agriculture* and the *Department of Transportation, Infrastructure and Energy* and whomever else was deemed necessary to begin the implementation work (i.e., *Department of Justice* to draft legislation).
5. As noted earlier in this report, the most critical first step in the process of establishing a Farmland Bank is for Government to acquire a repository of PEI farmland. That - coupled with a first-priority need to address those cases where retiring Island farmers are currently without a succession plan - should make a program to acquire PEI farmland from those particular farmers the very first program. This can happen immediately. While a Farmland Bank is being set up, which realistically could take a year or more, even with a dedicated effort, a program (with specific farmland purchase terms, and program application criteria) should be jointly designed by TIE and the *Department of Agriculture and Land* staff, and administered by TIE. Once a Farmland Bank is established, “title” to farmland acquired by the *Department of Transportation* would be transferred to the *Farmland Bank Crown Corporation* – if that is the corporate model adopted.
6. Next steps in the process would depend on the specific elements of the approach adopted by Government. If it is a Crown Corporation, as recommended in this report, legislation would need to be drafted, debated in the *Legislative Assembly* and adopted. If another model was pursued, that would obviously involve an entirely different process with a corresponding need for different steps in the go-forward process.