

Opportunities and Challenges in Atlantic Agriculture

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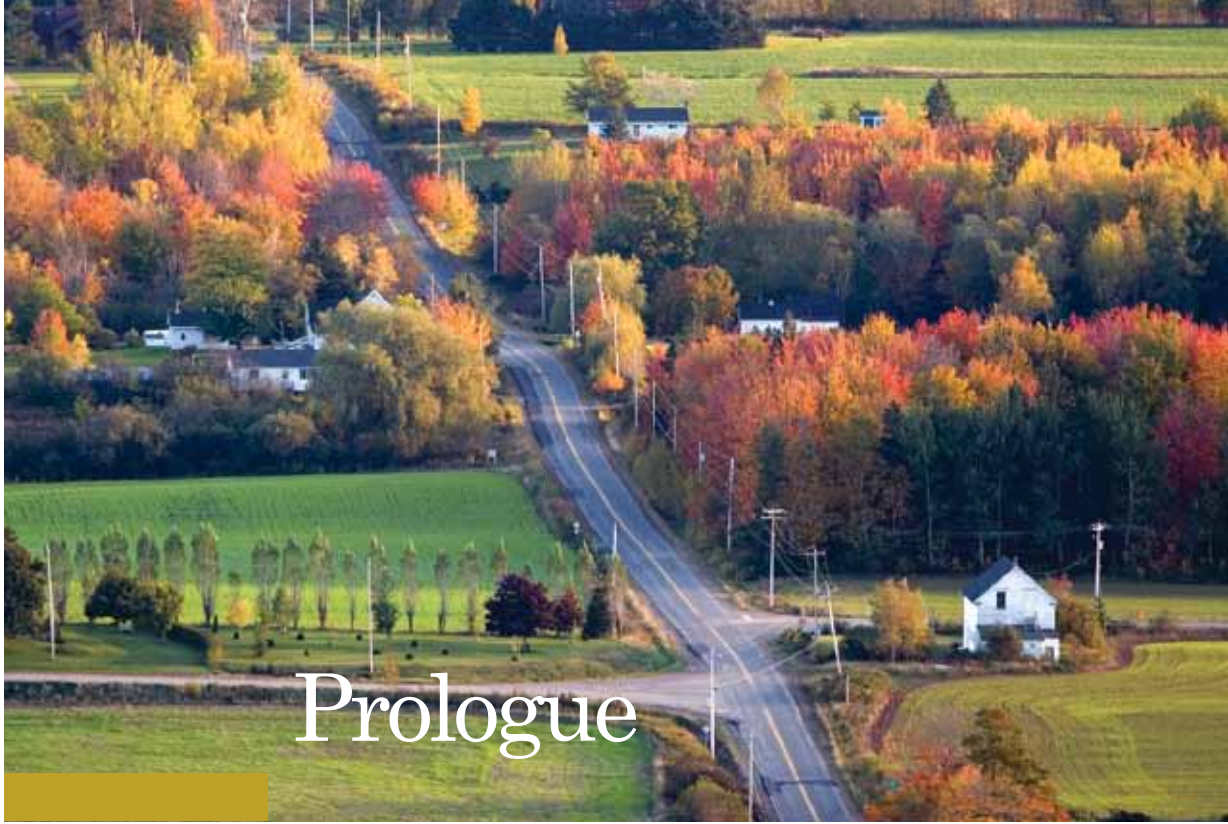
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Prologue

It is the end of the summer, 2010. Harvest time. Farmers all over Atlantic Canada are putting in long hours harvesting grain, hay, vegetables, and fruit. An increasing number of Farmers Markets are bustling with contented customers stocking up on a variety of fresh foods. Folks stop at Ebbett's Meadow Brook Farm Market near Tatamagouche for something to put on the BBQ. Or drop by Scoudouc River Farm outside Moncton for the freshest corn on the cob. All summer, people have been making pilgrimages to farms to U-pick their yearly supply of berries, to buy bulk field tomatoes for canning, to experience the exquisite taste of Annapolis Valley peaches and plums. It is a time of thanksgiving and celebration.

This year, young farmers in the region celebrated success. Nova Scotia organic vegetable producers Josh Oulton and Patricia Bishop were named Atlantic Canada's 2010 Outstanding Young Farmers. They have an innovative Community Supported Agriculture scheme that invites their customers to pay in advance for weekly deliveries of farm products. "As consumers become more involved

and interested in food production, farmers like Josh Oulton and Patricia Bishop are setting a great example of how to capture new opportunities while maintaining the grassroots values of rural life," says Brian Newcombe, a fellow farmer in Port Williams. "They are adapting and adjusting, and getting closer to their customers, and that is vital for the health of Canadian agriculture." In New Brunswick, Isaac Villeneuve was awarded the 2010 New Entrant Award. He is a hard working, environmentally conscious, dedicated individual. He has maintained his family farm, while venturing into new territory. The farm expansion into field grains has been a labour of love for Isaac and his wife Stephanie. With no permanent farm hands on site, the Villeneuve's are not unknown for their twilight harvesting and early morning market preparation. The market garden portion of the farm was operated as a family business for 10 years by Isaac's father, Marc. Isaac has transitioned into sole owner of the farm within the past 5 years and expanded to include the production of certified organic buckwheat and soybeans. The Villeneuve Family Farm markets organic fresh vegetables

at the Boyce's Farm Market in Fredericton, specializing in greens, salad mix, spinach, beet greens, arugula, and their most popular item, carrots. Their relations with consumers are dependable and enjoyable, developing a consistent clientele who push through the crowds at the Boyce's market for bags of carrots and greens and a taste of végépâté.

It is easy for us to take farming in this region for granted. We consume milk, but don't consider that cows need to be milked and tended to twice a day, seven days a week, all year. We assume farmers will continue to produce food for us; that young people will continue to choose farming as a vocation. There are many excellent farms and farmers in the region, as shown in the examples above, but there is another side of Atlantic farming reality. One Nova Scotia farmer wrote: "In our community the pork industry has disappeared and much of the land has been sold for cottage lots, forestry or other uses. Our farm supply store and grain center are also now out of business... Many are hoping for the government to somehow save the day...to save their farms for the next generation but will this come soon enough? Even though the dairy industry is a bright spot because they still have a return on investment we have only one dairy farmer left in our immediate area and they are seriously questioning whether to encourage their son to take over the farm. They are first ensuring that he gets a good education so he can get employment elsewhere. And even though this is a dairy farm it would not continue to exist if the wife did not work as a nurse as well."

Farming in Atlantic Canada is in trouble. Caught in a vise between high input costs and low food prices, farmers' margins have been squeezed so savagely that net income on Atlantic Canadian farms now hovers around zero. Farmers have actually lost money in several of the past few years, and their losses are getting worse. In effect, they are paying

consumers to eat. As a result, farmers are abandoning their farms in droves—and those who continue to farm are falling farther and farther into debt. The situation is easy to describe and difficult to alter. On the one hand, the companies that supply farmers with equipment and materials—fertilizer, feed, machinery, and the like—have grown and consolidated to such an extent that they have almost eliminated competition. The same thing has happened in the retail food sector, where two or three food chains completely dominate the grocery market. To maintain a steady flow of products, and to hold prices down, the food chains scour the world for the low-priced food to which consumers have become accustomed. Atlantic Canada's farms, being relatively small and restricted by a short growing season, are ill-placed to compete on price and volume – though they can compete very strongly on quality and, most importantly, on security and reliability. The result of these trends is that Canadian consumers—especially Atlantic consumers—have little access even to products that their own farmers can readily supply. Canadian imports of red meat, which Canada can easily produce all year, have grown from 4% to 19%. In Nova Scotia, imports of beef are closer to 90% of consumption. A lack of supply is not the problem. Canadian farms could easily supply all the beef that Canadians eat. Atlantic farms could do the same for Atlantic Canada. Today's crisis is an acceleration of a long-standing trend. In the 1930s, nearly half of Nova Scotians made their livings as farmers. In 2006, only 1.1% did so. In the same period, the proportion of farmers in the population of PEI fell from 63 % to 3.9 %. In New Brunswick it fell from 44.1 % to 1.0 %. In Newfoundland, the farming population has declined from 5.5 % in 1951 to 0.2 % in 2006. The difference today is that so few farms remain, and their financial situation is so precarious, that a few bad years can wipe out whole

sectors. A spectacular recent example is the collapse of the pork industry in Nova Scotia. In 1978 the province had 225 pork producers. In 2007 it had 80. Today it has just 16. Overall pork production is down 73 per cent in 2010 against 2009, which itself was a bad year, and the province has seen a wave of closures of processing facilities. The province once produced 60% of its own pork consumption; now it produces very little. As one producer says, “Nova Scotia needs to face the fact there could be nothing on the shelves if it can’t come across the border.” This report surveys the economic data – net farm income, expense-to-income ratios, farm solvency, debt in relation to net farm incomes, return on investment—to demonstrate and quantify the fierce economic pressures on farmers, and thus on rural communities in general. But it does not stop there. Recognizing that farming involves questions of value far beyond what can be measured in

dollars, the report attempts to gauge such more elusive—but more important—considerations such as our losses in stewardship and ecological sustainability, the preservation and productivity of human capital and social capital, and the relationship between imports, diversity and farm community viability. Yet though the situation is grave, it is not hopeless. In an supportive regulatory environment, with governments committed to the security of provincial food supplies, many innovations are possible that could re-shape agriculture and marketing, creating a vibrant and sustainable local food supply. The report identifies promising new directions in other jurisdictions, and suggests approaches that would bring farmers, consumers and governments together in a common dedication to the goal of a secure, sustainable, and just food system. The old model is broken. A new model is possible. And the time for action is now.



Farming Underwater

Squeezed between rising costs and falling revenues, tossing in his bed at night, what can he do?

Jim Grant is underneath his pickup truck, changing the oil. He could take it to the dealer in town, but he can save time and money by doing it himself—and the truck is just about off warranty anyway, so it doesn't matter who does the maintenance any more.

The truck is four years old, and it shows. On a farm, a pickup works for its living, and this one also serves as the family car. The truck was a demonstrator, so Jim got it at a good price, just \$27,000. With the taxes and license and all the other bits and pieces, the total came to \$33,000. He didn't have that kind of ready cash—few farmers do—but he did have outside income from driving the school bus, so he financed it at the Credit Union, stretching the repayment over six years at \$530 a month.

Jim wasn't expecting the truck's value to dive, but then who could have predicted \$145 oil and the subsequent financial meltdown of 2008? He isn't thinking of buying another truck, not yet. But the other day he checked the value of the truck. It had plummeted to \$9,000, while the loan still stood at \$15,000. If he sold the truck and gave all the money to the Credit Union, he'd still owe them \$6,000.

This truck is underwater, he thinks, tightening the bung in the oil pan.

It's a word he learned from the US mortgage crisis, and he likes it. It's descriptive. An asset is underwater if it's worth less than the loan against it. In the States, a lot of homeowners are underwater. The value of their houses is less than the balance owing on their mortgages. Let's say you bought a house for \$400,000, with a down payment of \$50,000 and mortgage of \$350,000. But then property values nose-dived. Now your house is only worth \$300,000—and you still owe \$340,000. The house is underwater.

Yeah. And the truck is underwater, too.

But the whole farm is underwater, come to that. Or maybe it's not entirely underwater yet, but it's sinking. When Jim took over the farm from his father, it was free and clear—no mortgage, no operating loans, no debt of any kind. But over the last decade or two, three significant things have happened.

Farmers' costs have gone up. Farm suppliers have merged and amalgamated. Now there's no competition, just a handful of big international companies providing seed, fertilizer and equipment.

At the same time, the prices Jim gets for his crops have stayed the same or gone down. As transportation infrastructure has been built up (at public expense), and it is easier to ship food in from anywhere, Atlantic farms are forced to compete with farms all over the world.

Thirdly, there's much less competition among Jim's customers. The old mom'n'pop grocery stores have all vanished. Now the food business is all in the hands of fewer and fewer processors, a couple of wholesalers, and a couple of huge supermarket chains. They can pretty much dictate prices because there are so few buyers of farm products.

Consumers are used to having any food item they want, at any time of year. The connection between household meals and seasonal availability of food from our farms has been severed. You don't often find tomatoes from Atlantic Canada in local grocery stores any more. Fruit and vegetables come from California, Chile, New Zealand. Beef comes from Alberta or South America. Which is crazy, Jim thinks, when we grow really great products right here. But the chains can get stuff cheaper in Chile, even with the freight costs, and all they care about is squeezing profits out of producers and consumers.

Jim climbs out from under the truck, lifts the hood, takes off the oil filler cap, and reaches for a litre of oil.

The whole system runs on oil, he thinks. And we haven't learned anything from \$145 oil. The oil is getting scarce—that's why we're going after difficult and expensive oil like the stuff from the tar sands. When oil goes back to \$150 or up to \$200, it won't make sense to bring fruit from Chile. But by then there might not be any fruit growers left in Atlantic Canada.

Dairy and poultry farmers sell their products into controlled markets, according to their quotas, and that helps. But almost all the hog farmers have gone under, and they're being followed by the beef farmers, the grain farmers, the tree

fruit and vegetable farmers. Two generations ago, our farmers could feed our people. But not today. If Maritimers had to live just on the products of Maritime farms—if the roads and rail lines were severed, and the ports shut down—people would starve.

Our grandparents wouldn't have starved, Jim thinks. Something's really wrong here. It can't be healthy that our food supply depends on imports and transportation and cheap oil from faraway places. But that's the way it is.

So what can Jim do? Squeezed between rising costs and falling revenues, tossing in his bed at night, what can he do? In six of the past eight years he's been farming underwater—selling his crops for less than it cost to produce them. And there's only one way to make up the shortfall, and that's by borrowing. So now there's a mortgage on the place, and six years out of eight it's grown bigger. No, Jim doesn't want his kids taking it over. They should be teachers or dentists or bankers, not farmers.

You never hear of anybody banking underwater. Or teaching underwater.

He'd be better off if he sold to that fella that was out last summer sniffing around. "You're only forty minutes from town, Jim," he said, "great location for an exclusive development. Here, take my card. What a golf course you could have here, expensive houses all around it. Gated? Oh yeah, of course. Or maybe an equestrian community, horse barns and show rings and bridle paths. I can see it all now, country club building on the top of that hill. Great place for horses."

And not for cows, or corn, or fruit trees? Who's going to live in those executive homes? Teachers or dentists or bankers, Jim supposes. He smiles to himself wryly. Maybe one of his kids could get one of those houses.

But here's the strange thing. In a pinch, Jim believes he could survive for quite a long time without the services of teachers or lawyers or bankers. But if

they and their families had no food for a couple of weeks, they'd be clawing and kicking and stealing from each other to get it. They'd be rioting in the streets. So how does this work? Jim can get along without their work, but they can't get along without his. But Jim can't make a living at what he does.

He's farming underwater.

Now where did he put that fella's business card?

Jim Grant is not a real person—but he's not exactly a fiction, either. He's a composite, reflecting the real situation of the farmers of our region, and saying more or less what they've been telling researchers for years. Farming has contributed to Atlantic communities in so many different ways, but farming is dying in Atlantic Canada. Our farmers are underwater.

And nothing seems to help. Plants keep closing, the number of farms keeps shrinking, and as farmers age and retire, they aren't being replaced. So whole communities are fading. And, as Jim Grant notes, farmers don't just shuffle paper around. They generate real wealth, producing essential goods from our natural resources. And that wealth multiplies and reverberates throughout the region, providing employment in many sectors.

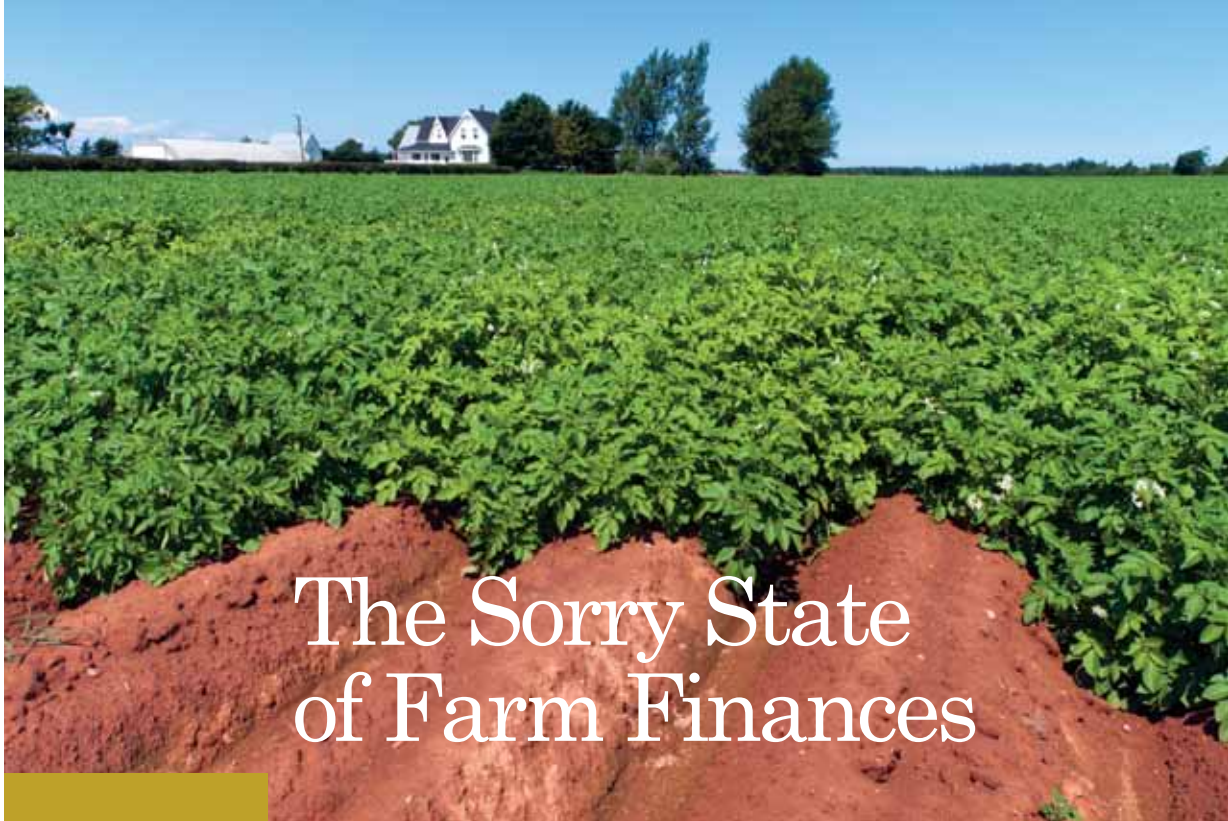
Well, tough on the farmers, but why should you and I care?

Because our present food system is harming us all—except for the agri-food corporations. Consumers need wholesome, trustworthy, tasty food—and they aren't getting it. Farmers need the opportunity to make a decent living at their work—and they aren't getting that, either. Taxpayers need to hold down the cost of our cherished public health system—and 30% of the people who present themselves to our doctors and hospitals are suffering from food-related disorders. Eating disorders are killing us in record numbers—anorexia, obesity, diabetes, allergies and food intolerances.

And our food supply isn't even secure.

Atlantic Canadian consumers are way out at the end of the conveyor belt. When the belt stops, only our own farmers can feed us. And the belt will certainly stop. As heritage seed dealer Tom Stearns remarks, our food system is "marinated in oil," from the fertilizers and pesticides we spread on the fields to the fuel for the farm equipment and the trucks and trains that carry it to out supermarkets.

When the oil stops flowing, so will the food. And is there anyone in Atlantic Canada who wouldn't care about *that*?



If the costs keep increasing faster than revenues, large swaths of Atlantic Canadian agriculture will disappear.

Farm finances in Atlantic Canada are dire. As a result, more and more farmers are leaving their farms—and Atlantic Canada's food supply is becoming increasingly insecure.

The essence of the problem is that farmers simply aren't getting the prices they need to cover the rising costs of growing food. Input costs are high, while output prices are low. You can see it in the figures below: the cost of farm inputs is rising much faster than the prices farmers get for their products. Farm wages in particular have shot up in the last 25 years and become a much larger portion of expenses. The cost of wages per farm rose steadily between 1980 and 2005 in Atlantic Canada. Farmers did not see any real increase in revenue during that time. Yes, food prices in stores are increasing—but the extra money paid by consumers isn't reaching farmers. It's being captured by farm suppliers and by food processors, wholesalers, and retailers. So farmers are going deeper into debt and having more trouble making payments. Many farmers can't break even any more, and must moonlight in off-farm jobs just to keep their farms.

Justin Rogers, a sixth generation livestock, grain and potato farmer of Brae, PEI, admits that off-farm income is his bread and butter. His farm used to sustain his whole family, and he says it's his choice and his dream to farm for a living, but for now he needs the second job to get by.

"A friend of mine works with the federal government," he says, "He works from 8:00 to 5:00. He makes more than I do with my farm job and my other job, but I work twice the hours."

According to Rob English, president of the Agricultural Alliance, a large portion of agriculture exists today because farmers have an off-farm job just to be able to pay bills. "Profitability and costs of production recovery—these are key things."

In a 2003 survey of 331 Canadian farmers only a third of them felt they were fully compensated for their farm work. Three quarters of them received no wages.

If the costs keep increasing faster than revenues, large swaths of Atlantic Canadian agriculture will disappear. In 2002, Nova Scotia farmers got 14% more for their products than in 1986, but paid

Figure 1

Price Index
Change Over Time,
NS, 1981-2008

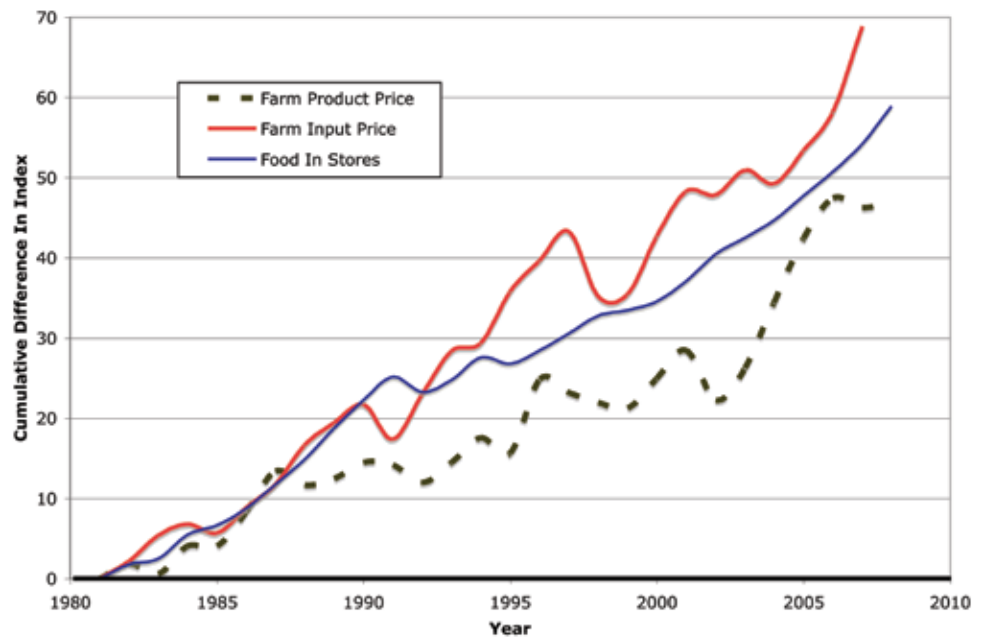


Figure 2

Price Index
Change Over Time,
NB, 1981-2008

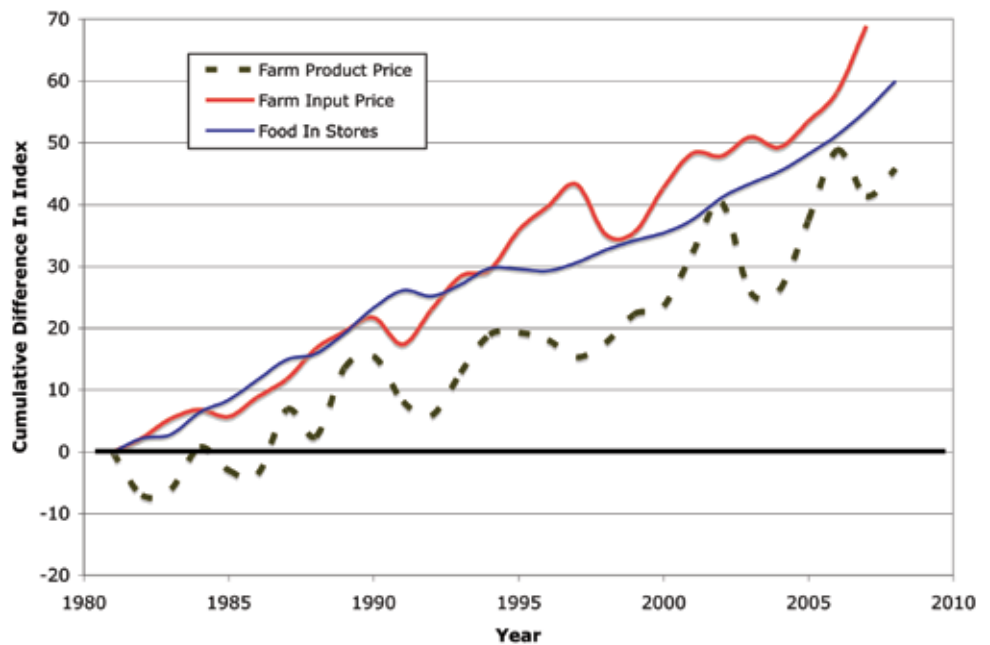


Figure 3

Price Index
Change Over Time,
PEI, 1981-2008

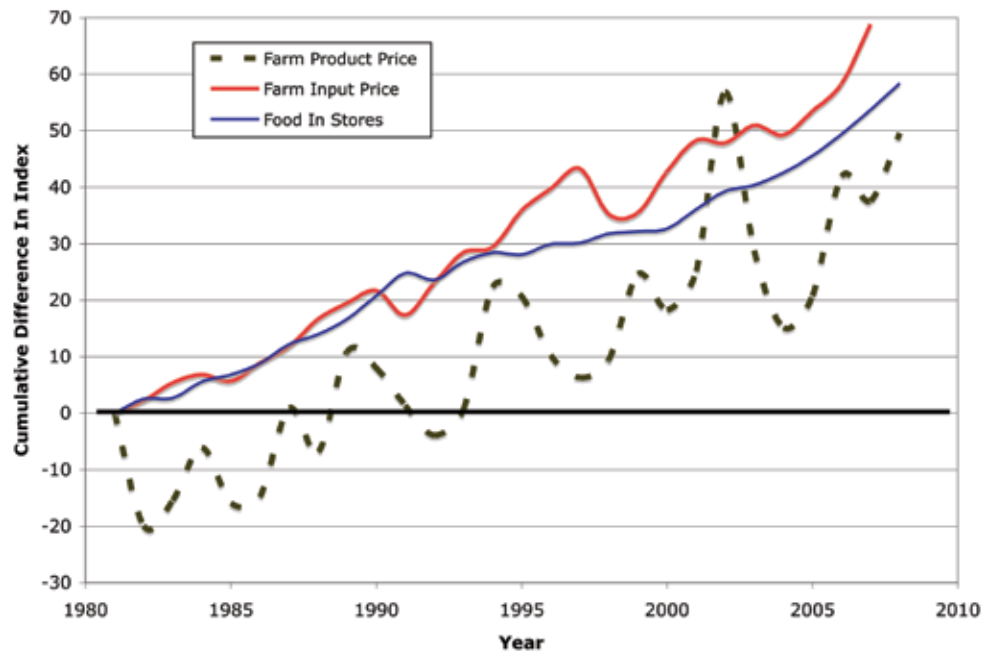
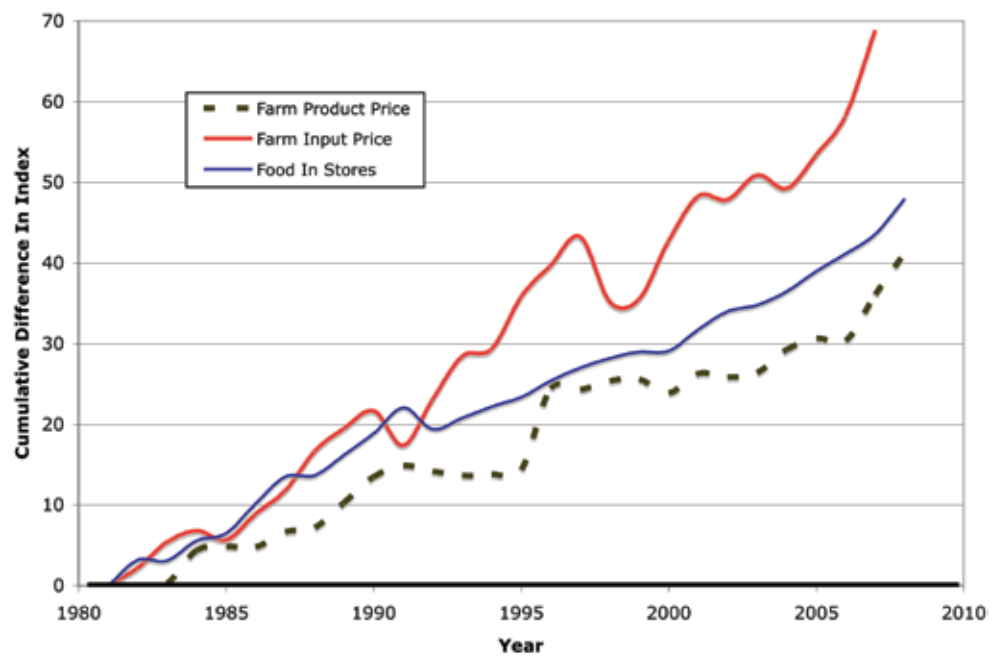


Figure 4

Price Index
Change Over Time,
NL, 1981-2008



Because consumers seek the lowest possible prices, retailers are importing food that Atlantic Canada is fully capable of growing.

42% more to produce them. Meanwhile consumers paid 46% more for food. Newfoundland and New Brunswick suffered similar, though less drastic, decreases in profitability.

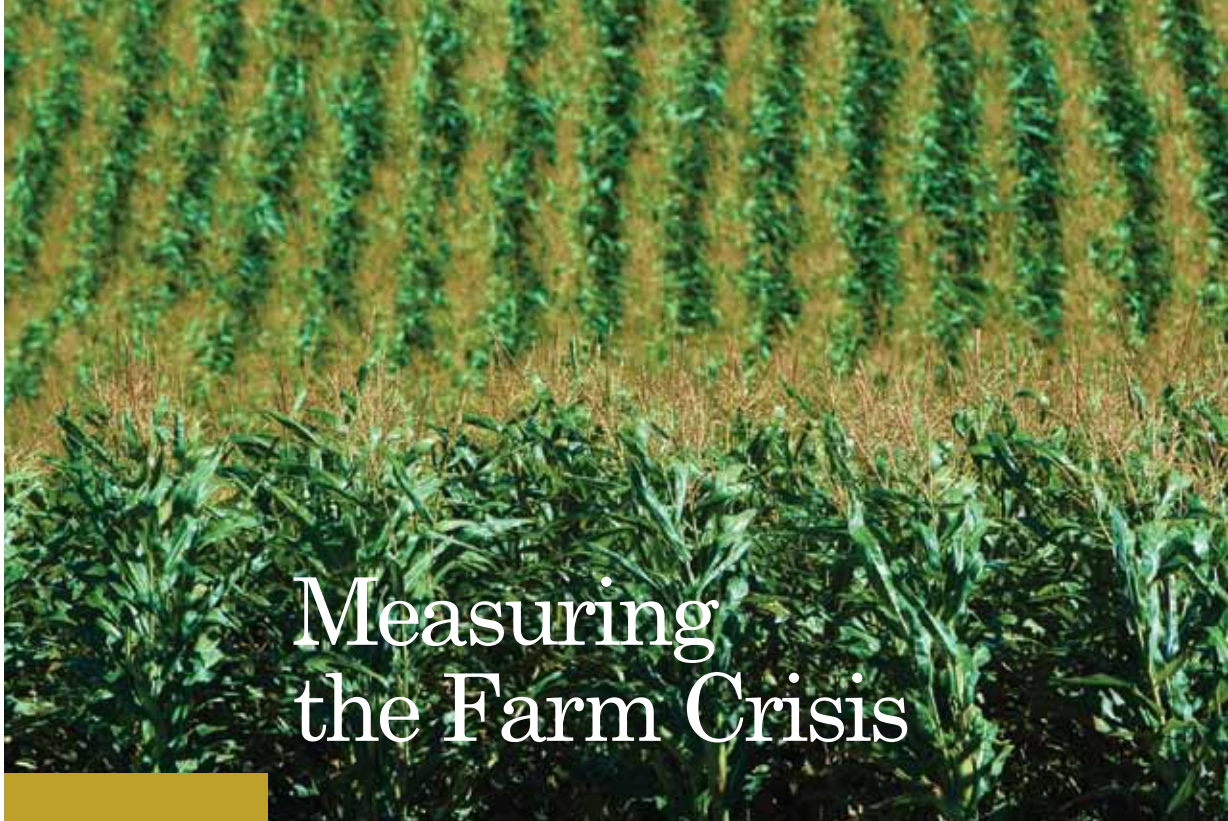
In PEI the situation seems less dire, though it's difficult to track because that province's farm product prices fluctuate madly. That's probably because more than 50% of PEI's farm revenue is tied up in one product, the potato, and potato prices fluctuate according to global markets.

In most of Atlantic Canada, the extra money consumers are paying for food is either going to the food processors or the retailers. The National Farmers Union (NFU) says the consolidation of the farm input sector is making farming much more expensive. Whether it's equipment manufacturers or seed sellers, companies are merging and eliminating competition. The remaining mega-companies can charge what they like, because the farmers have no other sources.

The same thing is happening in retail. The old-fashioned ma and pa grocery stores are largely a thing of the past, leaving two major companies in Atlantic Canada to buy farm products. These

large corporations also spend heavily on specialized packaging, food traceability, quality assurance programs, and food safety programs, cutting into what they are willing to pay for the food itself. Some of the costs of these programs are also being offloaded onto farmers, so farmers are getting squeezed at both ends.

When researchers spoke with 107 farmers in 2003, every one of them said, unprompted, that food prices were too low in relation to the cost of production. They also raised the issue of cheap food imports from countries with low labour costs and weak environmental standards. Because consumers seek the lowest possible prices, retailers are importing food that Atlantic Canada is fully capable of growing. Furthermore, the quality of imported food is often suspect. Overall, our food security has deteriorated, leaving us vulnerable to supply-chain interruptions and unknown quality standards. We have become dependent on an unsustainable, unfair, unhealthy, high risk, oil-based global food system.



Measuring the Farm Crisis

...traditional economic measures like Gross Domestic Product tell us only about the movement of goods and services in exchange for money. They say nothing about the quality of our working conditions, the health of our families and communities, the condition of our environment, or our satisfaction with our lives.

If our food security is compromised and our farmers are being pushed out of agriculture, one would expect Atlantic Canadian consumers to be outraged and worried. The fact that this issue is hardly on the political radar screen has a lot to do with what we measure and how we measure it.

To begin with, traditional economic measures like Gross Domestic Product tell us only about the movement of goods and services in exchange for money. They say nothing about the quality of our working conditions, the health of our families and communities, the condition of our environment, or our satisfaction with our lives. And because we don't measure these things, we behave as though they didn't matter.

The reliance on narrowly-economic indicators as the core provincial and regional measures of progress ignores essential information about our well-being—like how our farmers are doing, and how we are becoming completely dependent on oil-based food imports. Failure to count unseen costs and benefits gives them a default value of zero, which is a gross inaccuracy. Our

paper economy can grow and grow and grow while our society and environment deteriorate.

By tracking other trends we can get an early warning system of major societal problems so that policy-makers and citizens can intervene and avert permanent crises. In farming, for instance, government reports have normally emphasized gross farm cash receipts over other, more sophisticated measures of economic performance. If gross revenues are rising, our farms are assumed to be healthy. But in the real world, a key social, economic and cultural sector is shrinking and fading.

Using the exchange of goods and services for money as the key measure of farming progress not only ignores the sector's distress signals, it also intensifies certain types of long-term decline. If the secret of survival is to increase output, that's what farmers will be forced to do, even if in the process they degrade the very land they rely on. Gross revenue will go up until the land can no longer bear it, and farmers will still lose money and go out of business.



Agricultural Statistics: Deep Down, They're Shallow

We have sophisticated systems to assess the depreciation of equipment, but we don't assess the depreciation of land and other natural resources that we absolutely need to feed ourselves.

Traditionally, the success of the farming sector has been measured mainly by its gross income—or total farm cash receipts—which have generally gone up in the last 35 years. Farm revenues spiked rapidly in the 1970s and fell drastically in the early 1980s. They then rebounded, and have been fairly stable for the past decade.

Overall, between 1971 and 2008, total farm cash receipts increased 11% in Nova Scotia, 33% in PEI, 54% in Newfoundland, and 25% in New Brunswick, with most of the growth happening in the early 70s. Which sounds pretty good.

Unless you dig a little deeper, starting with expenses. Farming in Atlantic Canada is getting more expensive, and expenses are increasing much faster than revenues. The sector actually loses money in some years, and the overall trends are getting worse. So we've seen dramatic decreases in the number of farmers and an aging farming population. Clearly, farming has become unviable for many farmers.

A number of other trends in farming are comparably troubling. One area policy-makers and politicians have mostly ignored is the web of human and social relations on which farming depends. Although farms are often run by single families they are stitched into the fabric of rural community life. But as rural communities are “developed” into suburbs, farms are squeezed out. As we shift from community-building informal trade to a formalized market economy we lose a certain community vitality, not to mention a feeling of trust in one another.

Besides inputs like livestock, seeds, and machinery, farms require a unique mix of human resources. Good farmers become highly skilled accountants, marketers, supervisors, soil technicians, botanists, zoologists, machinists, politicians and community development experts, often all rolled into one person or family. There is a value that can't readily be measured in such knowledge, skill and adaptability.

By any standard, however, farmers are clearly undervalued. Often they work for free. In Kings County, Nova Scotia, researcher Jen Scott asked eight farmers how many hours of free labour they work each year. Scott was amazed to find that an average farm provides nearly \$60,000 worth of free labour a year to feed society.

On the flip side, economic measures tend to ignore the well-being of farmers—their health and happiness. GPI Atlantic's research shows that the more meaningfully a farmer can contribute to the community, the healthier the farmer is; and the healthier the farmer is, the more s/he can contribute.

We have sophisticated systems to assess the depreciation of equipment, but we don't assess the depreciation of land and other natural resources that we absolutely need to feed ourselves. In fact, we often measure environmental destruction as positive economic growth. And we don't even try to measure the depreciation of people.

Financial indicators of the farm crisis

Net income on Atlantic Canadian farms is now hovering around zero.

Clearly, we need to look beyond simple farm revenue to understand how farmers are faring. Five fairly straightforward financial measures provide a more nuanced and accurate view of farming. They include net farm income, expense to income, total debt to net farm income, solvency, and return on investment. Together, these indicators give us a comprehensive look at the financial health of the farming sector. They paint a frightening picture.

The data reveal a sector that has been in financial decline for more than 35 years, with particularly grave results in the last decade. Gross income may have risen, but net income—income after expenses—has fallen steeply, even dipping below zero, which means that farmers are now paying us to eat their food. The farmers' lack of bargaining power, coupled with public demand for the cheapest possible food, drives these losses.

Financial measure #1: net farm income

While total farm cash receipts (revenues) have risen in the past 35 years, net farm income has plummeted. In Nova Scotia, for example, farm revenue went up by 11% but net income crashed downward about 79%. In Prince Edward Island revenues went up 33% as net incomes went down

37%. The graphs in Figures 5-8 show how hard it is for Atlantic Canadian farmers to turn a profit. Net income on Atlantic Canadian farms is now hovering around zero. Farmers have actually lost money in several of the past few years, and their losses are getting worse.

Figure 5

Total Net Farm Income, NS, 1971–2008
(millions of \$2007)

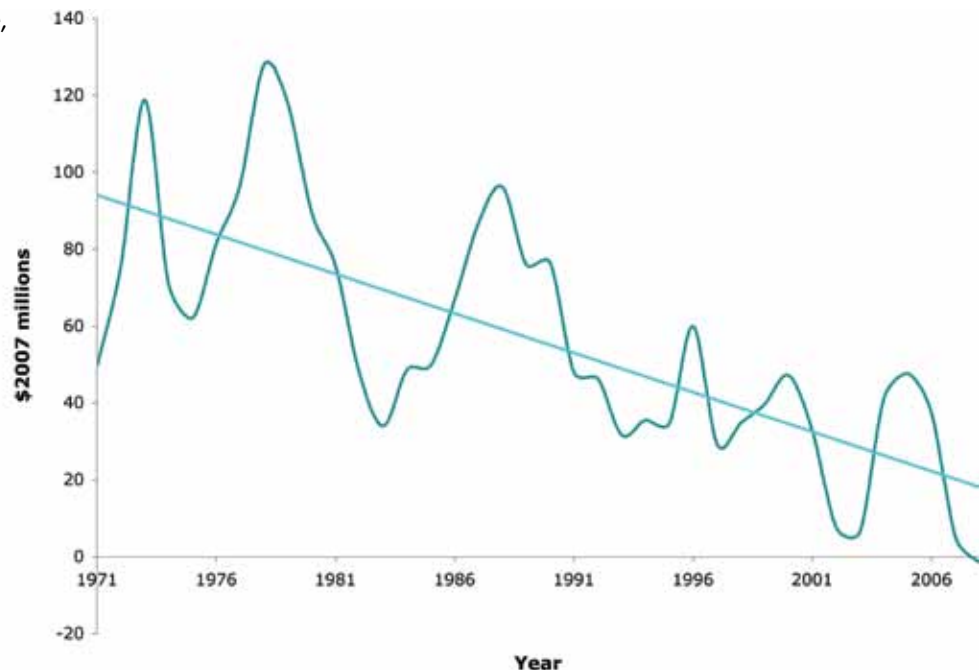


Figure 6

Total Net Farm Income,
NB, 1971–2008
(millions of \$2007)

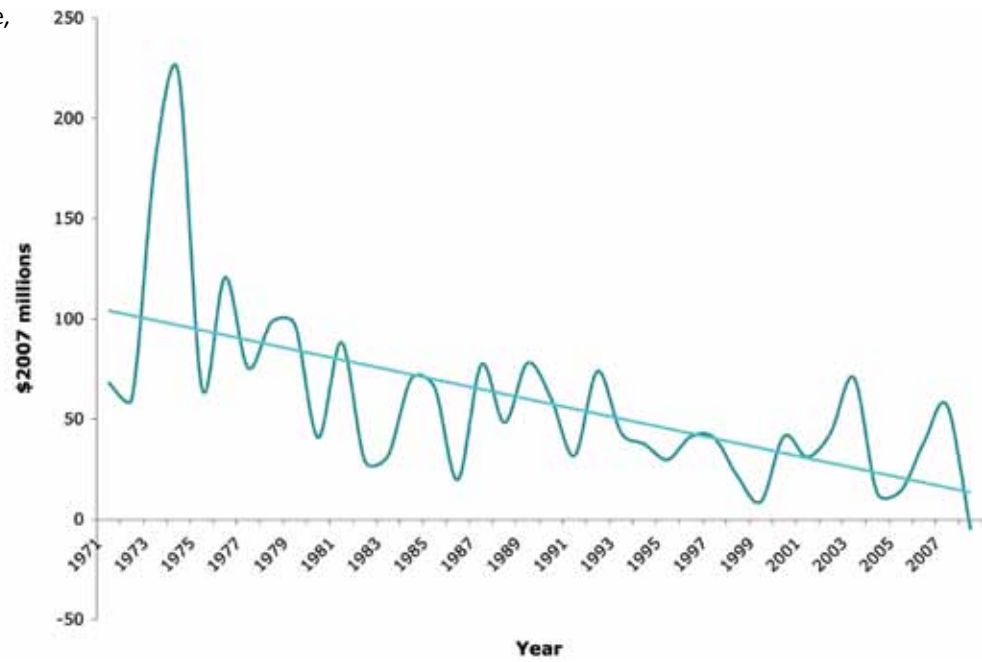


Figure 7

Total Net Farm Income,
PEI, 1971–2008
(millions of \$2007)

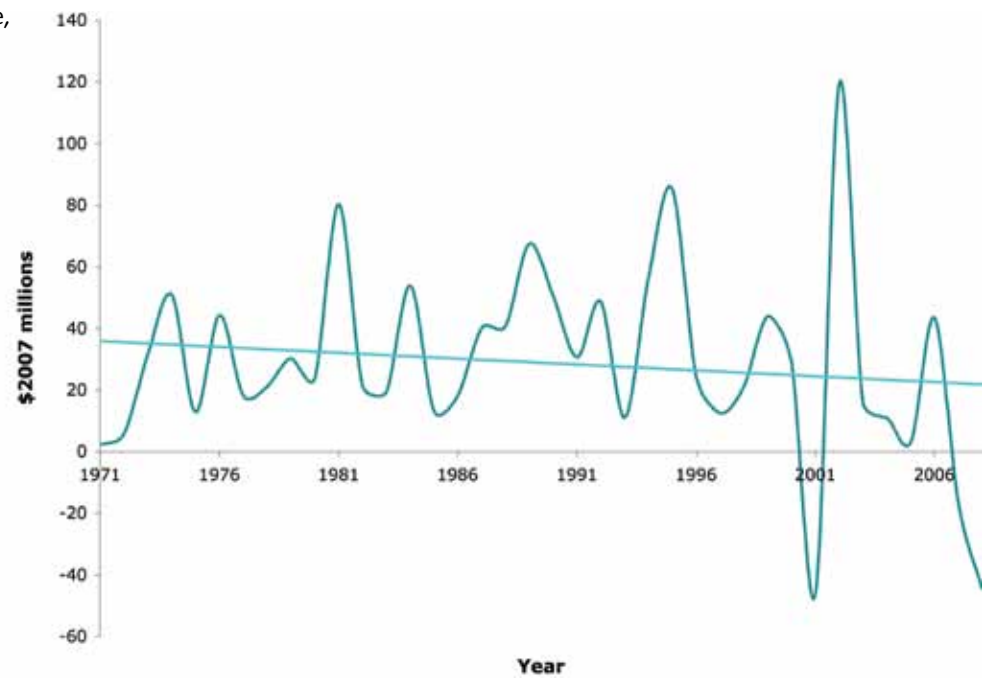
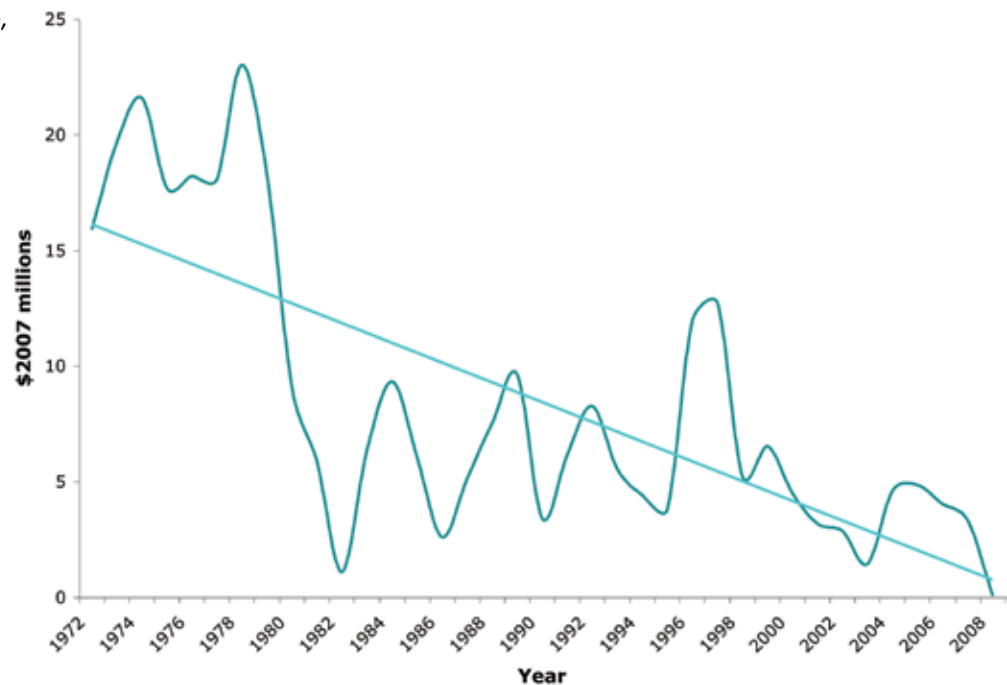


Figure 8

Total Net Farm Income,
NL, 1971–2008
(millions of \$2007)



Between 2001 and 2008, the average farm in Nova Scotia made a net income of \$5,805 per annum. The average Newfoundland farm made \$5,488, the average PEI farm made \$6,306, and the average New Brunswick farm made \$11,780. No wonder so many farmers have sold their farms and changed careers.

But even those figures are actually inflated because Statistics Canada doesn't count all the expenses. For example, the cost of labour commonly doesn't include the work of the farmer and the farmer's family. If farmers actually paid themselves a reasonable hourly rate for their thousands of hours of labour each year, farm losses would be huge.

Financial measure #2: expense to income ratio

If we look at farmers' expenses compared to the income they earn, we get an idea of how risky farming is. Farmers with modest profits and massive expenses take on enormous financial risk for their livelihood.

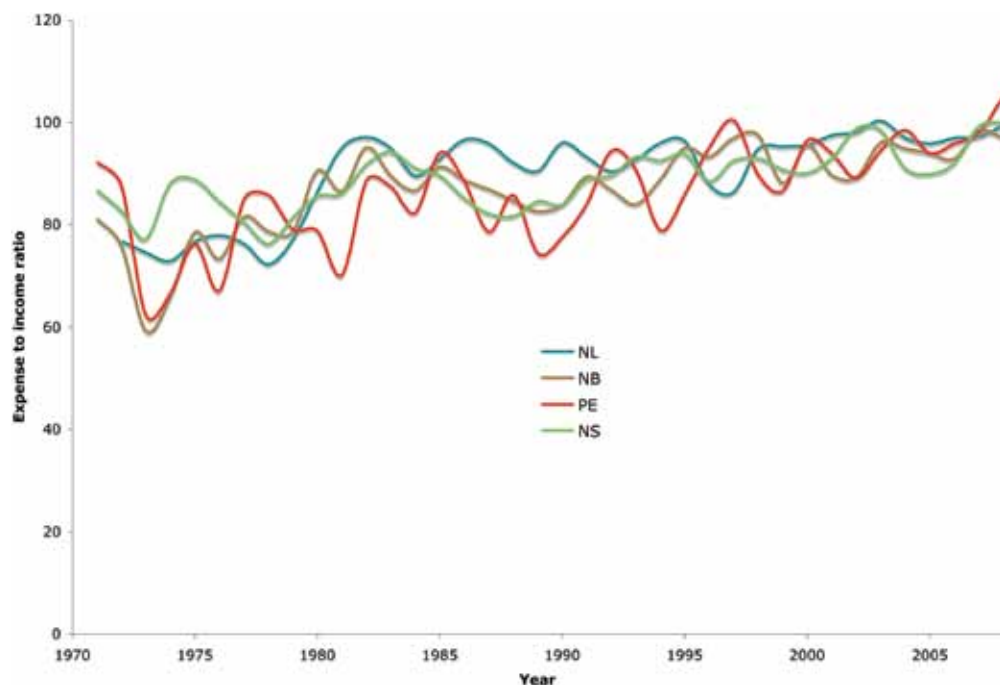
The expense to income ratio is calculated by dividing total farm operating expenses and depreciation by total farm cash receipts. The higher the ratio, the narrower the farmers' margins, and the more risky farming is. A healthy farming sector should have an expense to income ratio of less than 80%. That ratio shows enough financial stability to survive in adversity, to deal with bad weather, pests and diseases, and collapses in commodity prices.

All four Atlantic Canadian provinces have suffered large increases in this ratio since 1972. Newfoundland had an increase of 22%, from a relative healthy 77% to a red alert 99%. PEI's expense to income ratio tends to fluctuate more than the other provinces, so it's not surprising that its current rate is 105%, meaning PEI farmers are losing money.

Every Atlantic province is now well over the safe 80% mark. Nova Scotia and PEI are over 100% and Newfoundland and New Brunswick are close to it. This is a major change even from 1999, when all four provinces were under 95%. Over the long term, this level of risk is unsustainable.

Figure 9

Expense to
Income Ratio (%),
NL, PEI, NS,
and NB Farms,
1971–2008



Financial measure #3: total debt to net farm income ratio

In recent years, many farmers have taken out mortgages on farms that were already paid for, just to pay the bills and keep the farm going. This is a result of rising farm expenses and falling farm incomes. In some years, as we have seen, net income has sunk below zero, meaning that expenses are greater than revenues. For example, since 1971 farm debt skyrocketed in PEI, increasing 354%, while at the same time farm income bottomed out.

To understand the burden that debt places on farmers, we use the debt to net farm income ratio. If debt is going up more than income, farmers will have more trouble making their payments. This ratio is calculated by dividing total farm debt by total net income.

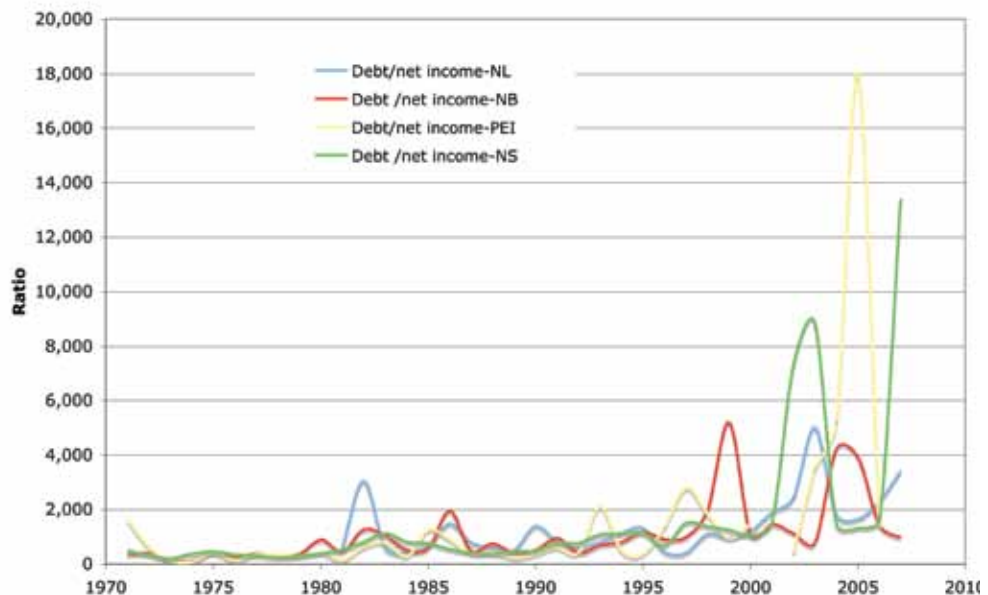
If the ratio of total debt to net farm income is 600:1 (meaning \$600 of debt for every dollar of net income) or less, it's a sign of a healthy farm sector. For the most part, Atlantic Canadian farming's debt

burden was reasonable by this standard in the 1970s and early 1980s. Since then, things have not looked good.

In Nova Scotia, the debt to net income ratio more than doubled in the 1990s, then doubled again in the early 21st century. New Brunswick hit an off-the-chart ratio of 159,581% in 2008. The other provinces could not be measured that year because their net income was negative. Atlantic Canadian farm debt is out of control, as seen in the figure below. Atlantic Canadian farms may in fact be overcapitalized—with too much expensive machinery driving up debt—but they are also not getting the prices they need to make a living. It's not that food is cheap. It's that consumers are not paying its true costs, and farmers are not even getting a fair portion of the low prices that consumers do pay. As a result, farmers have been forced to accept more debt and more risk to bring in less net income.

Figure 10

Debt to
Net Income Ratio,
Atlantic Provinces,
1971-2007



Financial measure #4: solvency ratio

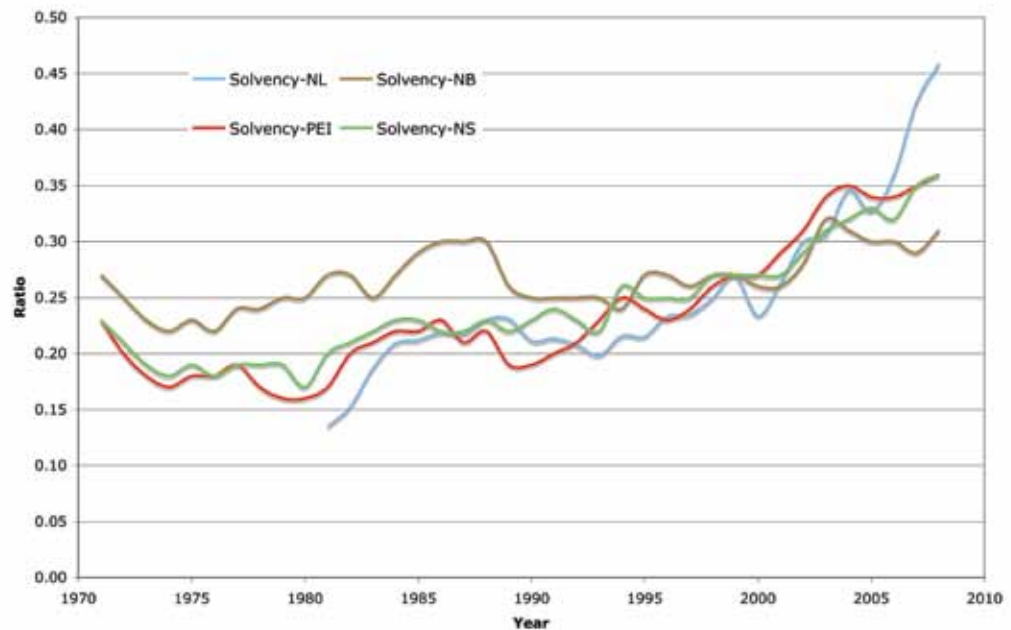
Beyond simply looking at farmers' earnings, it is important to take their assets into consideration. Land and capital equipment have great value to farmers and to the market, and they are more permanent than immediate income, so they give a longer view. If we divide farm debt by farm assets we get a solvency ratio, which is a good assessment of the long-term picture.

Here again, the picture is not pretty. Atlantic Canadian agricultural solvency ratios have climbed steadily since 1971. Solvency ratios began rising around 1980, but really shot up from 1990 on.

Atlantic Canadian farms are simply getting less sustainable. Debt is rising much faster relative to the actual value of farms.

Figure 11

Solvency Ratio,
Atlantic Provinces,
1971-2008





Financial measure #5:
return on investment

...farmers almost never make as big a return on their farms as they could if they sold them and put the money into bonds and stocks.

To compare farming to other industries we can use a standard financial indicator like return on investment, or ROI. This is a simple comparison of profits to investment that anyone with mutual funds will recognize. The ROI calculation shows that farmers almost never make as big a return on their farms as they could if they sold them and put the money into bonds and stocks. In the late 1990s, for instance, trustee pension funds got an average return on investment of 10.2% and the ROI of the food retailing and processing sectors was just over 12%. Only one kind of farm did that well in Atlantic Canada, and that was dairy farming, which earned an average annual ROI of 12.2%.

By comparison, tree fruit and hog farmers in Atlantic Canada consistently earned negative returns on investment. As a result, hog farming has practically been eliminated in this region. In February 2010 Maple Leaf Foods announced that it would be closing its hog killing line in Berwick Nova Scotia. With just half a dozen hog farmers remaining in the area, the plant can no longer find enough hogs for processing. The closure will put 45 people out of work.

No savvy investor would invest in an industry as unrewarding as farming.





Better Statistics: Real Measures of Progress

Clearly, farming involves questions of value beyond what can be measured in dollars, acreage or even soil quality. Financial viability is unquestionably the essential foundation of a sound rural community. But it is only part of the story. To measure real progress, we must move beyond purely financial measure-

ments, and attempt to gauge such more elusive—but more important—considerations such as stewardship and ecological sustainability, the preservation and productivity of human capital and social capital, and the relationship between imports, diversity and farm community viability.



Genuine Progress measure #1: stewardship

If farming is to survive in Atlantic Canada, farmers must care for their land so that it is available to future generations. When researchers interviewed 107 Atlantic Canadian farmers in 2003, the interviewers were impressed with the depth and breadth of knowledge farmers had about such stewardship, and the amount of time, energy and money they devoted to stewardship.

Without necessarily using the term, farmers strive for “ecological efficiency,” meaning that they try to maintain or increase productivity without compromising the ability of the soil, water, and other natural resources to provide ample and nutritious food for future generations. That means minimizing inputs like pesticides and fuel, and outputs like waste and pollution. Organic outputs like manure can be recycled back into the system.

One farm family in PEI, David and Edith Ling, reported spending eight years to build up the humus and fertility of the soil on the family’s land to the point where David called it “living soil.” The Lings grow grain, hogs and beef cattle in Winsloe North. Their soil had to be consistently covered by crop sod or mulch to protect it from erosion. The Lings say manure works just as well as chemical fertilizer and costs less. David also figured out he could grow three

tonnes of dry alfalfa hay on an acre of land for hog feed, versus just 1.5 tonnes of barley. Alfalfa is more efficient, requires less effort, and is easier on the land. The result is more productive land, healthier crops, and healthy livestock.

Ling was just one of many farmers who reported careful efforts to improve the quality of land and soil, and to protect the water from runoff and pollution. Blair Corkum, a PEI farmer, spoke of serving society through such efforts. “Even though farmers own the land, their stewardship affects all of society,” he said. “Even though water is a common resource, farmers bear the cost of protecting it. They maintain wetlands and forested areas as well.”

Another PEI farmer, Justin Rogers, spoke of the added economic benefits to farmers’ efforts. “The tourism industry benefits from the visual pleasure of the rural landscape that farms contribute to,” he said. “The rural landscape is one of the main reasons why tourists come to PEI. It has a dynamic about it—the land looks alive.”

This stewardship serves not only farmers of the future but also communities of the present. The PEI Department of Agriculture calls it “ecological goods and services” (EGS), “the positive environmental benefits that Canadians derive from healthy

Even though water is a common resource, farmers bear the cost of protecting it.

ecosystems, including clean air and water, enhanced biodiversity and other benefits including recreation and an attractive rural landscape.”

Stewardship also involves caring properly for farm animals. The late Jurgen Schroeder, a former pharmacist, landscape engineer and house-builder, became a Nova Scotian farmer, and built a slaughter facility on his farm so that his animals could avoid the stress of being shipped elsewhere to die. He raised a variety of livestock. “The idea of putting them in a truck and shipping them somewhere made me sick,” Schroeder told interviewers.

Rick Degregorio, a cattle and hen man in Cape Breton, measures the health of his farm by the health of his animals. He says the cattle are slow to reach market size, but they like to be outside all year and they do well on rough pasture, including forestland. They like the conifers that give them good browse, bedding material, and cover in the winter. Degregorio says the parasites leave them alone in this environment. “They produce really delicious and healthy beef from just pasture,” he told interviewers. His savings on feed grain compensate for the extra time he spends raising the animals.

Despite the best efforts of farmers to care for animals and land, however, Atlantic Canadian farmland is being worked harder. Since the early 80s, for example, the proportion of farmland being cultivated in PEI (as opposed to being left in hay or pasture) has gone from 57% to 68%, while the proportion used as pastureland fell from 18 to 13%. Cultivated land tends to be uncovered more days of the year, making it more vulnerable to erosion. And the cultivation itself burns off organic matter in the soil.

Atlantic Canada still fares better than the national average when it comes to keeping farmland covered by vegetation and mulch, likely because of high precipitation and hilly land here. As a result, our soils seem to have a reasonably high content for organic matter. Still, in one study “49 percent of the soilsamples that were analysed for land in a potato rotation had an organic matter level that was less than the target,” according to the PEI Department of Agriculture and Forestry.

Genuine Progress measure #2: human capital

Human capital is a measure of how well human beings, in this case farmers, are doing.

If no one cares for the land it will be degraded and our farms will be lost. By the same token, if no one cares for the farmers we will lose them. Human capital is a measure of how well human beings, in this case farmers, are doing. The goal here is to have happy, healthy, well-respected farmers fulfilling their potential and contributing to society in meaningful ways.

There are many ways to look at human health, and many benefits that farms and farmers offer to human health. One way is providing jobs and wages. Wages are a major and increasing expense for farmers, but the flip side is the

employment provided for farmhands, most of whom work full-time.

While wages have increased over the last quarter century, the number of jobs in the sector has actually decreased, with the shortfall in farm labour being made up largely by migrant labourers from developing countries. The number of permanent farm jobs has risen in the past two years, but it is too soon to say whether this represents a long-term trend. As we see in Figures 12-15, the number of Atlantic Canadian farm jobs has trended downward in the last 32 years, except in New Brunswick.

Figure 12

Full- and Part-time
Jobs in Agriculture
and Support Activities
(thousands),
NS, 1976-2008

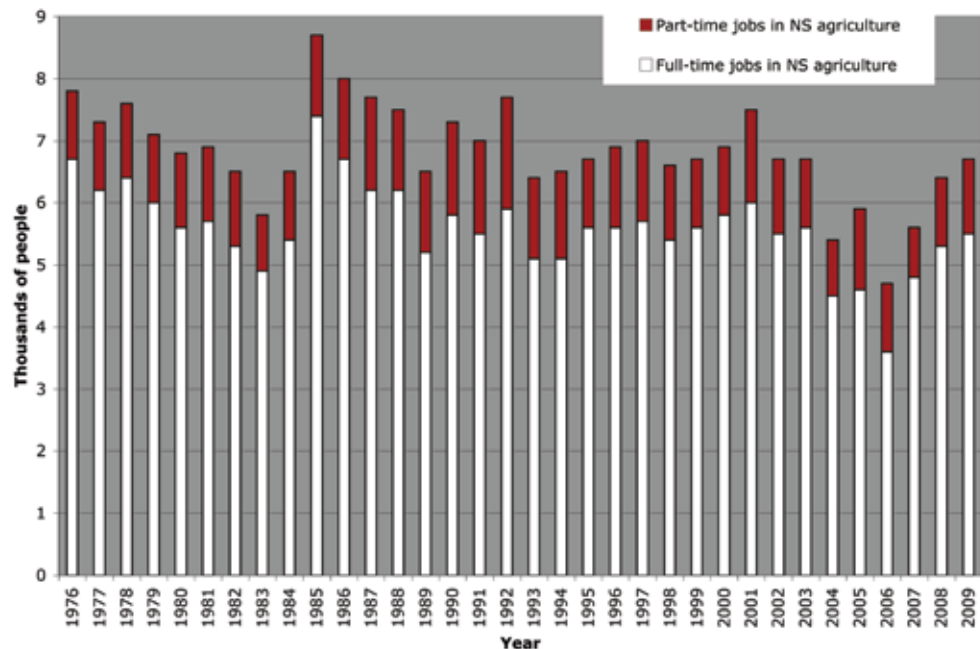


Figure 13

Full- and Part-time
Jobs in Agriculture
and Support Activities
(thousands),
NB, 1976-2008

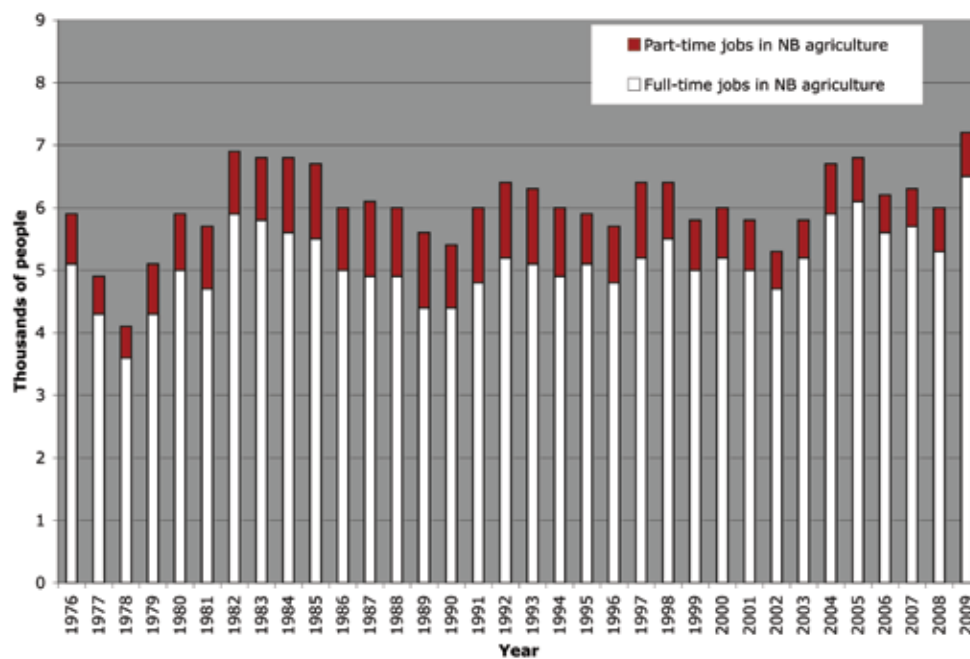


Figure 14

Full- and Part-time
Jobs in Agriculture
and Support Activities
(thousands),
PEI, 1976-2008

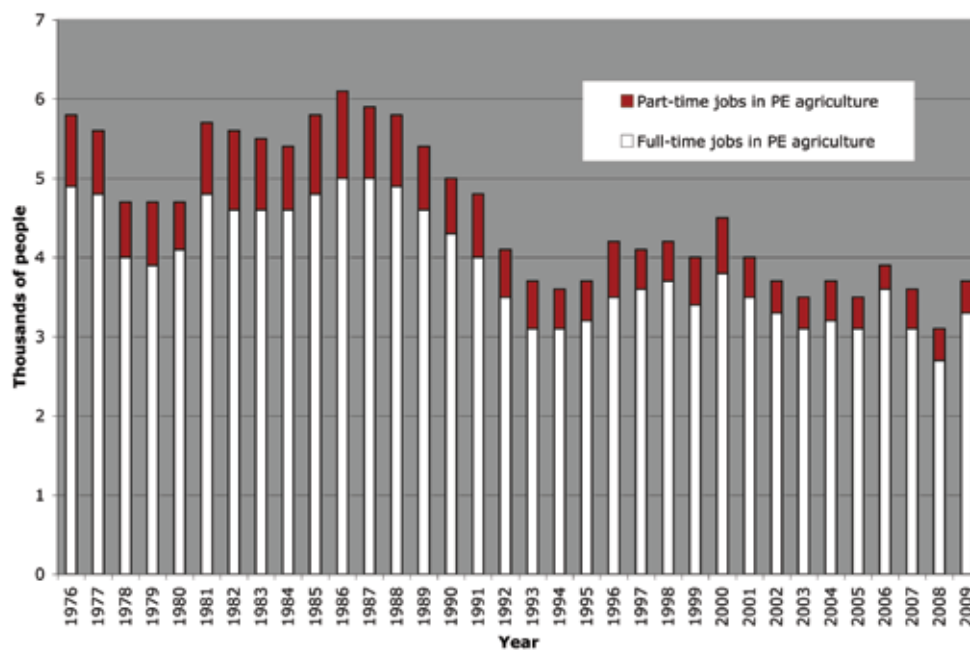
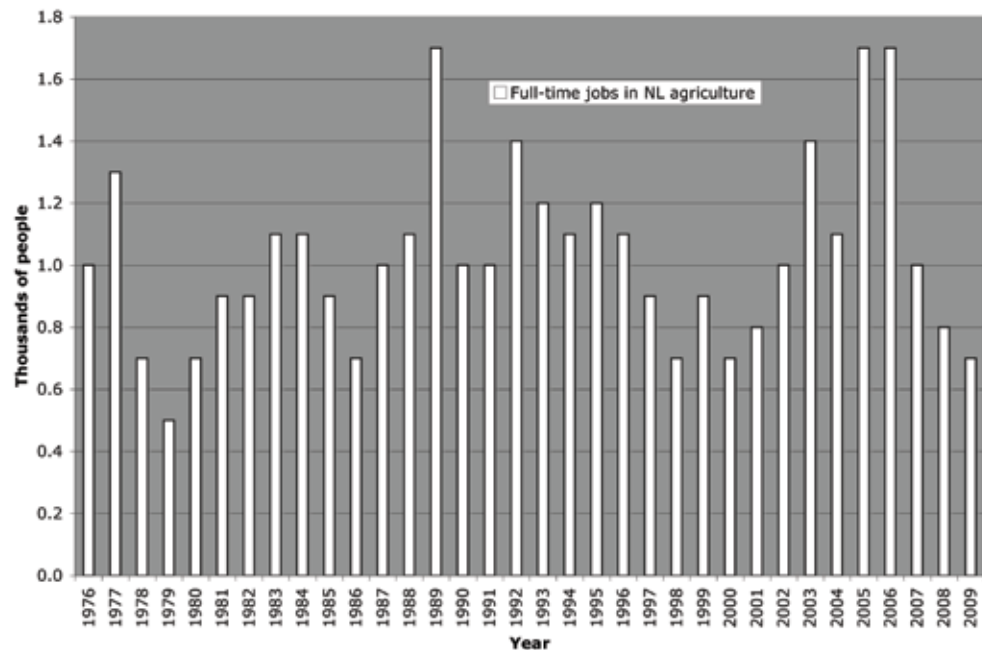


Figure 15

Full- and Part-time
Jobs in Agriculture
and Support Activities
(thousands),
NL, 1976-2008

*Note: Part-time jobs
in agriculture data
were suppressed
in NL.*



...the average
Canadian farmer
works about
11 hours a day,
seven days a
week.

Farmers themselves are some of the hardest working people on the planet. Researchers Martz and Brueckner looked carefully at how farmers used their time in 2003. They found that farmers have half as much time for leisure as the average person, and only a third as much time for socializing. They spend their time working; the average Canadian farmer works about 11 hours a day, seven days a week. Many worked off-farm jobs on top of farm work to cover the bills.

This kind of workload is beyond challenging; StatsCan has found it correlated with high rates of depression and weight gain. It's just not healthy—and farmers know it. They told researchers that the two things they desired most were more leisure and less stress.

The data are not painting a pretty picture here. Farmers are badly overworked and underpaid, unable to retain hired help, and obliged to watch their children migrate to the cities. Besides the obvious financial disincentives of farming, young people

are often turned off by the workload and the lack of benefits like health care, pensions and daycare. Daycare spots are far fewer in rural areas, even relative to population density—but some form of child care is essential for young parents who want to farm.

Janice Whalen, a hog farmer and conference organizer in Vernon River, PEI spoke about the lack of benefits to her work. "As a farmer," she told interviewers, "there is no maternity leave or any other benefits, no EI, no way to provide the family with a safety net."

For those who keep farming despite being overworked and underpaid there is another problem of perception. Sociological research shows us that a human being must not only work to find contentment. That work must also be useful to society. When farmers feel needed and appreciated, they are more emotionally healthy and more productive.

But farmers don't feel appreciated. In 2000 farmers in Kings County were

...a population
that has never
known hunger
takes food
for granted...

asked to rank their status in society. Every one of them said it was low. They felt that a population that has never known hunger takes food for granted, and sees farmers as marginal figures always looking for handouts.

Compare that to how society actually sees farmers: GPI Atlantic surveyed Kings County residents two years later. Fully 90% of respondents thought farming was very important, and 82% had a high level of respect for farmers.

Farmers aren't getting that message. When researchers Martz and Brueckner interviewed farmers across the country in 2003 they said they didn't get much support from urbanites. Farmers felt that city folks want cheap food on demand and aren't committed to buying local.

That same year farmers said they were worried that the public didn't know much about farming anymore, that as consumers we are disconnected from the sources of our food, that we don't think past the grocery store. There have been increasingly encouraging signs since 2003, however, with some consumers making serious efforts to support local farmers and buy locally-produced food. It is clear that it will take some time and effort before non-farmers will really understand farming, and relate to farmers in an authentic and mutually-respectful way—but these relationships will bring multiple rewards for both sides.

Genuine Progress measure #3: social capital

Farming, like any business, is dependent on good relationships. Trust is the soil, reciprocity the seeds, good communication the water, and cooperation the sun that those relationships need to grow into complex social networks in rural Atlantic Canada.

Social networks help farmers improve their productivity, efficiency, and ability to market their produce at fair prices. Being socially connected is also good for health. Sociological research shows us that such connections strengthen immunity and enhance healthy behaviour patterns. Good social relations and support from family, friends and community have been shown to reduce the incidence of premature death, depression, mental illness, and chronic disability. Such relationships reduce adverse responses to stress and improve medical outcomes in high-risk populations.

In 2003 Atlantic Canadian farmers told researchers that they had well

developed social relationships, based on interdependence, and a sense of cooperation to achieve common goals. As a PEI store clerk told interviewers, "We need each other."

Statistics Canada conducted a large study that same year called the General Social Survey, which confirmed what the store clerk said. Most people in rural areas told researchers that they knew most of the people in their neighbourhoods. A mere 17% of urban dwellers could say the same. Knowing one's neighbours is of course essential to cooperating with them.

One of the most tangible benefits to cooperation is the formation of formal and informal farming cooperatives. Helen Arenburg of the Nova Scotia Fruit Growers' Association lists face-to-face contact among farmers as a key reason the co-op has succeeded for many years. "There is a group of growers that meet for coffee quite a few mornings of the week," she told interviewers. "They discuss their

Knowing
one's neighbours
is of course
essential to
cooperating
with them.

problems and solutions together. One grower built a tree-planter, which was used on many farms in Kings County for several summers in a row. If one guy has seen a bug in his orchard, then the other guys know they should go look." These farmers don't feel that they are in competition and would rather help each other out, and mentor younger farmers, than fight for market share. Cooperatives can allow small producers the chance to sell their products to large buyers.

One Nova Scotian dairy farmer near Truro, Duncan McCurdy, guesses that 80% of Nova Scotia milk is sold through the province's two co-operative dairies, Farmers and Scotsburn. McCurdy's neighbour, Jim Burrows, says the co-ops strike a good balance between competition and cooperation.

Allison Weeks, a 25-year veteran of the PEI Department of Agriculture and Forestry, told interviewers that potato farmers have found greater power and influence through participation in the Potato Marketing Board. "At the time of the potato wart crisis," he said, "the Board was the voice for the potato industry, representing the producers, and presenting a united message and negotiating body with all the other players."


Other farmers have worked together to market their products locally. According to Kent Coates, vice-president of the Really Local Harvest Co-op in south-east

New Brunswick, "The mission of our coop is to ensure a link between you [the customer] and our farmers to highlight the treasures of our land through the Dieppe Market and various other farm stands."

The strength of such co-ops is threatened by the growing concentration in the farming sector. Some farmers and agri-food companies are acquiring more land in an effort to achieve economies of scale and greater efficiency and profits. This trend is prominent in the dairy and poultry sectors. Only a few farming operations can benefit from such a strategy while the rest—and their communities—suffer from decreased social capital.

In 2003 many farmers said they were already worried about the decline of farming culture. Statistics on membership with farming-related social clubs, like the Women's Institute and 4H, support the farmers' concerns. There has been a sharp drop in the number of branches and members of WI since the 1950s, including a 40% drop in PEI between 1992 and 2003 alone. 4H membership has dropped a third in PEI since 1984.

These trends are disconcerting because these farm clubs are how farmers socialize their children into farming culture. Farm clubs and societies are where future farmers are formed.



Atlantic Canadian
food retailers
actually buy most
of their food
from outside
the region,
especially meat
and produce.

Genuine Progress measure #4:

imports, diversity and
farm community viability

Looking closely at the state of farming in Atlantic Canada we have seen that there are enormous stresses on the sector. It is important then to understand how well farming can recover from these stresses, and find ways to thrive in the long term. This is essentially a measure of resilience, the “bounce back” factor.

To survive external stress any system needs to be diverse. One indication of social resilience is actually crop diversity, which varies throughout Atlantic Canada, with PEI’s farms being the least diverse. PEI agriculture is heavily focused on potatoes, which account for more than half of farm revenues on the island. In 1992 PEI assigned a taskforce to consider how the potato became so dominant. The taskforce pointed out that PEI farms consolidated faster than in any other Canadian province, and that smaller may actually be better when it comes to maintaining crop diversity.

The specialization on PEI farms has its advantages. PEI farmers know potatoes and with the sheer quantity they produce they gain from the economies of scale. They can produce potatoes more cheaply than other vegetable farmers. On the downside, the entire province is vulnerable to the unpredictable fluctuations of world potato prices and diseases.

Diversity is also vital to communities. A self-reliant community with diverse products, people and ideas—a community working to meet its own needs, create its own identity, build on its own strengths, and use its resources optimally—is well-positioned to adapt to change.

Communities that are not economically self-reliant become dependent on foreign markets. They are vulnerable to shifting trade patterns, commodity price fluctuations, crop diseases, political and natural upheavals, supply disruptions due to fuel shortages and rising transportation costs, or other unpredictable changes outside the region’s control. Such vulnerabilities can undermine community resilience, stability, and viability.

Self-reliance is characterized by considerable use of local resources. A self-reliant community, for instance, has locally produced food on retail shelves. As fossil fuels become more difficult and more expensive to obtain, the supply of imported foods will become more unreliable and insecure. Communities that have focused on local food will have major advantages over ones reliant on imports.

Tables 1 and 2 show that Atlantic Canadian food retailers actually buy most of their food from outside the region, especially meat and produce. It is worth noting, however, that the locally-owned co-operative organization, Co-op Atlantic, has a distinctly higher percentage of locally-produced items.

Even what we call “Atlantic Canada produced food” often travels great distances. Food processed or packed in the region is considered local even if the actual food was imported. Conversely, food grown here may be shipped elsewhere, processed, and shipped back or shipped elsewhere for sale. We can’t honestly call that self-reliance.

Table 1

Portion of Grocery Retailers' Purchases from Atlantic Canadian Suppliers (Growers and Processors)	Grocery Department	Average of leading retailers including Superstore, Sobeys, Co-op Atlantic (%)	Co-op Atlantic (%)
	Meat	23	63
	Produce	18	32
	Dairy	50	54
	Seafood	40	61
	Frozen	47	57
	Bakery	61	75
	Deli	36	75
	Packaged Goods	10	22

Table 2

Portion and Dollar Amount (\$2007) of Grocery Retailers' Purchases from Atlantic Canadian Suppliers (Growers and Processors)	Total For Canadian Council of Grocery Distributors Stores		
	Department	\$ Value of Purchases from Atlantic Canada Vendors	Atlantic Canada Vendor Purchases as % of Total
	Dairy	\$229,724,932	49.7%
	Meat	\$128,576,277	22.6%
	Produce	\$65,664,706	17.7%
	Seafood	\$25,708,641	40.0%
	Deli/HMR	\$34,742,775	35.3%
	Bakery	\$92,668,146	60.9%
	Frozen	\$91,113,354	47.3%
	Packaged Goods	\$126,797,873	9.7%
	Total	\$794,996,704	24.7%

Nova Scotia farms could be supplying all of the beef that Nova Scotians eat, creating wealth and jobs at the same time.

The pie chart in Figure 16 shows the proportion of Nova Scotia food dollars spent that Nova Scotia farms earned in 2008—about 13%. Farms in Nova Scotia earned the equivalent of 8% of total food spending, for supply managed products (dairy, poultry, & eggs). The lion's share of the local food Nova Scotians are eating are from the supply-managed farms. Non-supply managed sectors such as vegetables and fruit, and red meat earned the equivalent of 3% and 2% of the food dollar, respectively. Most of the food dollar—87%—is not going to Nova Scotia farms. In 1997, 17% of the food dollar went to Nova Scotia farms, which indicates that less and less Nova Scotian money is reaching Nova Scotian farms, even as Nova Scotia's farm sector diversifies and the number of farmers' markets increases. Hopefully data for 2009 and 2010 will show a reversal in this trend.

In Nova Scotia, imports of beef are close to 90% of consumption. Nova

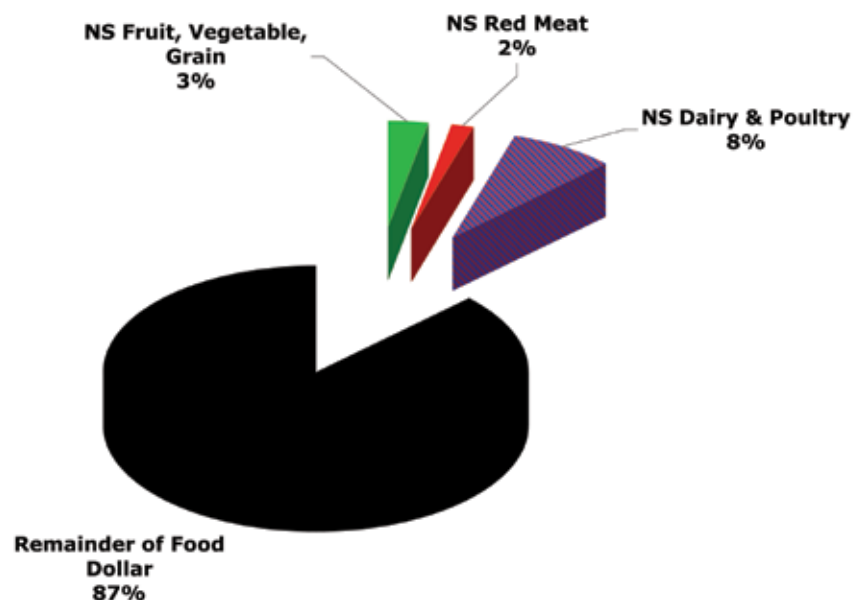
Scotia farms could be supplying all of the beef that Nova Scotians eat, creating wealth and jobs at the same time.

We have become dependent not on ourselves but on the cheap labour on farms abroad. With a focus on financials we have failed to account for the "hidden" costs of food imports. Instead of eating fresh local food we're eating long-distance substitutes that are kept "fresh" with preservatives and chemicals.

An additional problem for Atlantic farmers is the fact that Quebec farmers are subsidized more heavily than ours. Those subsidies allow Quebec farmers to sell their products—including pork, beef, vegetables and fruit—in the Atlantic Canadian market for less than our farmers can. There is nothing inherently wrong with subsidies, but they should not be allowed to tilt the inter-provincial playing field.

Figure 16

Food Spending
Relative to
Farm Cash Receipts,
Nova Scotia, 2008



	Dollar Amount	% of Total Spending
Total NS Food Spending	\$2,647,988,490	100%
NS Farm Crop Receipts	\$82,165,000	3%
NS Farm Livestock Receipts	\$43,637,000	2%
NS Farm Supply-Managed Receipts	\$224,426,000	8%
Remainder of Food Dollar	\$2,379,925,490	87%



The Gathering Crisis

Farming has been in a long slow decline in our region, and elsewhere, for a century or more. Innumerable farms have already vanished. Once-thriving agricultural communities have reverted to woodlands, their production replaced by the output of factory farms and—far more significantly—imported foods.

Ironically, the abandonment of farmland and the growing market for organic food provide an opportunity for Atlantic Canada. We have an extensive inventory of once-productive farmland that has never been subjected to applications of chemical pesticides and fertilizers, and could be brought back into production to serve a premium market both locally and farther afield.

That same farmland is an unexpected resource in terms of food security. The job of our generation, says Dr. Ralph Martin of the Nova Scotia Agricultural College, is “to keep the farms in operation until the rising price of oil makes them profitable once again.”

We're losing farms

As we have seen, farming in Atlantic Canada is in crisis. It is very difficult to make a living from farming. We are losing farms, the farm population, and the communities they support.

Tables 3 to 6 show that the number of farms and the land area of farms have both been in decline for at least 85 years, in all four provinces. Many farms have

amalgamated, resulting in fewer, bigger farms and shrinking rural communities.

Tom Van Milligan, a former hog farmer who had to shut his Lunenburg operation down after three decades of farming, shakes his head at this trend. "Would you rather have a neighbour or your neighbour's land?" he asks. Tom says he would choose the neighbour.

Table 3

**NS Farm
and Crop Area
Number of Farms
(1921–2006)**

Year	Number of Farms	Area in farms (ha)	Land in crops (ha)
1921	47,432	1,911,553	278,448
1931	39,444	1,740,970	252,408
1941	32,977	1,544,542	233,072
1951	23,515	1,284,347	193,221
1956	21,075	1,123,262	168,444
1961	12,518	902,609	133,188
1966	9,621	749,435	127,129
1971	6,008	537,777	98,322
1976	5,434	493,293	111,667
1981	5,045	466,023	112,782
1986	4,283	416,507	109,512
1991	3,980	397,031	106,231
1996	4,453	427,324	112,364
2001	3,923	407,046	119,219
2006	3,795	403,044	116,609

Table 4

PEI Farm and Crop Area Number of Farms (1921–2006)	Year	Number of Farms	Area in farms (ha)	Land in crops (ha)
	1921	13,701	492,293	186,690
	1931	12,865	482,062	201,175
	1941	12,230	473,024	190,344
	1951	10,137	443,254	172,481
	1956	9,432	431,178	169,603
	1961	7,335	388,562	158,277
	1966	6,357	375,135	161,216
	1971	4,543	313,482	142,200
	1976	3,677	295,839	158,448
	1981	3,154	283,024	158,280
	1986	2,833	272,433	156,498
	1991	2,361	258,875	154,103
	1996	2,217	265,217	170,361
	2001	1,845	261,482	175,488
	2006	1,700	250,859	171,296

Table 5

NB Farm and Crop Area Number of Farms (1921–2006)	Year	Number of Farms	Area in farms (ha)	Land in crops (ha)
	1921	36,655	1,727,829	366,518
	1931	34,025	1,680,091	391,873
	1941	31,889	1,604,218	350,423
	1951	26,431	1,404,354	287,993
	1956	22,116	1,206,549	249,804
	1961	11,786	890,177	195,280
	1966	8,706	733,167	173,137
	1971	5,485	541,928	130,434
	1976	4,551	466,780	137,069
	1981	4,063	437,888	130,526
	1986	3,554	408,893	129,475
	1991	3,252	375,631	122,247
	1996	3,405	386,019	135,008
	2001	3,034	388,053	148,883
	2006	2,776	395,228	151,996

Table 6

**NL Farm
and Crop Area
Number of Farms
(1921–2006)**

Year	Number of Farms	Area in farms (ha)	Land in crops (ha)
1951	3,626	34,414	8,203
1956	2,387	29,062	6,462
1961	1,752	22,080	5,228
1966	1,709	20,037	5,022
1971	1,042	25,375	3,535
1976	878	32,398	4,301
1981	679	33,454	4,744
1986	651	36,561	4,876
1991	725	47,353	6,274
1996	742	43,836	7,180
2001	643	40,578	8,435
2006	558	36,195	9,175

We're losing farmers

Not surprisingly, the farm population in Atlantic Canada has plummeted. In the 1930s, nearly half of Nova Scotians made their livings as farmers. In 2006, only 1% did so. In the same period, the proportion of farmers in the population of PEI fell from 63% to 4%. In New Brunswick it fell from 44% to 1%. In Newfoundland, the farming population has declined from 5.5% in 1951 to 0.2% in 2006.

Figure 17

NS Farm Population
1931-2006

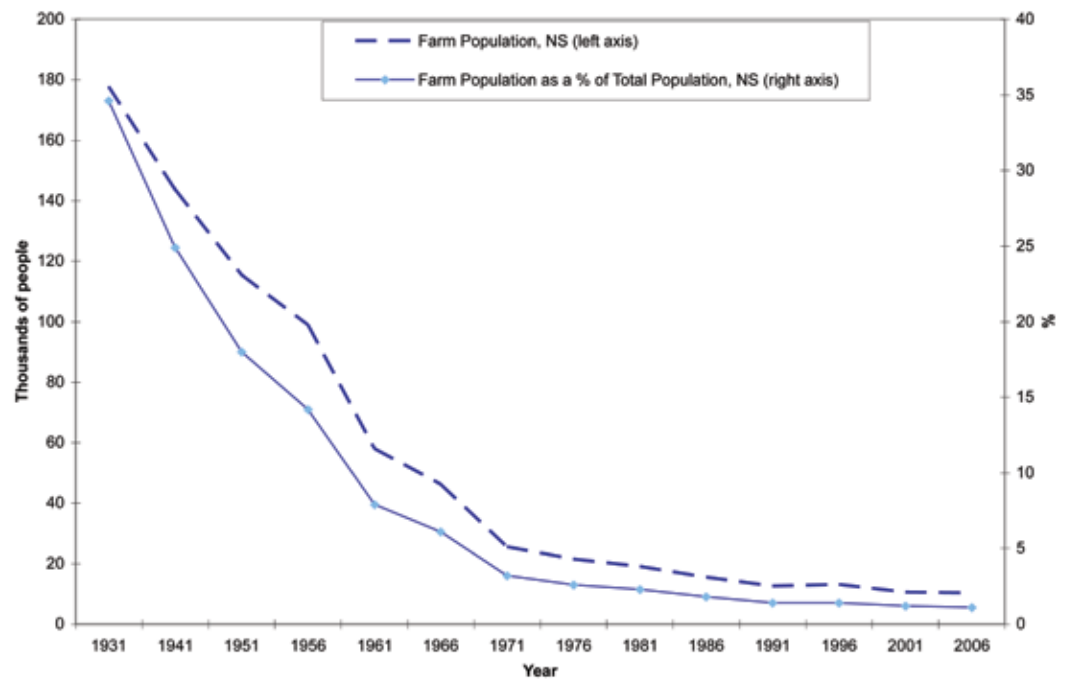


Figure 18

**NB Farm Population
1931-2006**

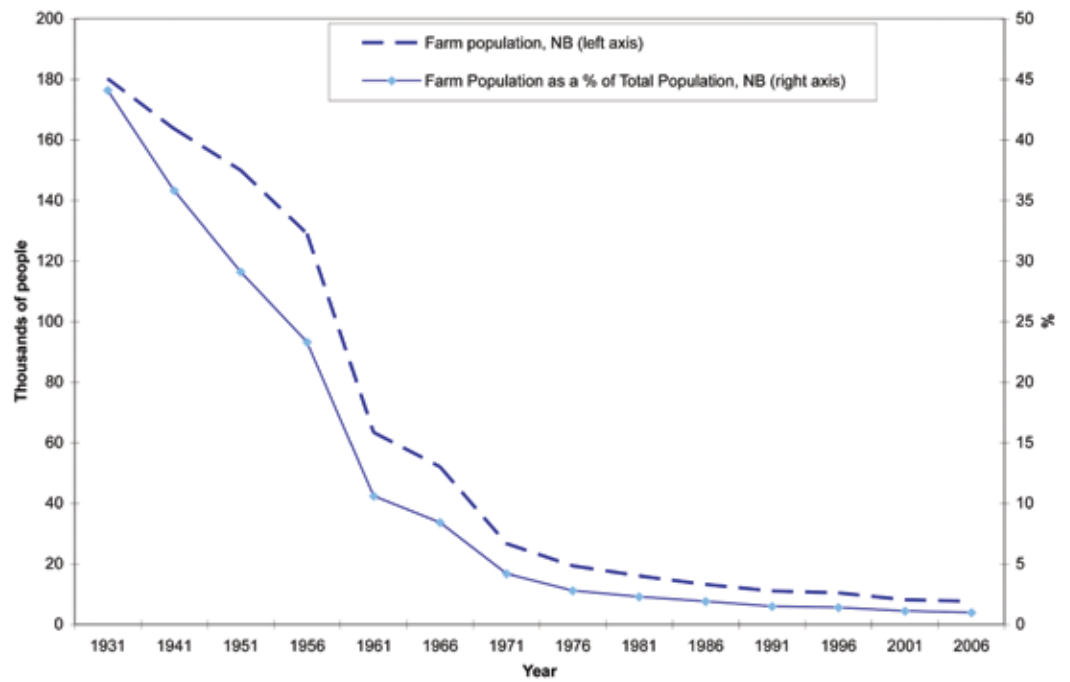


Figure 19

**PEI Farm Population
1931-2006**

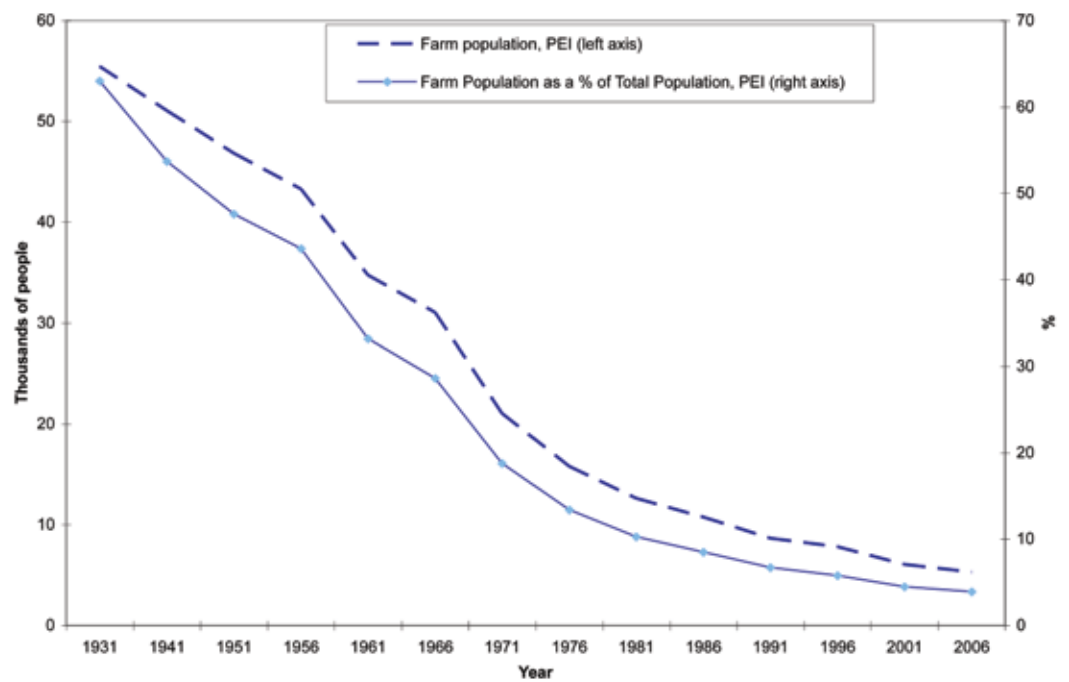


Figure 20

**NL Farm Population
1931-2006**

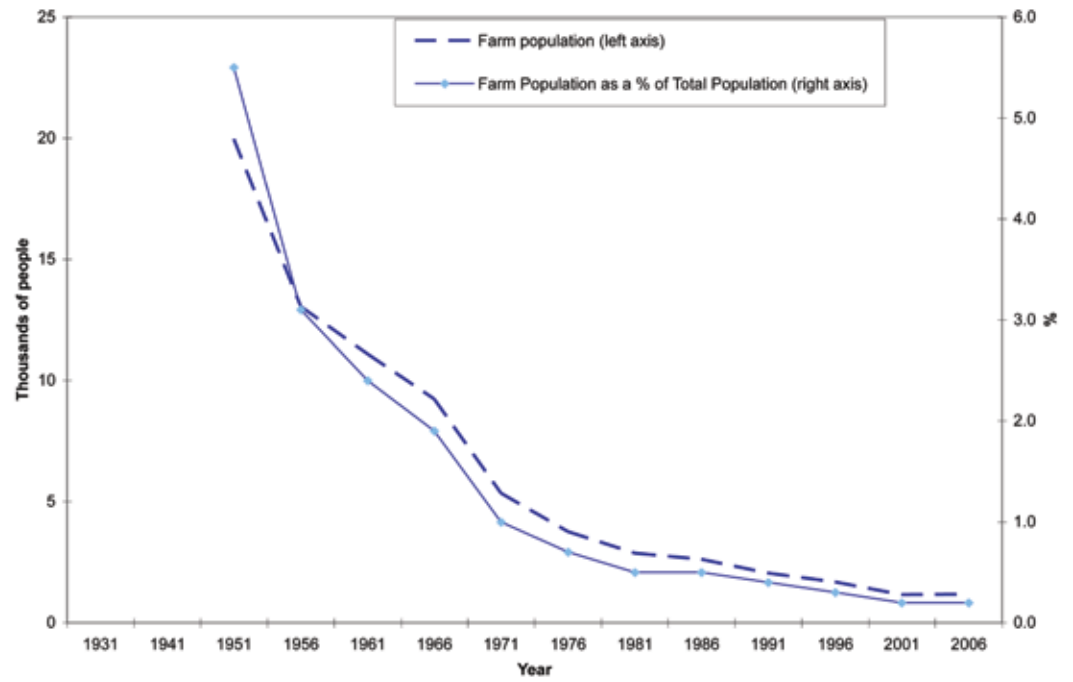
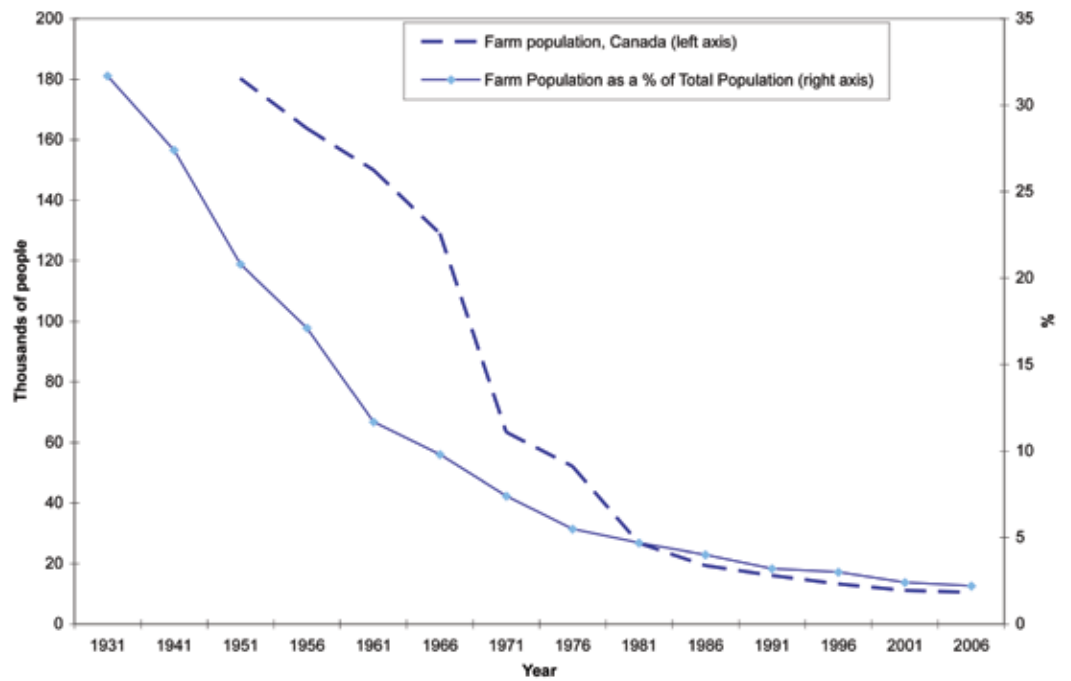


Figure 21

**Canadian
Farm Population
1931-2006**



Aging Out

We are also losing the most essential survival skill we have, the ability to feed ourselves.

Not every farmer who leaves the profession is forced out for economic reasons. Some retire, and some die. But today, those farmers are not being replaced. Fewer and fewer children are growing up on farms, and fewer farm kids are coming up to take the older farmers' place. As a result we have a statistically aging farm population and a decline in the proportion of younger farmers.

Across Atlantic Canada the portion of farmers under 35 is at an all-time low, as can be seen in the figures below. Just 6% of Newfoundland farmers are under 35, less than half the number only 15 years ago. This drop is too steep to be explained by an aging population. At the other end of the calendar, 44% of New Brunswick farm operators are 55 or older.

In Nova Scotia the number of new entrants into farming from 2003 to 2006 fell by about 30% compared to the 2000-03 period. Because young people are not learning to farm, we are suffering a significant loss of intellectual capital with respect to agriculture. We are also losing the most essential survival skill we

have, the ability to feed ourselves. The weight of sustaining a traditional way of life thus falls heavily on older farmers as the younger generation declines to learn the complex combination of skills and commitment necessary for the job.

That leaves older farmers in a difficult situation: who will they leave the family farm to? That question has been answered with a deafening silence. No one has given them a good answer, not the universities, not governments, not the people who eat the food, and not even the agricultural industry that relies on farmers for survival: the slaughterhouses, retailers, veterinarians, and other suppliers and processors of farm goods.

Without intervention, the situation will get worse. Laurence Nason, the former president of the Nova Scotia Federation of Agriculture, has predicted a very serious shortage of farmers. In 2003, noting that the average age of Nova Scotia farmers at the time was 57-years, he predicted that a large majority—between 60 and 70%—would retire within a single decade. And then what?

Figure 22

Number and Proportion of Farm Operators in Each Age Category, NS

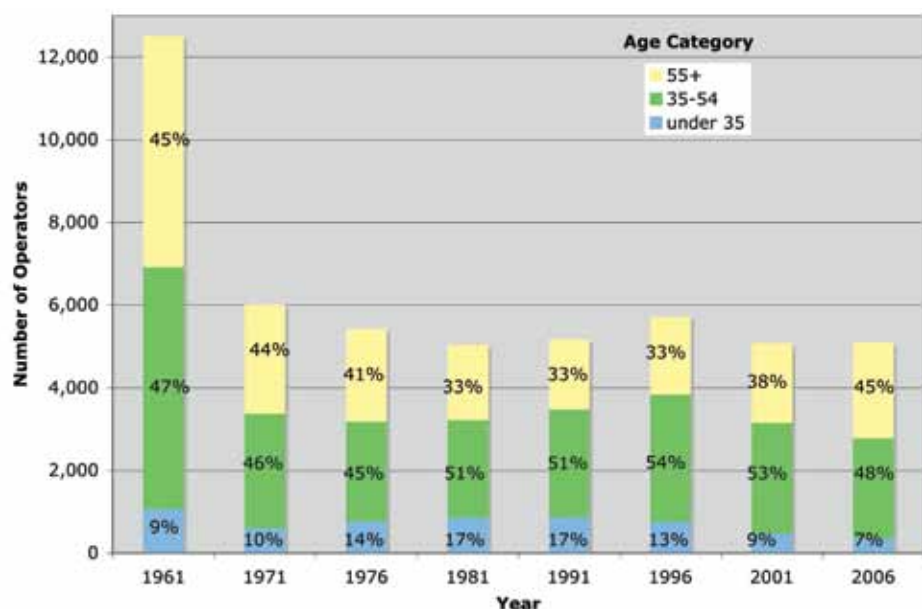


Figure 23

Number and Proportion of Farm Operators in Each Age Category, NB

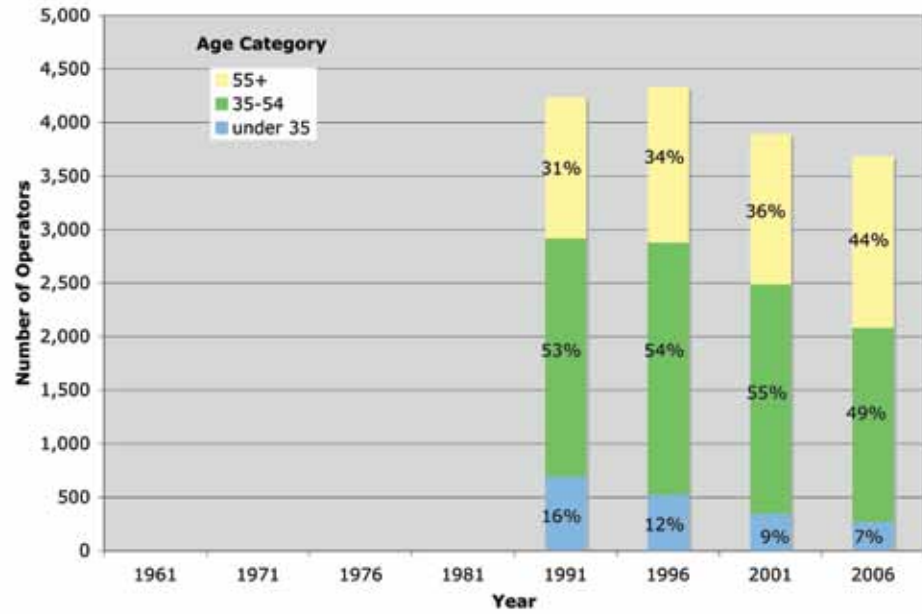


Figure 24

Number and Proportion of Farm Operators in Each Age Category, PEI

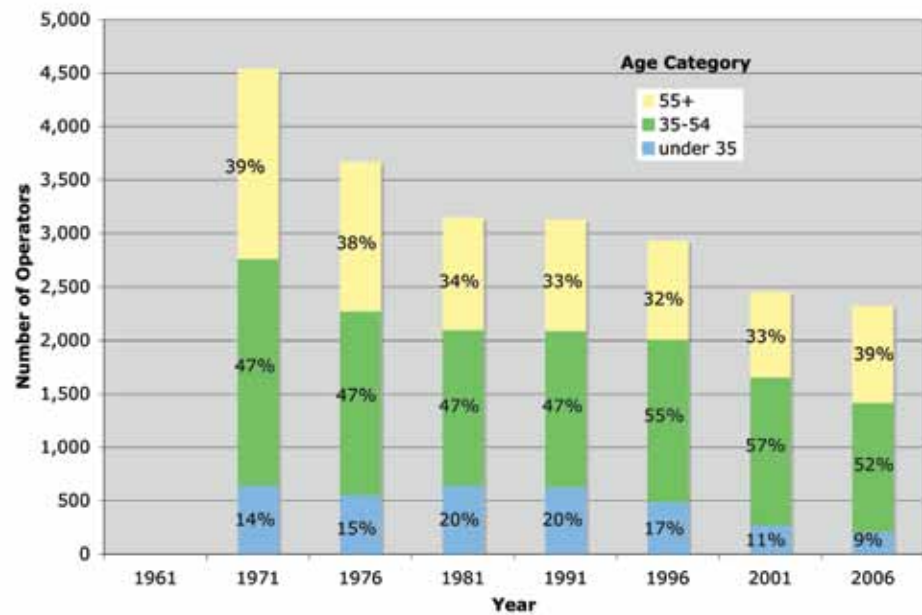
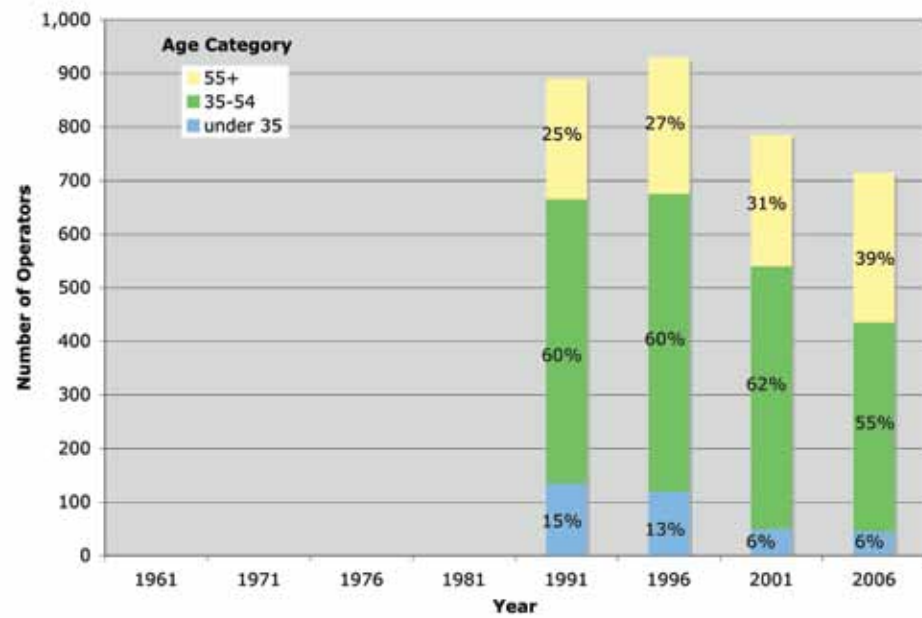
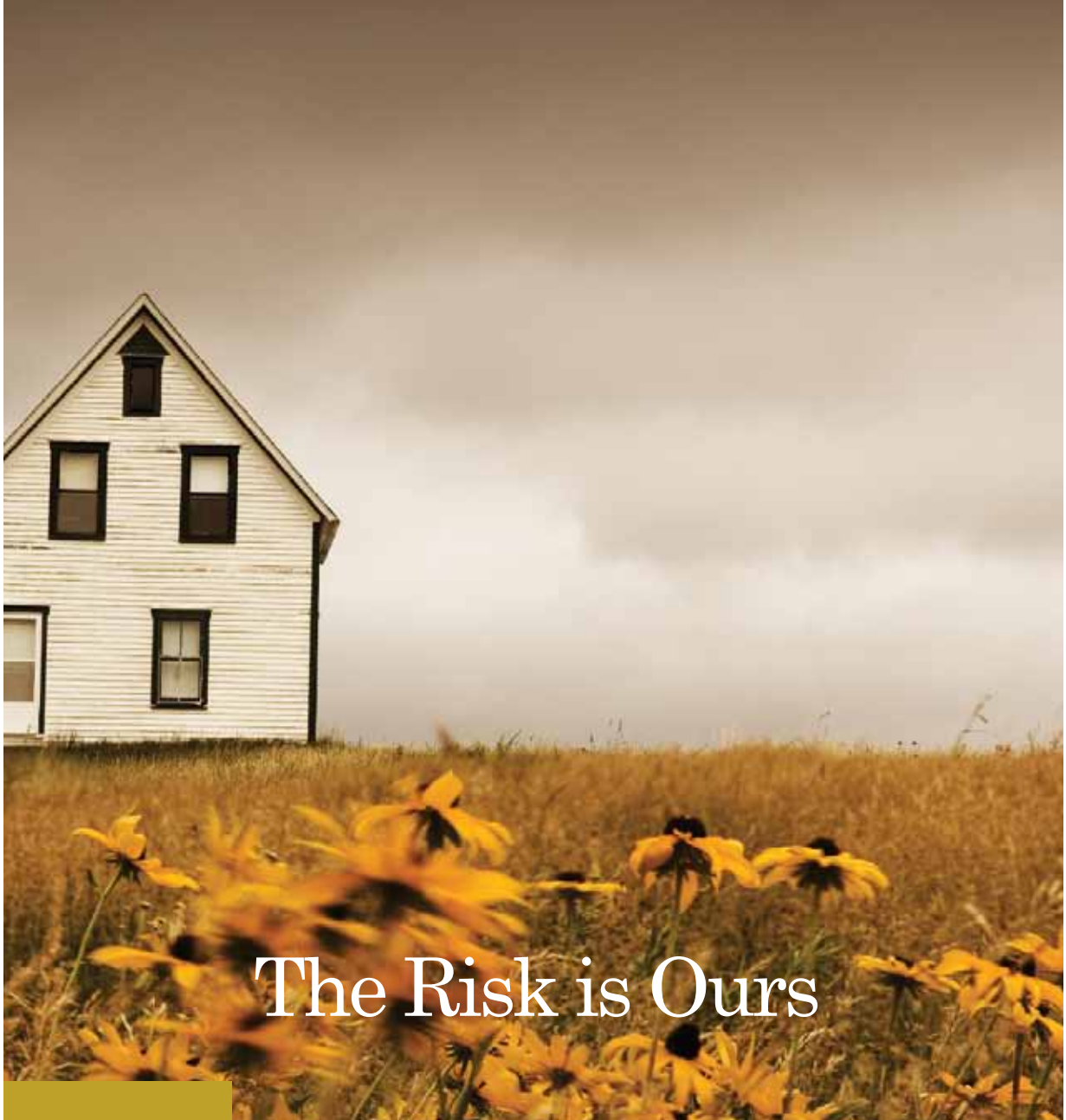


Figure 25

Number and Proportion of Farm Operators in Each Age Category, NL





The biggest question all this research leaves is this: who cares? These frightening trends are hardly new. Some date back for a century, and most of them have been well documented at least since 2002. Yet nothing happens. Things keep getting worse.

Maybe the answer is that nobody but the farmer suffers, so nobody else cares. If we lose our farms, however, everyone will suffer.

Rural communities depend on farms

When the farming is good, everything else in the community is thriving...

Farmers are the anchors of rural communities. “When the farming is good, everything else in the community is thriving,” says United Minister Barb Wagner of Prince County, PEI. “When the farming is in a slump, everything else suffers. When the farmers have a good year, they put more money into the rink or the church or other community activities. They buy equipment and trucks.”

Farmers tend to spend their money in their own communities. A 2000 survey of farmers in Kings County, Nova Scotia showed that 88% of farm expenses were spent in businesses within the county. A 2001 survey of 333 Nova Scotia farmers showed that 60% of farm-related spending takes place within the community, and fully 93% within the province.

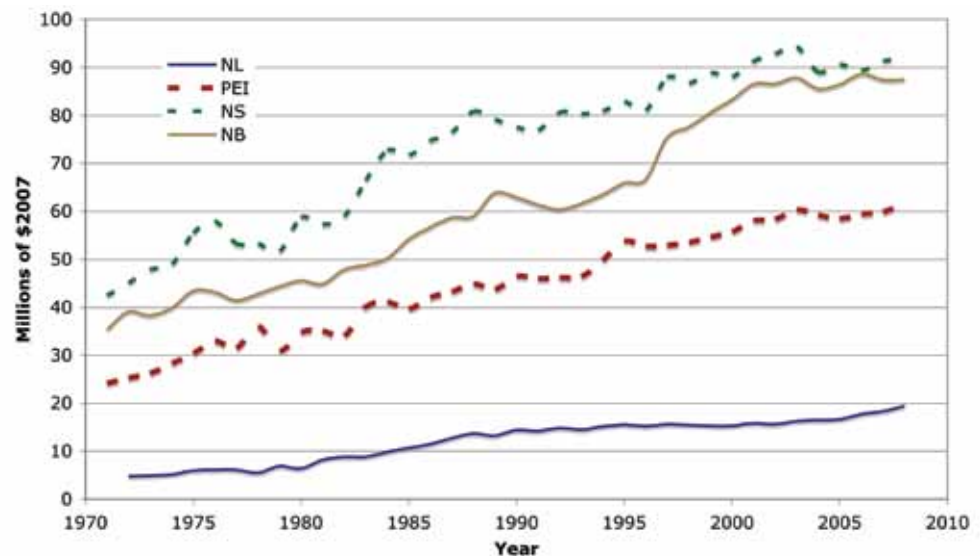
As farms grow and consolidate in the face of mounting financial pressures, a larger proportion of their expenditures leave the community. That’s because large farms tend to bypass local

community suppliers in search of the cheapest inputs. For example, a 1994 Iowa study found that economic growth is 55% higher in areas with regular hog farms than in areas with industrial-scale hog operations.

Farms are also major employers in rural areas, where jobs are harder to come by. In all, Maritime farms directly employ 16,000 people full-time, and an additional 2,300 people part-time. Sadly, these numbers have been on the decline for the past 20 years in Nova Scotia, Newfoundland and PEI. PEI farms, for example, employed 5,000 people full-time in 1987, but only 2,700 in 2008. Only New Brunswick has shown stable employment trends in agriculture; elsewhere, the shortfall has largely been made up by seasonal migrant labour. Still, farming remains an important employer in the Atlantic Canadian countryside, spending \$260 million in wages in 2008, as can be seen in the figure below.

Figure 26

Total Amount (\$2007)
Spent on Wages
Atlantic Farms
1971-2008



farmers tend to hold onto their land as long as they can, they become the holders of the history and cultural memory of a place.

Farmers generally consider their work highly rewarding. It is challenging and requires a diverse set of skills and a capacity for creative problem-solving. Farmers say they enjoy the work of creating a business, building things, growing food, raising animals, starting a project and seeing it through, and problem-solving in day to day tasks. Farmers enjoy working outdoors and in close relation with other people.

The economic ripples of farming are also felt in non-farming jobs. Farmers' expenditures generate employment for veterinarians, equipment dealers, mechanics, feed and crop supply businesses, food processors, transportation providers, retailers and others.

Among the worst outcomes of losing our farms would be the loss of the sense of place and heritage that farm work brings to communities. Traditional farms bring people of all ages together like no other business. And because farmers tend to hold onto their land as long as they can, they become the holders of the history and cultural memory of a place. As the metropolitan citizens of a globalized McWorld lose and change their identities, farming communities become enormous reservoirs of social capital, rare and precious in their knowledge of who they are, where they come from, and why they are there.

Statistics Canada's 2003 General Social Survey on Social Engagement shows that people in rural communities have a measurably stronger sense of social cohesion and well-being than urbanites.

In PEI, an almost entirely rural province, only four percent of respondents said they had no close friends or family members, the lowest rate in Canada. Islanders also expressed the highest levels of trust in their neighbours and have the highest voter turnouts come election time. In general, rural Canadians trust their neighbours more, express a greater sense of belonging in their communities, count on their neighbours for help when they need it, and also volunteer more.

But all these characteristics are weakening. As young people drift to the cities, enrollment in rural organizations declines. Churches shut down. Community centres stand empty most nights. As farmers vanish and farming towns shrink, rural areas are even having trouble finding volunteer fire fighters.

The sense of tradition, heritage and place, along with the natural beauty of farmlands, still brings thousands of tourists to Atlantic Canada to visit farms every year. Some farms have become regular attractions, accepting tour buses and offering guest quarters, like Oaklawn Farm, or Noggins Farm in the Annapolis Valley. The Apple Blossom Festival in Kings County, Nova Scotia is in itself a major tourist attraction, and the growing number of excellent wineries in that region are also emerging attractions. But these are only a few bright spots in a generally dark picture. If the farms go, GPI Atlantic estimates that Nova Scotia will lose at least 10 % of its tourists, and PEI will lose at least 20%.



Farms generate wealth for provincial economies

A 2005 study found that \$391 million in spending by Nova Scotian farms generated... more than 10,000 person years of employment.

Modern farms, even family farms, can be major operations. As seen in Figure 27, their collective expenditures in Atlantic Canada are more than \$1.4 billion dollars. These numbers are growing far faster than GDP, with PEI's farm spending increasing by 73% from 1971 to 2008 (in 2007 dollars).

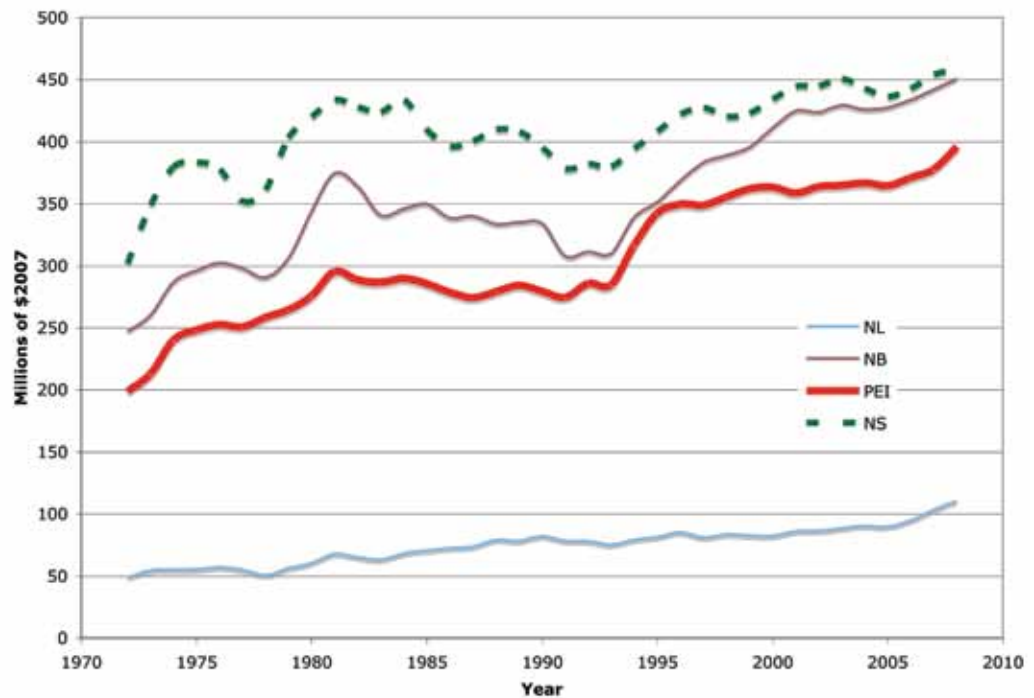
That spending is a stone cast into a pond. The ripples are the money that non-farmers make—what economists call “multiplier effects.” Every dollar that Nova Scotia farmers spend creates a \$1.95 increase in the local economy, and a \$4.29 increase in the Canadian economy. Thus Nova Scotia agriculture alone contributes \$199 million directly to the provincial GDP, and \$389 million when indirect spending is included. Its total economic impact on Canada's GDP is \$853 million. A 2005 study found


that \$391 million in spending by Nova Scotian farms generated \$1.16 billion in gross spending and more than 10,000 person years of employment.

There is an old business adage that it's cheaper to keep a customer than to find a new one. By the same token, in the development-obsessed milieu of Atlantic Canada, surely it is better to hang on to an industry like agriculture—rooted in the region, family-oriented, healthy, well-established, a mainstay of rural areas—than to go pouring yet more money in the form of incentives into the pockets of footloose corporations with lavish plans and promises. Our farms are here now, and they make up an important segment of our economy. If we have the funds to help out other industries, surely we can find the money to help sustain agriculture.

Figure 27

Total Farm Operating Expenses, Atlantic Farms (Millions of \$2007) 1972-2008





Importing food
from all over
the world
exposes
consumers
to sub-standard
processing and
inspection
practices...

Food security will suffer

Economist Jeff Rubin, who has a remarkable history of accurate economic predictions, writes that oil will reach a whopping \$225 a barrel by 2012, thanks to increasing demand and decreasing affordable supply. When the price of oil goes up, so does the price of food, for several reasons. First, most food travels hundreds or thousands of kilometres before it hits a plate, on average 8,240 km for food and farm input transport in North America. Second, synthetic fertilizers and pesticides are also petroleum products, and their prices rise in tandem with that of oil. Farm equipment and food processing also relies on oil and gas, and on electricity generated by fossil fuels.

All these factors drive up the price of food when the price of oil increases, as we saw in 2008 when global oil and food prices skyrocketed.

As Rubin assures us, oil prices will rise again, and steeply. The increasing frequency and severity of storms and drought that climate change is bringing

will further spike food prices. As governments and citizens strive to cut back on our greenhouse gas emissions, food importation will become more expensive and more difficult. In response to these changes, we have already seen an increased demand for local food and the emergence of new farmers' markets across the region. At these local markets, farmers can sell directly to supportive consumers who want local food and are willing to pay a fair price.

In the broader picture, however, our dependence on imported food has grown enormously—and continues to grow—while our local food system unravels.

Dependence on imported food also includes an unknown risk of contamination. Consider the 2008 Chinese melamine-in-milk scandal that poisoned 300,000 people. Importing food from all over the world exposes consumers to sub-standard processing and inspection practices anywhere in the world.



The environment will suffer

Farmers interviewed in 2003 demonstrated a great deal of passion for the ecological sustainability of their farms. As farms disappear and consolidate, we lose that sense of stewardship. No longer will we know that the rural landscape

is in capable, caring hands determined to leave a land-based livelihood and resource to future generations. Furthermore, importing food that we can grow here greatly increases greenhouse gas emissions, intensifying climate chaos.



The Opportunity is Ours

Nova Scotia's population could be fed by the production from just 490,444 ha of farmland—less than half our physical capacity.

The problems that Atlantic Canadian farmers face are numerous and complex. Farmers are rooted locally, but they sell their products into a global economic and political environment that values pure financial growth over real economic, social and environmental progress. Their competitor, really, is a globalized free trade food system that is subsidized by cheap oil and unrestricted greenhouse gas emissions. It's these hidden subsidies that make our "cheap" food extremely expensive—if only we measured its costs realistically.

No single government or institution can resolve all of these challenges. A shift in our culture, policies, and practices around food is needed, and participation must be widespread.

The shift needs to start now. Our farms are disappearing before our eyes. If current trends continue, if decisive action is not taken immediately to change the tide, the next report on farming will be a post-mortem.

But we also have assets that aren't always obvious. One of these is the powerful bond between farmers and their land. When researchers interviewed 107 farmers in 2003, all expressed a strong

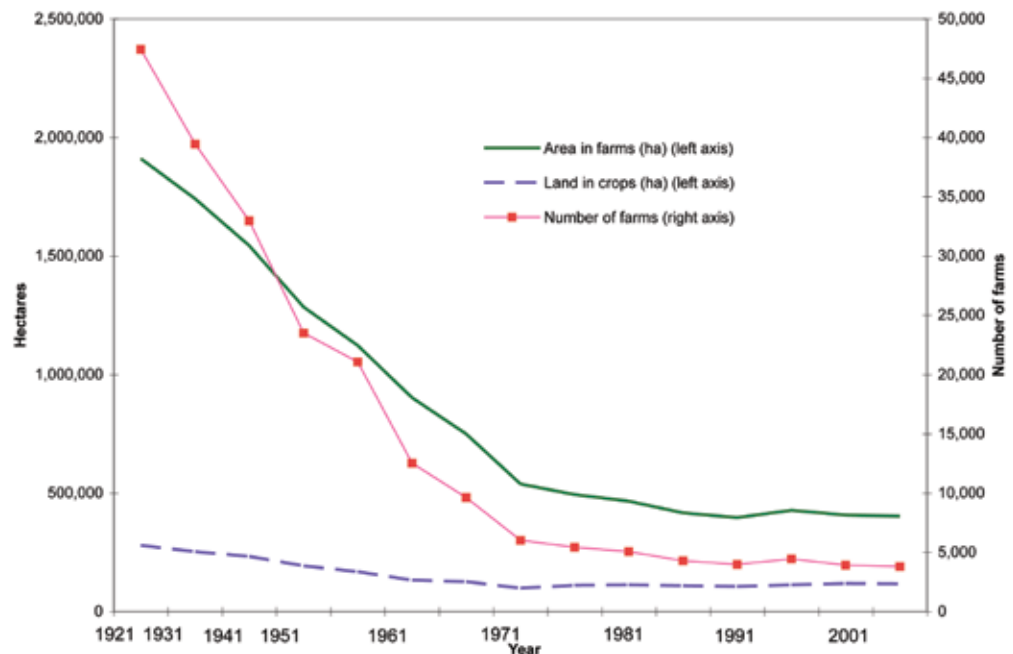
connection with the land. That individual connection to the land, multiplied by the hundreds of farms across the region, represents a huge bank of social stability.

And farmland itself is a huge asset. Unpolluted farmland will soon be doubly valuable—and our region has plenty of that. In Nova Scotia, for instance, about 138,000 hectares of land is used for crops and pasture. More than ten times that amount—about 1.6 million ha, or 21% of the province's land area—is suitable for farming. Setting aside 30% of that for infrastructure like roads, farm edges, ponds, hedgerows, and woodlot leaves roughly 1.1 million ha available for crops and pasture.

Nova Scotia's population could be fed by the production from just 490,444 ha of farmland—less than half our physical capacity. Some of that arable land is no longer available for farming, having already been converted to subdivisions and golf courses. Figure 28 shows that the number of farms in Nova Scotia, and the total land area used as farms, fell drastically between the 1920s (when NS had 1.9 million ha of arable land) and the 1970s, and fell again into the 1990s. Things have stabilized somewhat since then.

Figure 28

Nova Scotia Farm and Crop Area, and Number of Farms (1921 – 2006)



In short, there is no inherent reason that Atlantic Canada should not have a thriving agricultural sector. What we need is the wisdom to deploy these assets appropriately.

All the farmland in Nova Scotia, used and unused, would fetch \$562 million dollars on the real estate market. If farm buildings are included, the value more than doubles.

Although Atlantic Canada has, in general, plenty of arable land, much of it, especially in Nova Scotia and Newfoundland, is difficult to farm. The land is jagged and sometimes rocky, the rains are regular and fierce, and soil erosion is high.

Agriculture and Agri-Food Canada researchers have assessed 84% of Nova Scotia's cultivated farmland as severely vulnerable to water erosion if left bare, compared to a national average of 13%. That province's soils have been assessed as "inherently weakly structured, low in soil organic matter and nutrients, and acidic. Poor soil structure may be evident as compacted subsoils or the presence of naturally occurring hardpans or hard-set layers, or both."

The use of heavy machinery on these vulnerable soils in the early spring and late fall tends to damage and degrade the soil. Instead, many Atlantic Canada farms should be kept in pasture, hay, orchard, agro-forestry or other perennial cover options. In short, there is no inherent reason that Atlantic Canada should not have a thriving agricultural sector. What we need is the wisdom to deploy these assets appropriately. And to do that, we need experienced farmers. As we have seen, retaining farmers is a major problem—but that problem, too, is susceptible to imaginative solutions.

Young Farmers

If farming is to have a future in this region, we need to develop younger farmers. Only 6% of Newfoundland farmers, 7% of Nova Scotia and New Brunswick farmers, and 9% of PEI farmers are under 35.

But where do farmers come from? Traditionally, they've come from farms. Seventy-one percent of women farmers in Canada and 87% of male farmers were raised on farms. They worked on the farms as children, absorbed the lore and learning of farming at their parents' knees, appreciated the lifestyle and the intangible rewards of country life. They slipped very naturally into farming themselves.

Today's youth, however, grow up with no understanding of where their food comes from. Most think it comes from the grocery store. They don't know—literally—about the work of farmers.

How might that be changed?

Farmers' markets and Open Farm Days certainly help, by providing young people with opportunities to meet and talk with farmers. Young people also need to get their hands in the ground, whether in backyard gardens, community gardens, or on commercial farms. Tim Jones, an applied anthropologist and food waste expert at the University of Arizona, recommends that children between five and eight—the ages when values are instilled—regularly visit farms and food processing facilities as part of their science curriculum, to grow, pick, cook and eat food. Increasing numbers of schools across the country have community gardens in the schoolyard, worked and tended by parents, teachers and neighbours as well as children.

Farming—particularly organic farming—often has great appeal to idealistic youth. Since farmers have difficulties hiring workers, programs linking farmers with students interested in agriculture should be easy to devise. Universities, farmers and government human

resources departments could be working together to create paid summer jobs on farms for students.

Some such programs already exist, including the apprentice program run by the Maine Organic Farmers and Gardeners Association (MOFGA) and the Willing Workers on Organic Farms (WWOOF) program. WWOOF connects young volunteers—often travelers—with organic farms, where they get free room, board and a farming education in exchange for their labour. There is no reason the program couldn't be extended to other farms as well. A Willing Workers on Local Farms (WWOLF) program would give Atlantic Canadian youth the chance to learn farming close to home. To be effective, such programs need to be carefully planned and implemented, paying close attention to such matters as a minimum length of stay for the young people, so that their contributions of labour at least balance the commitment of time the farmer must make in training them.

New farmers face two other major hurdles: the cost of entry into farming, and the lack of benefits and support services for farm families. Neither problem is unsolvable, but both require imagination, innovation and courage from everyone in the food chain, from consumers through governments to farmers themselves.

In Quebec, new-farm establishment grants help new farmers sell directly to customers through Community Supported Agricultural (CSA) programs, and at weekly farmers' markets. Such farms usually tap into the market for organic food. A single new farm on this model can feed more than 1,200 people a season, for a one-time government investment of just \$40,000. At that rate, the entire population of New Brunswick could be fed for a \$25 million investment in labour intensive, job-generating farms.

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The Toronto Star recently reported the story of three young Quebecers—all city kids—who met in university, and wanted to go into organic farming. They began by forming a co-operative and renting 12 acres from the sympathetic owners of a 1500-acre organic farm. The Quebec Ministry of Agriculture provided them with a \$40,000 new-farm grant, which they used to buy equipment. They market their vegetables through a CSA program and two weekly farmers' markets. Some families visit them weekly to pick up their veggie baskets, and the micro-farm features a picking garden so that parents and children can pick and eat their vegetables right from the soil.

Renting the land kept their start-up costs modest, and co-operative ownership allows them to pay themselves salaries with a full range of benefits. They work 50-hour weeks during the growing season, take weekends and vacations off, and enjoy other pursuits during the winter. Says one participant: "We're able to run a profitable farm without breaking our backs. We live modest lives but we're not worried financially. We make our own decisions. We work outside. We eat really well. I love the diversity of tasks, the constant decision-making. Really, I love everything about farming."

This story is all good news. A major expansion of labour-intensive organic farming would require a lot more farmers, and those new families would create employment in rural areas and rejuvenate rural communities while enhancing public health and strengthening food security. All that's really needed is courage and imagination.

The Madison Area Community Supported Agriculture Coalition (MACSAC) in Wisconsin has helped Community Supported Agriculture (CSA) farms get well established. They organize events to promote the farms and encourage people to sign up and pay in the spring for weekly food box deliveries through the summer and fall.

In 2009, 36 CSA farms sold 7,800 shares and served some 18,000 people. In 2010, some 45 farms are offering 9,100 shares, representing a potential \$4 million-plus in sales to local farmers.

In Atlantic Canada, CSAs are taking a while to catch on, but the number of CSA farms has grown in the past five years. And so have the number of subscribers. There are now about 20 CSAs in Nova Scotia. Each CSA offers a mix of products suited to the farm and talents of the farmer. Some offer straight vegetables, others offer fruit, honey, eggs, flowers, canned tomato sauce, or even bread and croissants along with the vegetables. Some offer summer shares, others offer full-year or winter shares. Most offer support for customers who want to learn how to prepare delicious meals from the contents of the weekly box.

MACSAC has done something truly innovative that could be adopted elsewhere. They recognized that CSA customers were eating really well, and asked health insurance providers if they would be willing to subsidize the cost of a share. They now coordinate a program called Health Plan Partners, which includes several pioneering insurance companies that offer rebates of up to \$200 a year to their customers who eat local food from CSAs. Since the CSA share cost for a family is \$400 to \$550, this rebate is significant. These health insurance companies get extra exposure through the program, but they are offering a rebate because they know eating fresh vegetables and fruit directly from farms will help their clients stay healthy and have fewer health care costs. This financial recognition of a social health benefit from farm-direct food is a good example of internalizing a positive externality. The dollar value of the health benefits of eating fresh local produce are recognized by the health insurance companies and they are willing to subsidize the cost. This is the kind of incentive for positive behaviour that should be encouraged.

...farmers
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For people with less disposable income, MACSAC raises funds to subsidize their CSA shares. Members of just one CSA (Vermont Valley Farm) donated \$8,435, and are subsidizing 29 shares.

Members of CSAs also have been known to help out the farmer who supplies them. One of the larger farms, Harmony Valley, run by Richard de Wilde, offers 1,100 shares as well as selling at farmers markets, restaurants, and grocery co-ops. Customer loyalty literally saved the farm after a flood swept through the area in August 2007. Two hundred and fifty of his customers donated \$50,000 to Harmony Valley, and the farm never missed a week's delivery during his 30-week season. They got hundreds of small checks in the mail with "nice little notes". De Wilde found it to be an amazing morale booster. As MACSAC co-ordinator Kiera Mulvey puts it, CSA subscribers acknowledge the special status of farmers in society. She says farmers are responsible for our nutrition, for the care of our environment, and for a lot of other values that are hard to put a price tag on.

Similar innovations are emerging elsewhere. Determined young farmers in Ontario have developed "condo farms," in which several diversified farms and even processing operations all function within one big farm. Ontario non-profit organizations now offer training, business planning and other services for would-be farmers. One organization provides "matchmaking services," linking new farmers with established landowners who don't want to farm their land.

In a similar vein, an Ontario dairy farmer offered free land to a new organic farmer, who set up a farmers' market on the property. People stopped to buy vegetables and ended up buying dairy products as well. The Toronto and Region Conservation Authority set aside 50 acres for an "incubator farm," where potential farmers can try their

hands on a small scale. A community food organization plans to grow specialty herbs and vegetables such as okra, callaloo and sorrel for Toronto's multicultural communities.

All of this is working. Ontario farms smaller than 70 acres grew by nearly 20 per cent between 2001 and 2006.

Some Atlantic governments have taken steps in this direction. The Nova Scotia Farm Loan Board created a New Entrants to Agriculture Program to help new Nova Scotian farmers buy and develop successful farm operations. The program in effect provides interest-free loans for the first two years of operation.

Interestingly enough, solutions often come bundled together. Co-op or condo farming eases the isolation of farming, provides a safety net for the farmers, strengthens rural communities and the services they offer, and present opportunities to organize such vitally-important services as childcare. With a group of young families all dealing with the problem—and, ideally, with a supportive government—the problem could be easily solved.

Yet all the imagination and courage in the world cannot substitute for financial stability. The tendency of new farmers to focus on organic food targets a group of consumers who will pay better prices for better produce, and who understand the linkages between food and health. Nevertheless, until the broad issues of fair prices and farm profitability are addressed at a policy level, Atlantic Canada's farms will continue to be in the gravest of perils.

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Farmers and Consumers

Since the middle-men in the food industry are taking the bulk of the profits, the best way for a farmer to get a fair price for farm products is to eliminate the middle-man and go directly to the consumer. Direct links between producers and consumers also have a powerful educational impact, in that consumers who have a chance to talk to farmers better appreciate the work, the sacrifices and the essential roles that farmers play. All of this translates into a better understanding of the high cost of cheap food, and the reasons that superior local food warrants higher prices.

Farmers' markets are the places where consumers and farmers are most likely to meet and form relationships, and farmers' markets are growing and spreading all across North America. In Nova Scotia there are at least 15 farmers' markets, and they do \$62 million in business each year. PEI has eight farmers' markets, including one in Charlottetown with more than 50 vendors. New Brunswick has had many successful farmers' markets for years. Small and large towns across the region are opening new farmers markets; among the most recent is a thriving new market in Cornerbrook, Newfoundland. The growth in farmers markets must continue to be supported and promoted by municipal and provincial governments.

CSAs—Community Supported Agriculture programs—are an increasingly popular way for farmers and families to work together. CSAs come in many different forms and sizes, but the central concept is that a group of consumers commits to purchasing a set amount of produce weekly from the farmer, and often pays up front for all or part of a season's produce. Sometimes the farm's entire production is distributed through a CSA, but in other cases the CSA is only one of the outlets the farm utilizes.

In a CSA, the farmer and the consumers decide on the crops to be grown and negotiate the prices, and deliveries or pick-ups usually take place weekly during the season. Consumers do not buy a set amount of produce, but instead support the overall farm budget and receive the appropriate share of the produce.

For the farmer, CSA programs provide a predictable market and financial return. Sometimes CSA members even provide a specified amount of labour. In a notably uncertain occupation, a CSA allows the farmer to plan. Perhaps best of all, the stability of a CSA allows the farmer to concentrate on what s/he does best—growing food, and caring for soils, crops and animals. For the consumer, a CSA provides a steady supply of safe, high-quality farm products at a fixed cost. CSAs—which are popular in Europe as well as in the US and Canada—are usually organized by the farmer, but they can also be organized by consumers or groups of consumers, and on occasion consumer groups have actually leased farms and hired farmers to run them.

The growing sensitivity of consumers to food issues has also led to a "local-food" movement that sustains "locavore" restaurants. Such restaurants typically try to source all of their food locally, and to buy all other products and services from local suppliers. Restaurants like this are now appearing in the Atlantic region; a celebrated example is The Wooden Monkey, in Halifax.

Food issues are clearly of growing concern not only to farmers and rural communities, but also to consumers, institutions and governments. As this is written, a coalition of concerned Nova Scotians is establishing a Food Policy Council designed to bring all the stakeholders together to communicate about food concerns among the sectors, and also with the public and the provincial government.

Scoudouc River Farm

Source:

Translated from
<http://www.recoltedecheznous.com/userfiles/file/La%20ferme%20Scoudouc%20partie%201.pdf>

If you ask Aline and Maurice Cormier of the Scoudouc River Farm what motivates them to develop their agricultural enterprise over 22 years with so much enthusiasm, they respond with a big smile that it is their customers. They come from all over—from Moncton, Riverview, Dieppe, Memramcook—to stop at their farm stand. Some stop on their way to the cottage, and others are tourists on their way to PEI or northern NB. The local clientele, who have been there from the beginning, are loyal. Elder care homes are also great clients. Older folks appreciate good, fresh vegetables, prepared the old fashioned way.

The Cormiers have operated the farm since 1986. They like planting and harvesting healthy, quality vegetables. They enjoy the satisfaction of growing their own vegetables, to can and freeze for the winter, to know they have good quality food, and to be able to eat the freshest, direct-from-the-garden vegetables. Most of all, they love to work outside. Today they have more than 60 acres of a variety of vegetables.

Maurice Cormier: We have producers who supply us with certain vegetables, like potatoes. Sometimes we've run out, or ours aren't ready yet, or we don't produce them because we don't have the machinery. We also buy fruits from other producers, because our clients are asking for them.

The season starts at the beginning of July with the strawberry harvest. It is a tradition to pick strawberries at the U-Pick. Strawberries have a short season in NB, and it is for that reason that the first strawberries eaten directly in the field are so delectable. Scoudouc River Farm invites families with children to pick their own strawberries. There is no one posted to prevent people from eating the fruit while picking. It is a relaxing family outing, a time for fresh air. The farm is in a quiet area that benefits from a regular breeze and no mosquitoes. There is always someone to greet people with a smile, let them know where to get the best berries, how to preserve them, and share the best recipes.

At the beginning of August, the bean and pea U-Pick is ready. It is a popular attraction in the region. Retirees come to harvest their peas and beans because for them, it is a time to be in nature, without the inconvenience of keeping a garden. Corn is also a popular item. It is picked fresh every day. In any case, demand for the products is so strong that they don't stay long on the shelves.

Maurice Cormier makes sure he has qualified people working who know how to answer questions. He notices clients return regularly to his business not only for the product, but also to get the best service. Once the store is open at the beginning of July, they already have orders. "People want us to call them as soon as the beans are ready to pick, or the beets, or the cukes. Our order book is full even before the harvest begins."

Aline Cormier: "Clients phone us from work, or from the cottage, or from home to ask us to put things aside for them. If there is something they want, we make sure we have it or we run out to the field to get it."

"I have workers who return to work in the fields year after year... they like to work outside and it is good for mental health. In the process of manual labour, of working the earth, you can see what your work produces. It is a very positive atmosphere." At the end of the season all products are offered at a reduced price to show appreciation for the clientele who encouraged the farm all summer.

"I always plant a field of carrots to donate to the food banks in the region. We try to help in our way."

"I'd like agriculture to be taught in schools because there are so many children who have never been on a farm. It is important for them to keep contact with nature and to know where their food comes from. It is not enough to learn from books, it is important for them to experience the soil and to know what we can produce here. It is easy to invite children to visit the farm, participate in some games, and harvest vegetables that they can bring home with them."



Farmers and Farm Organizations

Farmers are doing an incredible job staying in business given the challenges they face. Strategies that have worked well in some sub-sectors to recapture a larger share of the food dollar for farmers include supply management, organic premiums, direct marketing, and value-added.

Supply management has worked well for poultry and dairy producers, who work together to control the supply chain and are assured of a fair predictable price based on cost of production estimates. They can count on stable markets and prices because they have cooperative marketing boards that control imports, regulate supply, and give a single, powerful voice to what would otherwise be a bunch of separate small farmers calling out in the wilderness.

Supply control systems are not perfect—buying a share of the quota can be prohibitively expensive—but they have sustained dairy and poultry farms as the foundation of many farming communities.

It is likely that organized marketing, or producing according to local demand and limiting imports, could work for other farm products. But free trade deals inhibit this kind of organization. Other ways of matching supply and demand could happen through government procurement policies and deliberate consumer purchasing of well-labeled local products.

Sometimes farmers can work together to save money by sharing information, equipment, marketing costs and similar expenses. Some farmers have found success by differentiating their products from the typical grocery store fare. For example, eliminating the use of pesticides and gaining organic certification allows farmers to save on the cost of inputs while getting a higher price for their products from health-conscious consumers. A changeover like

this demands a considerable investment of upfront capital, time and energy.

There are both environmental and financial rewards in soil-building farming methods—using composted manure from livestock, taking remedial actions in the fields, and putting in livestock fencing or manure storage structures to prevent erosion and protect water courses. The Watershed Agricultural Council in New York State directs funds that would have been used to build water treatment facilities into supporting small farms and woodlot businesses. Their research shows that small farms and woodlots, if given funds to protect streams and wetlands, will protect the watershed more effectively than other land uses. The Council promotes the consumption of locally-produced food and wood products, and helps consumers connect the quality of their water with their support of watershed land stewards' businesses.

As oil prices rise and carbon-pricing is implemented, local organic produce will increasingly enjoy price advantages as compared with imported foods from industrial farms.

Some farmers have also vertically integrated to add value to the products they sell. For example, rather than selling live animals ready for butchering, farmers may butcher and process their own pigs into sausages, cutting out the middle-men and increasing their profit margins. Berry farmers offer baked goods, juices, and jam. Perhaps the most striking example is the success of farm-gate wineries, often coupled with exclusive restaurants and inns.

In the regeneration of Atlantic agriculture, older farmers will also play a major role in the recruitment and retention of young farmers. Many of the necessary innovations will rely on the willingness of existing farmers to experiment with new products, new

forms of ownership, new approaches to labour relations and business succession. Older farmers can help in developing flexible employment options as well as daycare, healthcare, and workers compensation packages that will make farming a much more attractive career

choice for young families. A logical way to organize these innovations is through the provincial Federations of Agriculture, which obviously have a deep interest in everything that affects the future of farming.

The Consumer's Role

Farmers and consumers are natural allies, as we have already seen, and consumers are most likely to be effective agents of change when they organize themselves either with other consumers or with the farming community. That said, individual consumers concerned about food safety and security certainly have a role of their own to play.

Consumers need to seek out local foods in their supermarkets, and if they can't identify local foods, they should demand better labeling and fuller information. Recognizing that "local" is a powerful new concern of consumers, supermarkets sometimes now label products as "local" if they come from

someplace in Canada. Consumers need to confront store employees about such mendacious practices.

Shoppers can ask store employees questions about where the food is grown and processed—and some already do. If they get a shrug for an answer, consumers should take their concerns to management. We have a right to know where our food comes from, and it's perfectly reasonable to expect employees to know at least the basic facts about the products they are selling. Consumers should know that their requests for, and purchases of, local products in stores gives growers a better bargaining position when selling to retailers.

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The Role of Provincial Governments

The absolutely indispensable thing we need from our elected representatives is vision, expressed in the form of a coherent, comprehensive food policy.

The provincial governments of the four Atlantic Provinces are crucially-important partners in any attempt to improve food security and restore the position of agriculture in our region, but the key thing that we need from them is not, fundamentally, regulation, legislation, subsidies or training. Those things have their place, but what we most profoundly need is a full and clear description of an appropriate twenty-first century food system—a food system that can reliably provide us with safe, healthy, nutritious and affordable food, despite the uncertainties we face in terms of oil prices, climate, transportation and the like.

After that, we need political leadership to help us create such a system—and that's where regulation, incentives and other instruments may be useful.

Creating a comprehensive food policy is not an easy task. Canada itself has no national food policy, no policy instrument to ensure that our food system actually delivers the nutritious food that Canadians need. Instead, national policy focuses on making the agricultural sector profitable, which means supporting the business ambitions of large corporations rather than addressing the needs of Canadian families and Canadian farmers.

It may not exactly be true to say that Canada has no food policy. It might be more accurate to say that our country has an unacknowledged food policy—and an appalling one. A recent study by the Canadian Agri-Food Policy Institute (CAPI) called “Building Convergence” revealed that fully two-thirds of Canadian health-care costs stem from chronic diseases related to unhealthy eating. More specifically, poor food is

costing us \$32 billion a year for cancer and cardiovascular disease, and a further \$15.6 billion for diabetes.

To put those two numbers in perspective, their sum is almost the size of the record federal budget deficit. And in fact the situation is even worse than that. These three diseases are, after all not the only nutrition-related disorders. Furthermore, as CAPI points out, we are achieving these dreadful results through a double level of public subsidy, first through agricultural policies and then through the public health-care system.

But this perverse and deplorable federal policy contains the seeds of a provincial solution. It is the provinces, after all, that are primarily responsible for health-care, which now eats up roughly half of our provincial budgets. Almost all of that is spent on treating sickness, almost none of it on prevention. And yet we know that a huge proportion of our health-care costs are a direct and preventable result of poor food.

The solution seems obvious: bring health-care, food and agriculture together in a single policy of provincial wellness. We are so accustomed to seeing these issues in separate silos that we never examine them together. But if we diverted even a small amount of our health-care budget into improving the determinants of health—into the promotion of healthy eating, and the provision of healthy food, among other things—we should be able to trim our medical costs dramatically while also returning our farmers to the central, respected social position they deserve to occupy.

In fact, we have examples right in the region that demonstrate how well such a wellness policy could work. SunRoot Farm, in Hants County, Nova Scotia, is an organic farm that obtained support from the provincial social services and health departments to deliver

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subsidized organic vegetables to families that otherwise couldn't afford them. Their clients lost weight and felt more energetic, and the diabetics among them were able to reduce their reliance on insulin.

More formal scientific studies show the same result. Dr. Jean-Pierre Després, director of cardiological research at Laval University, recently mounted a rigorous experiment on the health implications of diet—and measured the economic impact. He took 144 big-bellied men at high risk for diabetes and heart disease. They were eating a typical Canadian diet—high in sugar, fat, salt and processed foods, low in fruit and vegetables. (Cancer researchers say that simply eating the recommended servings of fruit and vegetables can decrease the incidence of cancer by 20%.)

Després' treatment involved monthly meetings with a nutritionist and a kinesiologist to gradually improve the men's diets and increase physical activity to 160 minutes per week. In a year, the men had lost an average of 15 pounds, and eliminated 30% of their most dangerous body fat. Their triglycerides, blood pressure and HDL cholesterol all improved. The program ran for three years, and 65% of the men continued with the regimen afterward. It cost about \$1000 per person per year, or \$3000 in total. By comparison, the cost of treating diabetes alone is \$1,000 to \$15,000 a year—for life.

Clearly, prevention saves both money and lives—and a wellness policy would benefit farmers and consumers as well as relieving the strain on ever-growing provincial health-care budgets. But such a progressive policy would represent a significant departure both from the economic structure of the existing food industry, and also from today's mainstream policy assumptions.

Provincial governments are unlikely to adopt such innovative policies without a strong signal from their citizens—and this may be where farmers, rural

communities, the medical establishment and consumers can have their most powerful effect. Governments need the reassurance that they obtain from citizen pressure, and citizens need to feel that their involvement is important and their voices are heard. Farmers and consumers and their organizations could only benefit from lobbying provincial governments not only for coherent food policies, but also for the smaller changes that incorporate such policies.

Forexample, an obvious step that unites the interests of farmers and consumers would be to ensure that all provincial institutions—cafeterias, prisons, schools, hospitals, and government offices—have local procurement policies, requiring a certain minimum percentage of their food to be supplied directly by local farms. Nothing prevents provincial regulation and legislation from requiring such institutional policies tomorrow, and consumer advocacy groups should be lobbying for them.

Governments may prove surprisingly receptive to such pressure. Legislators and civil servants are also citizens, consumers and eaters, and they too are coming to recognize the undesirability and unsustainability of our present food system. Indeed, some governments have already taken steps in the right direction. In 1992 the PEI Cabinet Committee on Government Reform recommended striving for a diverse but balanced farming sector, one without the polarization that happens when a few large agri-food companies start buying out the smaller players. In this vision, farmers have about as much power as any economic sector, power is shared, and farmers have "positive relationships" with each other and with the rest of society.

These are reasonable goals. To achieve them, we need regulations limiting food company mergers, and/or anti-combine laws that prevent the virtual collusion currently preventing farmers from getting a fair price for their products.

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The solution is not always the often-expressed view that farmers themselves should assert their own power by getting bigger. Indeed, a 2003 report from the National Farmers' Union says that although farms in Canada have tried to get bigger and more efficient, they have not gained from those efficiencies because they still lack the market power they need to get fair prices from the giant food corporations

According to the NFU report, "Low levels of competition allow these firms to take ever-larger profits and management salaries from the revenue streams within the agri-food chain. It appears that traders, processors, and retailers are not only declining to pass the benefits of their increased efficiency on to consumers, these trans-nationals are also absorbing the financial benefits from efficiencies created on family farms."

Only governments have the power to intervene and create policy that guarantees farmers a fair and equal share of the agri-food pie, as part of a wellness policy that balances the needs of all the stakeholders within an overall commitment to food security and public health. Every aspect of the food supply should be scrutinized, and the results should be published by an independent food system auditor, to ensure that the public food supply is accessible, sustainable, healthy and fair, and makes the greatest possible contribution to public wellness. What more important task could government have?

A further refinement of provincial policy could go even further, and map provinces into 'foodsheds.' A foodshed is a small geographic area equipped with complete networks of food producers, processors, transporters, retailers and consumers. Once provinces map out reasonable foodsheds, they can take steps to ensure that each area has the infrastructure needed to move food from field to table without ever leaving the small geographic area. That infrastructure

includes local transportation networks, farm markets, independent farm product outlets, home-delivery services, processing facilities, training programs, and grower co-operation.

Provinces can also play a greater role in ensuring the ecological sustainability of farms.

Farmers are already investing considerable time, energy and cash into soil improvements, reductions in toxic inputs, and protection of waterways. These are public goods, ensuring that the land can continue to provide the ecological services on which we all depend. Those ecological services have value—and if we expect farmers to protect them for us, we should be prepared to pay the farmers for doing that. Many jurisdictions do already pay farmers for that good work.

One method of determining payment rates is to pay farmers the difference between the value of their farmland on the real estate market and the agricultural value of the land. In return for such a payment, the farmer grants a "conservation easement," which prevents the use of the land for anything other than farming. This system rewards stewardship and forever saves the farm for agriculture. The farmer can still sell the land to another young farmer, but not at the real estate market rate, only at the much lower farmland rate.

The cost of such a program is not prohibitive. In Nova Scotia, for instance, at current market rates it would cost the province just \$540 million dollars to protect all its farmland under this system—and it doesn't have to be done all at once. It can be done in stages, similar to the phased approach the province is taking to the protection of wilderness.

Provinces can also legislate mandatory farmland protections, as Prince Edward Island's Department of Agriculture and Forestry has done. These protections can include mandatory crop rotations (to relieve overused land), vegetated buffer zones around farms, and forested riparian

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zones around water. They also include restricting livestock's access to streams, and mandatory Environmental Farm Plans and soil monitoring. Government and industry in PEI subsequently invested more than \$12 million in soil conservation and management projects. Nova Scotia has urged farmers to take these measures, but has not made them mandatory.

The ideal policy mix might include the implementation of a provincial wellness policy coupled with compensation for ecological goods and services and with mandatory minimum environmental protection measures. These measures should be supplemented with practical educational and informational initiatives, and with a flexible and innovative suite of programs designed to make farmland, benefits and services accessible to young farmers.

Beyond programs, if the next generation is to be inspired to farm, the "war on the country" must stop. Reams of literature portray agriculture as wasteful, destructive and abusive to animals and the environment. That kind

of farming does exist, but it is offset by the genuine efforts of most farmers to be stewards of the land. A distinction needs to be made between supporting local farmers, who provide important environmental benefits, and supporting industrialized factory farming, which often generates serious environmental problems.

In summary, we cannot expect to obtain sustainability, ecological services and food security without offering deep respect for the farmers who provide those things. We have tried the alternative, and—as this report surely makes clear—that approach has resoundingly failed.



Cheap food has cost us our health, and the health of our children; cheap food is literally killing us, by the thousands.

Paradoxically, our long experiment with industrial agriculture and a global food system leads us to a simple and surprising conclusion: We can no longer afford cheap food.

Cheap food has already cost us thousands of farms, and thousands of farmers—and their loss has also cost us vital pieces of ourselves: our heritage, our identity and our culture. Cheap food has cost us our health, and the health of our children; cheap food is literally killing us, by the thousands. Cheap food has cost us billions in environmental costs and taxation. It has put us at the mercy—or lack of mercy—of an unstable world food system. Our food security—our very survival—is at stake.

At the root of our own local farming crisis is the globalized profit-driven food system. Atlantic Canadian farmers are squeezed between soaring input costs and low prices for their products, the result of the consolidation of farm input providers and food retailers. As the *Toronto Star* recently reported, “the top four retailers now control 71 per cent of the food market, according to CIBC World Markets Inc., and they have the power to source cheaper food globally.

Just two companies, XL and Cargill, have a 95% lock on Canadian finished cattle slaughter.”

Because farmers anchor rural communities, rural communities have been disintegrating across the country, notably on the Canadian prairies. Atlantic Canadian farms have been somewhat more vital, resilient, and viable, with stronger social networks, bonds, institutions, and farm diversity. But farmers here also recognize serious deterioration in their way of life and their communities. Rural people are becoming more isolated, and losing the very sense of community which has always been their great strength.

With fewer people remaining, and with the mass exodus of young people, rural communities are slowly dying. The centres of community social life—the churches, halls, arenas, clubs, and schools—are disappearing.

We are near the tipping point. If farms continue to diminish in number and are replaced by a few large industrial farming enterprises, if we continue to rely on the global food system to sustain us—and if that system fails—then the dire situation of our farmers today will

become the dire situation of our whole region tomorrow.

We can accept that risk, and live with the consequences. Or we can take steps now to re-create a local, sustainable, healthy food system that gives our farmers the livelihood they deserve, and provides reliable, healthy food to our families.



The choice is ours.

The time is now.

For sources, references, and methodology, see the agriculture reports at www.gpiatlantic.org or contact Jennifer Scott (jenredfox@gmail.com).

Report Submitted to
Newfoundland and Labrador Federation of Agriculture
Jennifer Scott Consulting
with Silver Donald Cameron and Chris Benjamin
April 14, 2010 Revised August 30, 2010.

