

NEPTIS STUDIES ON THE
TORONTO METROPOLITAN REGION

**PROSPECTS FOR
AGRICULTURE IN THE
TORONTO REGION:
THE FARMER PERSPECTIVE**

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Neptis is an independent Canadian foundation that conducts and publishes nonpartisan research on the past, present and futures of urban regions. By contributing reliable information, expert analysis and fresh policy ideas, Neptis seeks to inform and catalyze debate and decision-making on regional urban development.

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Michael Bunce
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1. Introduction

1.1 Agriculture in the Toronto Region

The future of agriculture in rapidly urbanizing regions has long been a significant public policy issue across the western world. For the most part, the debate has been dominated by concern over the “loss” of good farmland to urban uses. Those who advocate farmland preservation have successfully campaigned for policies to protect or preserve the agricultural land base. Although the toughness and effectiveness of farmland protection policies varies from place to place, the common theme has been that protecting agriculture from urbanization is a land use planning issue, which involves giving some measure of land use primacy to agriculture.

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In much of western Europe, the tendency has been to integrate these measures into broader greenbelt and countryside conservation strategies, while in North America, farmland protection has generally been treated as a special and separate land use problem. By the 1980s, farmland preservation policies were well established in most provincial and state jurisdictions in Canada and the United States. Yet, to a greater or lesser degree, the urbanization of agricultural land continues and farmland preservation remains a contentious issue (Bunce, 1998).

Nowhere is this more apparent than in the Toronto region. In the mid-1970s, rapid and unregulated urbanization of prime agricultural land led to the implementation of Foodland Guidelines that provided some measure of provincial direction to the municipal land use planning process with regard to farmland preservation. These guidelines and the policies that succeeded them, however, largely failed to control the conversion of agricultural land to urban uses. In the early 21st century, after decades of provincial neglect of the issue, with growing concern over the state of the region’s agriculture, farmland preservation re-emerged as part of a public policy agenda of regional growth management and greenbelt planning. This has been accompanied by a growing concern over the state of the region’s agriculture and the need to incorporate support to the farming system in farmland protection initiatives.

According to recent analyses, agriculture is still an important sector of the Toronto regional economy. Yet farming in the region is also frequently portrayed as being vulnerable to urbanization pressures as well as increasingly unprofitable. Several studies have investigated the state of the region’s agriculture, but these have been dominated by aggregate statistical analysis. Far less is known about the state of agriculture at the level of the farm enterprise, where most of the key decisions directly affecting agricul-

Relatively little is known about the state of agriculture at the level of the farm enterprise, where most of the key decisions directly affecting agricultural production are made.

tural production are made. This report therefore presents the farmers' perspective on such issues as profitability, urbanization pressures, farmland protection, and the future of the family farm, and offers some insights into the factors influencing the future of the region's agriculture.

1.2 The changing regional policy framework

Agricultural land policy has increasingly been subsumed by the larger regional planning discourse. When farmland preservation first surfaced in the 1970s, there was little attempt to tie it into the regional Design for Development strategy. But from the Kanter report (Kanter, 1989) to today's smart growth and greenbelt initiatives, farmland preservation is no longer regarded as separable from broader regional environmental and growth management planning.

The Final Report of the Central Ontario Smart Growth Panel includes the protection of "unique and high-quality agricultural lands" as one of several elements of sustainable regional development, and advocates "a clear direction for balancing resource use between rural and urban areas." (Ontario Smart Growth, 2003, p. 3). In the initiatives for the Golden Horseshoe announced in 2004 and 2005, the Provincial government clearly intends to integrate the protection of agricultural land into broader growth management and greenbelt strategies, heralding a potential shift towards a more holistic approach to agricultural land use policy in the region (Ontario, 2004; Ontario, 2005).

This newly emerging regional policy framework has been accompanied by a distinct shift in the way agriculture land use policy is discussed. What was once predominantly a preservation movement led by urbanites and environmentalists has become a broader movement concerned with the viability of agriculture in the region. Farmers, farm organizations, and their supporters have become more vocal in arguing that the best way to protect farmland is to ensure that farmers can make a decent living. This was the underlying theme of the 1999 Agricultural Economic Impact Study commissioned by the GTA Federations of Agriculture and four regional municipalities (Walton et al., 1999). The 2003 update of this study was even more explicit in recommending policies to support the agricultural industry (Walton, 2003).

This position is also reflected in the *GTA Agricultural Action Plan*: "Preserving farmland is much more than protecting areas with prime agricultural soils; it involves protecting the livelihood of farmers and agri-businesses" (GTA Federations of Agriculture, 2003, p. 6), and in the Niagara Region's Agricultural Task Force report, which recommends a "comprehensive strategy to support agriculture" (Regional Niagara Agricultural Task Force, 2003, p. 6), built on twin pillars of land use regulation and

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policies that recognize the need to ensure the viability of farm enterprises. And in its discussion paper, the Greenbelt Task Force land use policies are *preceded* by a section on the economic viability of agriculture: “land use planning alone is insufficient to ensure that agricultural lands within the greenbelt will be farmed” (Ontario, 2004a, p. 15).

In their representations to the Greenbelt Task Force, farmers and their organizations generally argued that their livelihoods are not merely ignored but actually threatened by farmland preservation policies. They were unanimous in pressing for farmland policies driven by considerations for the farm economy. The provincial government responded by establishing an Agricultural Advisory Team, which recommended land use planning policies to support agriculture in the context of greenbelt planning and growth management (Vanclief and Bedggood, 2004).

Other reports have echoed this theme. But “ensuring the viability of agriculture” in a growing metropolitan region is not just a matter of providing economic and logistical support to the industry, or making it easier for farmers to make a living. To understand what is needed and how it fits with the experiences and aspirations of farmers requires a much finer-grained analysis than regional overviews. To be effective, agricultural policy must be informed by knowledge of individual and local farming situations, because it is within these that the decisions affecting the “viability of agriculture” are taken. We hope that this report will contribute to policies to support agriculture in the context of farmland protection and greenbelt planning.

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2. Objectives of the study

The central focus of this study is to explore what influences the reproduction, sustainability, and security of farm enterprises and their prospects for survival, in the context of the specific opportunities and constraints of operating different parts of the Toronto region. The main questions are: how well are farmers doing in different parts of the region, and what does the future of the region's agriculture look like viewed from their perspective?

The main questions of this study are: how well are farmers doing in different parts of the region, and what does the future of the region's agriculture look like viewed from their perspective?

In addressing these questions our main research objectives were:

- to gain insights into the issues facing agriculture in the region from the diverse perspectives of individual farmers;
- to investigate the factors that influence the *reproduction* of farms and farming in the region, through the stories of individual farmers, with particular emphasis on the economic, generational, social, and environmental stake that they have in their operations and how this affects their future farming plans;
- to understand how farmers are affected by and adapt to urbanization pressures;
- to assess the implications of our findings for the future of agriculture in the Toronto region in the context of farmland protection policies and the Greenbelt Plan.

Studying agricultural change at the level of the farm enterprise not only affirms the central role of farmers in the broader agricultural economy, but also reveals the values and goals that influence the countless individual decisions that together make up macro-level patterns of activity (Gasson, 1973; Blanc, 1994; Smithers and, Johnson, 2004). Macro-scale studies can describe the broad framework of the agricultural system, but farm-level investigation puts flesh on this skeleton.

The farm is a complex operating unit in which decisions are influenced by the particular farming situation, regional conditions, and global agribusiness. Given the added tensions of farming in peri-urban areas, understanding how farmers negotiate this relationship is essential in trying to predict the future of agriculture.

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In their studies of agriculture in the Toronto and Montreal regions, Bryant and Johnston show how farm-level investigations explain the resilience of farm enterprises to urbanization. They reveal the diversity of farmers' responses to urbanization and other external pressures (Bryant and Johnston, 1990, p. 109). Understanding matters at the farm level opens a

window into the lives of farm families and households, which are still the primary social unit of agriculture (Maurer, 1992).

In focusing on the reproduction of the farm, then, this study treats the farm as a social as well as an economic unit.

3. Method

3.1 Selection of participants

Farmers were selected using the snowball method, which involves using initial contacts as sources of additional contacts (Cassell and Symon, 2004; Hay, 2000). We chose this method over random sampling for three reasons:

- It increased the likelihood of selecting farmers who would be interested in and positive about participating in the study, because they were recommended by someone who knew them.
- The study takes a qualitative approach, which does not require the sampling rigour of a quantitative analysis.
- As we wanted to talk to no more than 10 participants in each locale, a representative sample would have been impossible. The snowball method allowed us to exercise control over which farms to include in the study.

Initial contacts came from a variety of sources, including local federations of agriculture, farmers whom the authors already knew, and other contacts in the farming community.

We conducted 64 interviews. Interviews were arranged by telephone and in almost every case involved face-to-face sessions of between one and two hours at the farmers' premises. In most cases, we spoke with the principal farm operator, but in some we also talked to his or her spouse or other partner, such as a son. Many interviews also included a tour of the farm operation.

3.2 The Interviews

In the interviews we used a prepared questionnaire as a guide. The interviewer wrote down the responses. Some interviews were also tape-recorded. Tapes of interviews were transcribed and combined with written answers and comments.

We used a semi-structured questionnaire; a fairly structured first section to obtain basic information about the farmer and the farm business structure, and an open-ended section, which was more of a guided discussion of selected topics. Throughout the interview, participants were encouraged to take the questions in whatever direction they preferred, so that we could capture what was important to them and what they felt should be emphasized. This was the guiding principle of all the interviews.

This study is based on 64 interviews with farmers, and, in some cases, their spouses, family members, and partners.

Interviewing was spread out over 12 months, beginning in June 2003 and ending in May 2004. Among other things, we needed to fit the interviews around the seasonal farming schedule. This meant setting up meetings in between field preparation, planting, and harvesting times and even a few winter absences. All participants were very cooperative in setting aside time for the interviews.

The first part of the interview established a profile of each farm and the people who ran it, including:

- farming background;
- type of enterprise;
- land base; acreage owned and rented, land quality;
- main products;
- economics of enterprise: gross income, costs, marketing;
- labour;
- off-farm and non-farm income;
- changes in the above over the past 20 years (where applicable).

Most farmers wanted to go beyond providing basic information and talk about their own personal and family histories, the changing nature of their operations, their economic challenges, the decisions they had made on land acquisition, and so on. So this preliminary section provided a rich impression of each farming situation. In fact, in many interviews, the first part ended up being more open-ended than we had anticipated and flowed straight into the unstructured second section.

In the second part, we focused on getting participants to provide us with a sense of their stake in, or commitment to their farm operation and how this relates to their goals and expectations. We organized this into four categories:

- economic: current financial situation, plans for future investment, innovations, value-added activities, reliance on non-farm income;
- generational: ancestral farming background, attachment to farming, commitment of family members to continue farming, prospects for children taking over the farm;
- social: status of local farm community, community involvement, concern for local political issues;
- environmental: stewardship practices, on-farm environmental conservation and restoration, attitudes towards sustainable farm practices and local environmental quality.

The interview concluded with a discussion of the challenges of farming in a metropolitan region: the impact of urban growth, farming at the urban edge, adaptation strategies, role of local planning and development, and attitudes towards farmland preservation policies.

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4. Study locales

The Toronto region as defined by Neptis covers a large and diverse agricultural environment. This presented us with a challenge in selecting areas for interviews. In the end, we selected areas that represent different types of farming.

To capture locational differences relating to proximity to urban areas, we identified four areas close to the expanding urban edge (including the specialty lands of the Niagara region), and two in more rural parts of the region. In addition we tried to select areas that reflect differences in the quality of the land and in land use regulations. The boundaries are imprecise, reflecting the snowball method used to select participants in the survey. So the locations marked by number on Map 1 indicate the approximate centre of the area within which survey participants are located.

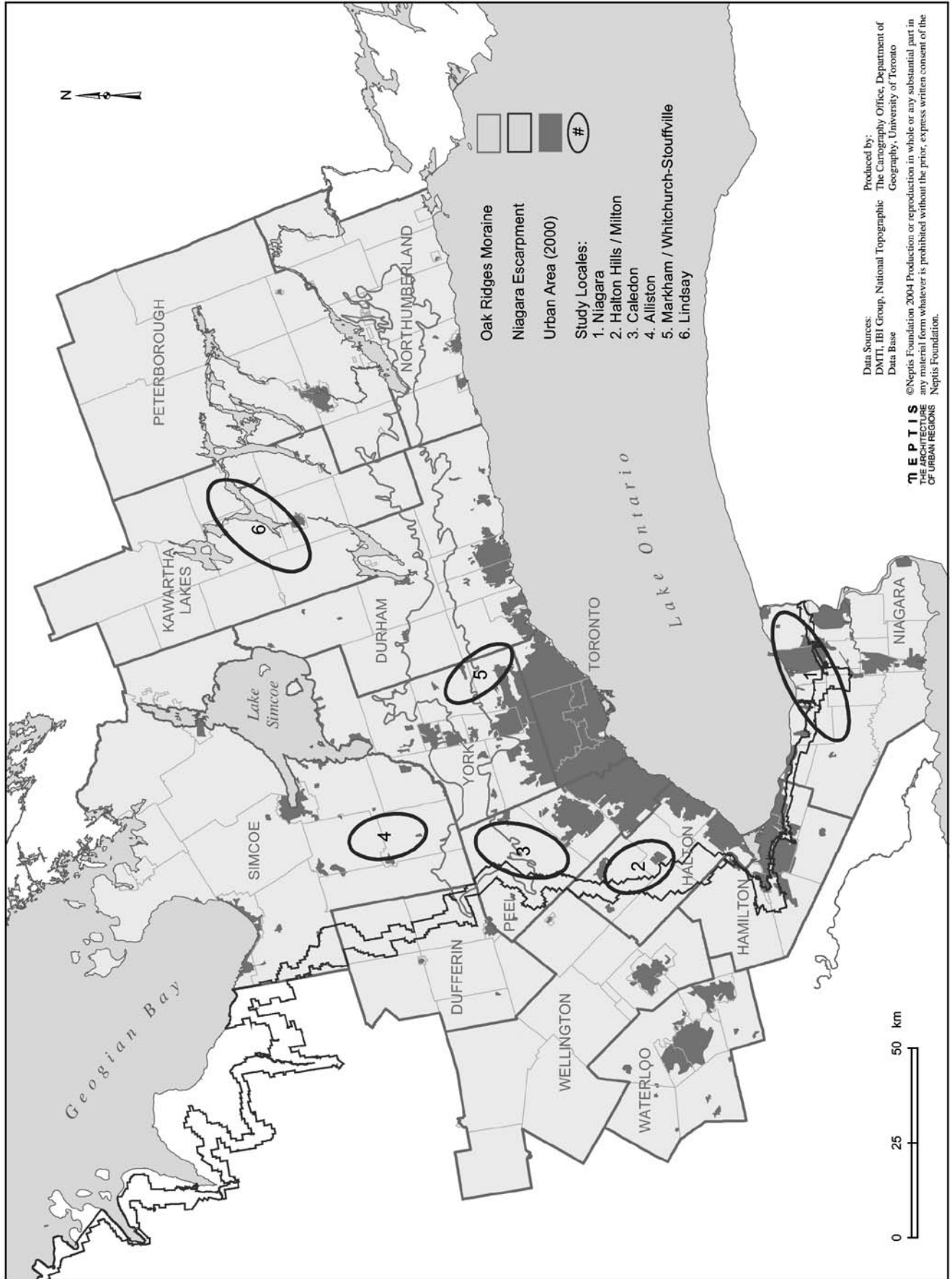
In this report we refer to the study areas as *locales*—fairly small, compact areas within the boundaries of one or two contiguous local municipalities. In Niagara and in the Lindsay area, the participants are more widely dispersed, and so these study areas are somewhat larger than the others.

4.1 Caledon

The Town of Caledon contains the only significant area of countryside remaining in the Peel Region, a landscape, as the municipality's website romantically describes it, of "gently rolling hills, green pastures, and clean air..." (Caledon, 2004). Although, like the rest of Peel, Caledon is experiencing considerable growth pressures, with a 45% increase in population in the last decade, most of this growth will occur in rural service centres, as the municipality tightens policies to protect rural areas, particularly the high-quality agricultural land in the southern half of the area. This is a wide swath of predominantly Canada Land Inventory Class 1 land close to the edge of suburban Brampton, which remains one of the most productive farming areas of the Toronto region, with almost \$47 million in gross farm receipts in 1996 (Walton et al., 1999).

The total agricultural acreage of Caledon has declined by 16% over the past 25 years - half the rate of the Toronto region as a whole. Although the number of farms has declined at almost the same rate as the rest of the GTA, average farm size has increased to 214 acres, and Caledon contains some very large operations; 20 are more than 760 acres. More than half (55%) of agricultural land in the area is rented (Walton, 2003). The dominant types of farming in 2001 were dairy, cattle, cash crops, and horse operations. Most horse farms were in the rural area of the Oak Ridges Moraine and on the Niagara Escarpment.

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The municipality seems determined to pursue policies to retain its overall rural character and ensure the continuation of agriculture on its prime lands by providing “the most support [to agriculture] possible through the land-use planning process” (Caledon, 2003, p. 8). This includes restricting urban boundaries, tightly controlling severances on farmland, and encouraging value-added farm activities. Caledon - both the municipality and its residents - represents one of the strongest supporters of region-wide initiatives to protect agricultural land.

4.2 Lindsay area

Situated in the far northeast corner of the Toronto region, this is the most rural locale. We selected it because we wanted to include an area that was less likely to be affected by urbanization pressures than other parts of the region, and at the same time represented farming on more marginal lands. The survey participants are located within a fairly wide area centred on the town of Lindsay. This is an area of considerable variation in physical conditions. To the west of Lindsay around Oakwood, where six of the participants farm, is the largest block of prime, relatively level farmland in the area. We also interviewed three farmers on poorer land north and east of Lindsay.

This area is not experiencing much urban or even general population growth pressure. In 2002 there were only 69,179 permanent residents in the whole of the City of Kawartha Lakes, a scant 1.8% increase over the 1996 figure (Kawartha Lakes, 2004). Although this number increases if the seasonal cottage population is included, there is less development pressure compared with more heated cottage markets elsewhere.

The study area is primarily cattle country. In the townships around Lindsay, where the interviews were carried out, average farm size is over 250 acres, reflecting the extensive use of land for growing feed crops for beef and dairy operations. Yet gross farm receipts in these townships are well below both provincial and regional averages, indicating that this is the least productive locale in the study (Walton, 2005), largely because of the shorter growing season, the “patchiness” of prime agricultural land, and the distance from markets.

Despite the variable and, in some areas, distinctly marginal quality of its agricultural resource base, Kawartha Lakes promotes itself as a farming community, not only with restrictions on the development and severance of prime farmland, but also by promoting local produce through the Farm Fresh program and fall farm tours (Kawartha Lakes, 2004). There are also active local farm organizations as well as an Agricultural Advisory Committee for Kawartha Lakes.

The Lindsay area is not experiencing much urban or even general population growth pressure. It is also the least productive locale in the study.

4.3 Alliston

The area around the small town of Alliston in the northwest of the region is also predominantly rural. Yet it differs from the Lindsay area in two respects: first, it is experiencing more development pressure, and second, it is a more productive agricultural area.

Simcoe County is rapidly becoming the new development frontier of the Toronto region, both as a bedroom community and as a location for employment. While much of this growth has occurred in the Barrie area, south Simcoe has also experienced significant population and economic growth. Alliston is the home of the Honda automobile plant, which employs more than 2,500 workers. Its operations put considerable pressure on local housing markets and infrastructure. The population of New Tecumseth township, where most of our survey participants are located, is projected to more than double by 2031 from the 2001 figure of 25,000 (Jones Consulting Group, 2002). The extension of Highway 427 and the construction of an east-west link between Highways 400 and 427 will increase development pressures on the area's rich farmlands.

Alliston is at the heart of Ontario's main potato-producing region. Most of the land in the area is Canadian Land Inventory Class 1. Fertile sandy loam soils are ideal for potatoes, but also for other field crops and increasingly for sod production, as well for cattle and dairy farms. Patches of organic soils in old lakebeds also provide good growing conditions. This is one of the most productive agricultural areas in the region, with farm sizes and gross farm receipts per acre well above the provincial average (Walton, 2005).

4.4 Niagara

The Niagara region is a symbol of the conflict between agriculture and urbanization in the Golden Horseshoe. Rapid and largely uncontrolled development along the Queen Elizabeth Way between the 1950s and 1970s eroded the specialty fruitlands below the Niagara Escarpment. This threat to the future of the Province's only significant tender fruit-, grape-, and wine-producing lands precipitated the introduction of provincial farmland preservation policies in the late 1970s and, more recently, strongly pro-agricultural policies on the part of the Regional Municipality.

Although agricultural acreage declined by almost 8% between 1976 and 2001, there has been a slight increase in the past few years (Planscape et al., 2003). Yet pressures on the limited land base continue, both from urban areas and from competition within the agricultural sector between traditional and newer types of farming (Niagara, 2002).

Despite these problems and despite increasing foreign competition in the fruit sector, agriculture in the Niagara region seems to be holding its own

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(Regional Niagara Agricultural Task Force, 2003). Agricultural acreage appears to be stabilizing and new types of enterprises are being developed. Although grapes and tender fruits define the region's agricultural identity, with expanding greenhouse flower and vegetable production, nursery gardens, sod farms, livestock production, cash cropping, and a range of niche enterprises, this is the most diverse agricultural area in the Toronto region. And with average gross farm receipts of almost \$2,200 per acre, it is also the most productive agricultural area in the region (Planscape et al., 2003).

Niagara presented us with the challenge of capturing its diversity in only 10 interviews. In order to include the grape and tree fruit growers and greenhouse operations below the escarpment, and the sod, livestock, and niche enterprises above it, we ended up with a somewhat less concentrated study area than in the other locales.

4.5 Markham/Whitchurch-Stouffville

Located on the northeast edge of the City of Toronto, this locale has been characterized by rapid suburbanization and the loss of farmland over the past 20 years, mainly in Markham. Development pressures continue, as a large percentage of the remaining farmland is rented - some from developers and 7,000 acres from the provincial government through the Ontario Realty Corporation (Harry Cummings and Associates, 2003). At the same time, parts of the area have been protected by development freezes on federal and provincial lands, and in the Duffins-Rouge agricultural preserve in Pickering.

Some of the lands used by farmers we surveyed are also on the Oak Ridges Moraine, which adds another layer of protection from development. This is a distinctive part of the Toronto region, which exhibits a mix of development pressures and special protection measures that may offer a model for other urban-edge localities.

The agricultural area in Markham has shrunk to less than 10% of the municipality (Harry Cummings and Associates, 2003, p. 3), but seems to be stabilizing at that figure, largely because most of what is left is on the protected East Markham lands. The agricultural lands in southern Whitchurch-Stouffville have experienced less development pressure, although between 1996 and 2001, the agricultural area of the municipality declined by 27%, which indicates the reach of the outward movement of the suburbia (Whitchurch-Stouffville, 2004). As the number of farms has declined, the percentage of land rented has increased. Yet agriculture persists, albeit in a farming community which is in obvious decline. Agricultural land use is dominated by several large cash crop farms, with a few market garden and livestock operations (Harry Cummings and Associates, 2003; Walton, 2005).

A large percentage of the remaining farmland in the Markham/Whitchurch-Stouffville area is rented - some from developers and 7,000 acres from the provincial government.

4.6 Halton Hills-Milton

This locale epitomizes the split personality of peri-urban landscapes. On the one hand, it is an urbanizing area, especially around Milton, which plans to expand its urban area to accommodate another 50,000 people by 2011 (Milton, 2001) and is a designated growth centre in the Province's growth management proposals (Ontario, 2004a). Given its proximity to Highway 401, Milton is an attractive location for both commercial and industrial development and Toronto commuters. Halton Hills to the north has experienced slower population growth, mostly around Georgetown, but the municipality's population is projected to increase from the current 50,000 to 70,000 by 2021, as Georgetown and Acton expand as commuter settlements (Halton Hills, 2004).

On the other hand, the area contains large areas of protected natural environment and open space, including some agricultural land, on the Niagara Escarpment, as well as some of the best farmland in the Toronto region on the plain below the escarpment. This land, however, is squeezed between the advancing urban boundaries of Mississauga and Burlington and those of Milton and Halton Hills.

While the protection of this prime farmland is a stated policy of the municipalities of Milton and Halton Hills, development pressures threaten the long-term future of agriculture in the area. Milton has already lost much of its farmland to development, with a 19% decline between 1976 and 1996 and a further 10% between 1996 and 2001, an overall rate much higher than the regional average. At the same time, the number of farms in Milton fell by more than 40%. Of the 271 farms that were left in 2001, over a quarter were livestock or cash crop operations; most of the rest were specialty enterprises such as horse barns, greenhouses, or nurseries. This pattern is reflected in the smaller average farm size - half the farms are less than 70 acres.

By contrast, some of the largest farms in the Toronto region can be found in Halton Hills. Between 1976 and 1996, Halton Hills experienced a steady increase in total farm acreage, but according to the 2001 census, this trend has begun to reverse. Farm numbers have declined as they have across the region as a whole, while average farm size has increased. Despite the presence of some very large operations, most farms are smaller than 130 acres, reflecting a diverse agricultural economy of dairy, beef, cash crop, and specialty operations, including many horse farms, and several greenhouse and nursery enterprises. The area generated gross farm receipts in 2001 of \$57.2 million, which makes Halton Hills the most agriculturally productive local municipality in the region (Planscape, 2003).

The Halton Hills-Milton area contains large areas of protected natural environment, as well as some of the best farmland in the Toronto region. This land, however, is squeezed between the advancing urban boundaries of Mississauga and Burlington and those of Milton and Halton Hills.

5. The farm interviews: Findings

Although the survey does not represent the full range of farming types and sectors in either the region or the individual study areas, the 64 interviews did capture the diversity of farm enterprises.

5.1 Understanding the commitment to farming in the region

Assessing farmers' commitment to the land being farmed in a specific area is one way to predict the future sustainability of agriculture in the region. We have characterized commitment in terms of the farmers' economic, social, generational, and environmental stakes in their enterprises.

The fact that farming is as much a lifestyle choice as a business opportunity creates conflicting views of the value of agriculture on the part of farmers and the general public. Farmers often oppose farmland preservation not only because it is a barrier to their rights as private landholders, but also because it seems to be a way of keeping the countryside merely as an amenity for urban dwellers. Yet many farmers view severances and strip development as indicators of the diminishing sustainability of their farms and their local farming communities.

Meanwhile, non-farmers usually prefer a countryside of fields and woodlots rather than one dotted with intensive livestock operations, and want to be able to drive on country roads unhindered by slow-moving vehicles. Often, neither group understands the other's needs or values. This problem was illustrated in 2004 by the "150 Ashburn [Ontario] residents who have launched a \$10 million lawsuit...[charging that the smells emanating from Greenwood Mushroom Farms, Canada's largest mushroom producer] have devalued their homes and made it impossible for them to enjoy their day-to-day lives" (Cheney, 2004, p. M3).

This confusion between the amenity value that farming represents to non-farmers and the actual business of farming can result in misunderstandings and resentments, as consumers demand lower-priced food, the voting public opposes government support of certain agricultural practices, and farmers insist that they should receive a reasonable return on their investments.

5.2 Economic stake

A number of indicators reveal farmers' commitment to long-term economic viability: the structure of the farm business, the degree and nature of investments in the operation, and future plans for expansion, specialization, or diversification. For instance, incorporating the farm business

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The amount of owned versus rented land can indicate the degree of economic commitment to the farming operation.

can indicate an intention to assume a more businesslike culture than that typical of the more traditional family farm. It may also indicate multiple partners in the business, an increased debt load, or a crucial change in the nature of the operation. The amount of owned versus rented land can also indicate the degree of economic commitment to the farming operation (Bunce, 1985). And the farmers' own description of their financial outlook expresses their sense of the security and viability of their farm business, as well as their future prospects and plans.

In terms of business organization, 63% of the respondents identified themselves as sole proprietor or part of a family partnership, and 80% employed family labour in one form or another. These indicators suggest that the traditional family farm structure is still very much alive. However, the average amount of non-family labour per operation was 2.1 full-time workers, 3.7 part-time workers, and 18 seasonal workers, so hired help is also important.

Almost 60% of the farmers identified themselves as primarily cash crop producers, 30% raised beef cattle, 22% had dairy cattle, and 25% had fruit and vegetable, grape-growing, or greenhouse operations. There were also a few exotic, organic, and sod farmers. Farm-gate (or direct) sales dominated the farmers' marketing strategies, followed by forward contracts, and selling to wholesalers. Remarkably, 70% had not made significant changes to their marketing strategies over the last 20 years. These figures suggest the dominance of relatively conventional farm business structures among the people we interviewed. A reliance, at least in part, on farm-gate sales may indicate continued and close ties to local communities or perhaps that farmers take advantage of marketing opportunities available to producers on the urban fringe, such as pick-your-own operations.

Almost 70% of the respondents said that there had been no significant change over the past 20 years in the percentage of their total household income that is derived from farming. However, more than 40% were currently involved in some form of non-farming work. About 50% said that the portion of farm-to-non-farm work had not changed over the last two decades, but for 11% of the respondents, off-farm work had increased. However, these figures may not be as significant as they first appear in terms of the contribution of off-farm income to the farm household. While an average of 89% of the principal operators' time was spent farming, 77% of the total household income was derived from the farming operation. This suggests that many of the farm operators' spouses work off the farm, although we did not record the actual percentages. Households also draw income from financial investments. Consequently, on average, the farm businesses are contributing substantially to the gross family income.

Investment in the farm operation consisted largely of purchases and maintenance of machinery and farm buildings (85% of investments),

The traditional family farm structure is still very much alive. However, the average amount of non-family labour per operation was 2.1 full-time workers, 3.7 part-time workers, and 18 seasonal workers, so hired help is also important.

More than 40% of the farmers interviewed were currently involved in some form of non-farming work. Many of the farm operators' spouses work off the farm. Households also draw income from financial investments.

The cost-price squeeze - that is, the relationship between the costs of production and the prices received for farm produce is a major economic challenge for farmers.

computerization (80%), land drainage systems (50%), and land reclamation (30%). Respondents were also asked to list their top four operating expenses. Fuel, pesticides, and fertilizers dominated the list, followed by machinery and building maintenance costs, and general utility costs such as hydro and water. Labour was also a significant expense for 42% of the operations.

Of the major economic challenges to making a living from farming, the respondents most often identified the cost-price squeeze - that is, the relationship between the costs of production and the prices received for farm produce. The costs of inputs and machinery were the next most significant issue. Land costs, and the inability to expand the land base through land purchases or renting, as well as regional and global competition from big grocery chains and agricultural imports were other important concerns. The economic viability of farming in general was cited by 55% of the operators as a major threat to continuing to work their farms, with urban development a close second.

Nevertheless, almost 70% of the operators felt secure or relatively stable about their overall financial outlook; the remaining 30% identified themselves as either struggling or unable to make any kind of a living from their farming operation. Almost 60% had no plans to expand, diversify, or alter their farm businesses. Only 19% had any intentions of expanding the scale of their operations. And almost 60% stated that they would sell their farm or farmland if offered the “right” price.

Almost 70% of the operators interviewed felt secure or relatively stable about their overall financial outlook; the remaining 30% identified themselves as either struggling or unable to make any kind of a living from their farming operation.

5.3 Social stake

How connected individual farmers are to their community is another indicator of the possible future of farming in the GTA. While marketing farm produce through direct sales is one way to develop social and economic ties to a community, locally recruiting non-family labour can also reinforce social relations within a community. More generally, the social stake in the local community can be measured by farmers’ perceptions of how the community serves their needs, how active the farm family is in community organizations, and how farmers view the non-farm population in their area, especially in the context of their farming practices.

One approach to measuring the social stake is the comparison of the average number of farm organization memberships (2.9) to non-farm community ties (1.5), determined through the total number of contacts, such as churches, local political organizations, school and recreational activities. While the questionnaire didn’t explore these variables in detail, especially in terms of the relative strength of these relationships, the indication from our respondents was that generally they had more ties with the farming community, local and regional, than with the non-farm population, thus demonstrating a weaker stake in local affairs. Reinforcing this supposition

Respondents generally had more ties with the farming community, local and regional, than with the non-farm population, thus demonstrating a weaker stake in local affairs.

is the sense of loss of their farming communities. For 36% of the respondents, no farming community exists any longer in their area; another 23% believed that it is in serious decline. Over 50% of the respondents felt that there was no evidence of municipal support for farming and a further 11% were unsure about the degree of local political interest in farming issues, with many farmers commenting that municipalities were very committed to urban development.

5.4 Generational stake

Whether the farm is considered a family farm reveals something of the past, present, and likely future choices made by farm operators. One might assume that a family farm has a reasonable chance of continuing because it has been in the family for many generations, but this is not necessarily the case. The sustainability of a family farm depends on variables such as the children's interest in farming as an occupation, the level of attachment to the farm as a family institution, and whether farmers intend to sell the farm if the "price is right."

While 55% of the respondents had worked on another farm before their current operation, they averaged 25 years on their present farm, and almost 70% said that their present farms had been in the family for at least two generations. This suggests a degree of emotional, as well as economic, commitment to the family land and homestead. However, almost 60% did not describe their farm as a family farm, and almost 70% said they did not expect any of their children to work the farm in the future. Some farmers mentioned the financial barriers to entry for new farmers, including their own children, as a reason why the farm would not pass to the next generation. Especially in the urban fringe areas, farmers said that they could not expand their operations to accommodate farming by their children because of the lack of available farmland to buy or, in some cases, rent.

Almost 60% of respondents did not describe their farm as a family farm, and almost 70% said they did not expect any of their children to work the farm in the future.

5.5 Environmental stake

Farmers are often viewed and, as this study demonstrates, view themselves, as stewards of the land. This is not necessarily a myth, but the idea tends to confuse the business of farming with the culture of farming. When a business sector holds ideals that it feels it already lives up to, it can be difficult for farmers and public alike to change their attitudes towards farming practices and rural land use.

Two measures of farmers' environmental stake are the environmental practices of the farmers themselves and their attitudes towards farmland preservation policies. Of the respondents, 25% cited over-regulation as a threat to their continuing to farm. Many cited the additional costs incurred by operators as a result of the provincial *Nutrient Management Act*, which might put some farmers out of business, and weak support for farmland

Of the respondents, 25% cited over-regulation as a threat to their continuing to farm. Only 34% were in favour of farmland preservation.

preservation initiatives. Only 34% were in favour of farmland preservation and most of these were already farming on protected land such as the Oak Ridges Moraine, or were farming in areas away from development pressures.

Almost 75% of farmers followed sustainable land management practices such as low till cultivation, leaving stubble on harvested fields, crop rotation, and/or green manuring; 56% had completed the Provincial Environmental Farm Plan, although a number questioned its usefulness. However, and not surprisingly, 84% relied to some degree on chemical fertilizers, pesticides, and/or genetically modified seeds and many argued that they had no alternative but to use chemicals in their production system. Fewer than 25% of the farmers were involved in other forms of land stewardship practice, such as tree planting, and only 13% were active in environmental organizations or environmental policy-making initiatives.

We included only two organic farms in this study. This isn't surprising, since the selection process was in large part facilitated through Ontario Federation of Agriculture contacts, arguably representative of more conventional farm interests. But the analysis reveals a prevailing attitude that farmers are looking after their land, and will continue to do so as long as it is economically viable, and that land preservation policies and untargeted environmental regulations are neither necessary nor welcome.

Farmers feel that they are looking after their land, and will continue to do so as long as it is economically viable. They consider land preservation policies and untargeted environmental regulations unnecessary and unwelcome.

5.6 Trends by locale

Because of the relatively small number of respondents in each locale and sector, the next two sections will identify only certain trends that appear to be location- or sector-specific. Substantive analysis would require a larger number of interviews representing a greater diversity of farm types. Nevertheless, some trends associated with specific areas may be worth investigating further.

The **Alliston** area is dominated by large, corporate farms, with a shorter-than-average land tenure of 21 years. Rental lands as a proportion of total land farmed over the over last 20 years has decreased, and the ratio of owned to rented land is much higher than average. However, other land use, economic, and environmental variables are all fairly typical, with a slightly higher rate of membership in farm organizations than the average and slightly fewer connections to the local community. Few farmers plan to expand their operations and most were open to selling their farms. Concerns about urban development and the viability of farming as a business were overwhelmingly identified as the major threats to continuing farming.

In the Alliston area, concerns about urban development and the viability of farming as a business were overwhelmingly identified as the major threats to continuing farming.

Caledon farms represent the overall variety of farm business structures, but have a much higher proportion of rented land than the overall aver-

age. The non-family labour component is also higher than average. Future investment plans suggest greater optimism about the sustainability of the farm business, and some farmers mentioned expansion strategies, although the majority had no plans to expand, and some would sell their land if they had the chance. However, a slight majority see a future for their family in farming, and are much more connected to both their farming and local communities. Not surprisingly, given the location, the implications of farming on or near the Oak Ridges Moraine and farmland preservation policies in general are dominant issues and the vast majority are not in favour of farmland preservation in any form.

Halton Hills/Milton farmers have been working their land for much longer than the average, but the farms are smaller, relying on twice as much rented land as owned. Traffic is a major issue, and only one farmer felt that there was any real municipal support for farming in the area. Farmers expressed concern about the non-farming public's interference with farm practices and, more generally, about the encroachment of urban development and its consequences.

Lindsay respondents represent a newer farming population in terms of length of farm tenure, and a less conventional mix of farm produce. Farm incomes are lower than average, as is the relative contribution of the farm business to the overall family income. Interestingly, the family labour component is much smaller than average in this area, perhaps reflecting spouses' off-farm income contribution to family finances. Investment in the farm business in terms of machinery and computerization is lower than average, but there is a greater sense of belonging to a farm community than anywhere else in the study region. Severances and traffic dominate as important issues. The viability of the farm enterprise is cited as the main threat to these farms.

Farmers in **Markham/Whitchurch-Stouffville** have a longer-than-average tenure on their farms. The proportion of rented to owned land is quite high. Cash cropping dominates and the contribution of farm income to the overall household income is well below the average. There are more family partnerships and the use of non-family labour is also well above the mean. The level of direct sales is less than one might expect in an urban edge area. The majority who still own are ready to sell, but a higher-than-average proportion of farmers expect their children to take over the farm. There appears to be more support for environmental management strategies such as the *Nutrient Management Act* and other land stewardship initiatives, but little enthusiasm for farmland preservation policies.

In **Niagara**, there are fewer family farms and more corporate farms. The length of land tenure is below the average. Greenhouses, fruit and vegetable operations, and grape growing dominate; farm incomes are above average and represent a much higher proportion of overall household

Farmers in Caledon seemed optimistic about the sustainability of the farm business, and some farmers mentioned expansion strategies, although the majority had no plans to expand, and some would sell their land if they had the chance.

Farmers in Halton Hills/ Milton were concerned about the encroachment of urban development, while in the Lindsay area, severances and traffic dominate as important issues.

In Markham, a higher-than-average proportion of farmers expect their children to take over the farm. Niagara, however, has fewer family farms and more corporate farms.

income. Both family and non-family labour are important components of the farm business, overall investment in the farm and the land base are higher, and farmers felt a greater sense of belonging to a farming community. However, there is little optimism about the future of their farms beyond the current generation. Proximity to urban regions is viewed as an asset rather than a liability in terms of increased opportunities for farm-gate sales; but urban development is still a threat to farming, along with over-regulation, including the restrictions placed on farming by the Niagara Escarpment Commission.

5.7 Trends by agricultural sector

Cash croppers generally use more rented than owned land in their operations and perform more custom-farm work in order to make the most of investments in farm machinery. They make less use of non-family labour. This is a relatively secure group economically, but with fewer connections to farming and non-farming communities. Most cash croppers see no future for their family farms. They identified traffic and residential development as the two major urban conflicts.

Cash croppers form a relatively secure group economically, but with fewer connections to farming and non-farming communities.

Cash crop and beef operations have the same land use and farm labour profile as cash croppers, but receive lower-than-average farm incomes and are less financially secure. Beef operations are especially threatened by ongoing trade issues related to BSE (bovine spongiform encephalopathy or “mad cow” disease). Conflicts with their farming practices come mainly from road traffic and the non-farm population. This group is split regarding attitudes toward farmland preservation policies.

Fruit and vegetable growers, grape growers, and greenhouse operators tend to farm smaller-than-average acreages, under a higher proportion of corporate farm structures.

Farmers with a variety of **livestock, cash crops, and feed crops** have shorter-than-average land tenure, more family partnerships, a broader range of farm income, and, not surprisingly, a greater variety of marketing strategies. The connections to both farming and non-farming communities are stronger than average and there seems to be more variety in their responses to the major threats and conflicts associated with their farming practices.

Fruit and vegetable growers, grape growers, and greenhouse operators are a mixed group, farming smaller-than-average acreages, under a higher proportion of corporate farm structures. They are the largest employers of non-family farm labour and use a wide range of marketing strategies. Although they have relatively high farm incomes, they vary considerably in how they rate their financial security. They are split on the question of selling their farms, the family future of the farm, and the sustainability of the local farming community. They do not particularly favour farmland preservation, but are concerned about the viability of farming in general and the encroachment of urban development, including conflicts with the non-farm population.

The **dairy** sector was most represented in Halton Hills/Milton and Caledon. These farms tend to be average in terms of farm size, length of farm tenure, and the variety of business structures they have adopted. They display a greater variety of investments in both the farm business and the land base. Their financial outlooks are quite varied: many would sell their land, and BSE has hit them hard. (Interestingly, BSE was mentioned as a major economic challenge more often by dairy farmers than by beef producers.) They enjoy closer ties to both farming and non-farming communities and display a variety of responses to urban conflicts and threats to their farming operations.

There was not enough representation of **poultry, organic, and sod farmers** to describe trends across the region.

BSE was mentioned as a major economic challenge more often by dairy farmers than by beef producers.

6. Common themes: General farming issues

A number of common themes stand out quite clearly in the findings. This section explores these themes in more detail, drawing on examples from the farm interviews to illustrate farmers' opinions and motivations as well as to reveal how these themes play out in particular farming situations.

6.1 Making a living from farming

Although most farmers said that they felt financially secure, the most frequently repeated concern was the challenge of making an adequate living from farming. Many farmers were pessimistic about their future of their business. They used expressions such as “tenuous,” “desperate,” “tough,” “bleak,” “terrible,” “precarious,” “the poorest since I started farming.”

Even those who were operating relatively successful and secure enterprises echoed the perennial farmers' complaint: the cost-price squeeze. While most saw this as endemic to agriculture, some specific factors were involved. For many, it related to the cost of expansion and new investment as operators worked to achieve economies of scale and greater market share. “We're up to our ears in debt and have to keep expanding to get more market share. We always feel as though we're losing control.”

Many farmers were pessimistic about their future of their business. They used expressions such as “tenuous,” “desperate,” “tough,” “bleak,” “terrible,” “precarious,” “the poorest since I started farming.”

FARMING NARRATIVE: THE LEAVERS

This farmer and his family have farmed for generations along the same road. Much of the original family-held land base has been sold off and rented back to the family members who are still farming. This farmer has a technologically sophisticated market gardening operation, and obviously has the skills necessary to successfully produce quality fruits and vegetables. The operation's marketing strategies have changed in the increasing reliance on pick-your-own sales. The operation's overall gross revenue is perhaps less than average for the area.

Even with the investment in technology and skills, this farmer is struggling and considering part-time work as well as increasing the farm-based non-agricultural part of the family business. The main problems are the increasing and relentless pressures of urban development encircling the family's operations, no perceived inter-generational future for a heritage family farm, a perceived loss of the farming community, and a lack of ties with the local non-farm population. Despite his efforts to use the most up-to-date and efficient crop production methods, and to diversify his operation to take advantage of proximity to the urban population, as well as his own entrepreneurial on- and off-farm skills, the viability of this operation is at risk. The farmer expects that his land will be developed within the next 10 years.

Start-up costs are a problem for young farmers. One new greenhouse operator in Niagara was struggling to cover his initial investment costs and break into the market for flowers. But rising input costs in general combined with declining commodity prices are clearly seen as the main culprits. “The returns on investment just aren’t there.” “The costs of farming just keep escalating... we’re having to work harder than ever just to stay where we are.” One farmer used the acronym the “DIRTI 5 - depreciation, insurance, repairs, taxes, and interest” to describe his costs. Although many blamed poor or fluctuating commodity prices, one farmer attributed low returns to a more general culture of “cheap produce prices and a ‘mental price barrier’ of consumers who feel that food should be cheap.”

Rising input costs in general combined with declining commodity prices are clearly seen as the main barriers to the continuation of farming.

FARMING NARRATIVE: THE STRUGGLERS

Typical of many farms in the study, this enterprise is a mix of cow/calf and stocker production and cash cropping. roughly half of the farmland is owned, and all expansion has taken place on rented land. This farm supports two family members, but off-farm work and proceeds from past land sales contribute substantially to the overall family income. The BSE crisis greatly affected this operation. Low commodity prices, coupled with increased land costs in the Alliston area, have pretty much eliminated any further plans for expansion. The farmer explains, “The return on investment just isn’t there.” If it were, he argues, more farmers would invest in their operations.

He views his property as his retirement income. “I think we’re in a special area here, because we’re caught between one of the biggest urban areas in North America, and one of the biggest playgrounds... Georgian Bay and Muskoka. So I think this area here is bound for growth.” With the diminishing importance of the farm income as a percentage of overall family income, increasing road traffic (especially important as he has to work rental lands away from the farm headquarters), and a perceived lack of support for farming in the region, this family’s commitment to a future in agriculture will probably not extend to the farm itself.

6.2 Market competition

Low returns on investment were usually attributed to the general difficulties of competing in continental and global markets. Several farmers talked about the large supermarket chains that could lock up contracts with foreign shippers and to the problems of selling produce locally when so much is imported. As one producer in Markham observed, “They can grow strawberries year-round in California and Mexico and deliver a reliable, good quality product to the supermarkets, so it’s hard to get supermarkets to stock local strawberries for such a short season.” Another saw the problem in terms of the more systemic consequences of global agribusiness: “I don’t think we can compete with Third World countries. We can’t afford to produce food as cheaply as they can.”

Competition from Third World countries, and corporate food processing monopolies reduce the potential profits from farming .

Potato and hog farmers felt vulnerable because of corporate food processing monopolies and the tight margins that this forced on them. According to one hog farmer, “It costs us \$1.40 to put them [the hogs] out the door, but Maple Leaf is telling us that if you can’t handle their price of \$1.35, then do something else.” A goat milk producer echoed this with the comment, “I don’t like how one single processor controls the goat milk industry.”

6.3 BSE: The “mad cow” scare

While the volatility of the market is a perpetual concern of beef farmers across the province, the fear of bovine spongiform encephalopathy (BSE) and outbreaks of other livestock diseases is clearly the last straw for most of the livestock operators. The closure of the U.S. market posed the greatest problem for beef producers, a number of whom said that it had caused a crisis for them and might force them to give up the farm. Others have been forced to re-think their dependence on beef sales. “We had thought of maybe building a 500-head feedlot here ... but now with BSE, there is so much uncertainty, it’s not worth the risk.”

BSE has closed the market for cull cows, thereby affecting dairy farmers, who rely on this market to supplement income from milk sales.

The loss of the market for cull cows has affected dairy farmers, who rely on this to supplement income from milk sales. For a large, highly leveraged dairy farmer in the Lindsay area, the loss of the cull cow market

FARMING NARRATIVE: THE NICHERS

Niche marketing is one strategy that many farmers use to stay competitive and continue to farm. Two operators, both from Ontario dairy farm families, have developed a specialty soft fruit crop operation northwest of Toronto. The operation started as a market gardening and cash crop farm, with pick-your-own facilities and sales to farmers’ markets. The family has since developed an on-farm fruit winery business as well. The winery may well become their major business focus, at the expense of the original mixed market gardening venture.

Their future plans are “to continue to reduce advertising dollars for [the market garden pick-your-own portion of the business]. However, we plan to increase advertising and promotional efforts for [the winery].” This change will not necessarily lessen land requirements on the urban edge, or their commitment to hiring seasonal migrant employment and local part-time and full-time workers, or their need to employ other farmers in the area to do harvesting. In other words, their interactions with the local economy will probably remain the same and their land will likely not be lost to development any time soon.

What will change is the amount of local food being produced. Although governments promote the business interests of soft fruit growers and wineries, there is less support for those who produce food for local, regional, and international consumption. Also, since there is no evident generational stake in the farm, and the farmers are both in their late fifties, the long-term sustainability of this on-farm business is questionable.

represented the disappearance of his overall profit margin. Dairy operators mentioned BSE more often than beef producers as a major threat to farming.

6.4 Entrepreneurialism and innovation

On a more positive note, large or highly capitalized operations with resources for investment and expansion seem to be holding their own. Here the common theme is entrepreneurialism, adaptation, and innovation.

FARMING NARRATIVE: THE VALUE-ADDERS

Increasing the amount of value-added activity that takes place on the farm is now widely promoted as a way to improve an enterprise's financial security. Much of this involves diversifying farm income sources, including on-farm processing, farm shops and stalls, wineries, and agritourism.

One couple of value-adders acquired their farm just under 20 years ago (both have a farming background) and began by growing cash crops. In the early 1990s they decided to add goats to their operation and to expand their acreage by renting land. They currently farm about 1,900 acres, of which they own only 100, and keep over 1,000 goats. Half of the farm income now comes from cash crops, with most of the rest coming from cheese sales and a small amount from livestock sales.

The decision to expand was partly motivated by their desire to farm full-time, which they started doing in the mid-1990s. They now employ four full-time workers in the goat operation. Not surprisingly, with increased capital investments and labour costs have come increased financial liabilities. Yet the couple is clearly committed to making a success of their business. "Our debt keeps going up...but we're not going backwards. Five years from now we should be solvent if we stick to our business plan."

By moving into on-farm processing of goats' milk into cheese products and selling these products to a wholesaler, they are clearly increasing the value-added component of their business. There is growing market for goats' cheese, so they are considering acquiring another cheese plant to increase capacity and use their hired labour more efficiently. Expanding the goat cheese operation will incur higher labour costs, but contracting out the cash crop side of the enterprise will save land costs.

The couple has a strong environmental stake in their operation, a dry manure program, good animal husbandry, no-till soil conservation, and participation in the Healthy Futures program. They seem to be influenced by a strong sense of attachment to the local farming community, although they are beginning to notice more non-farm people buying up farmhouses and building on severed land, and they worry how this will affect their livestock operation.

Cash-croppers who have been aggressive in assembling a large land base, especially by renting rather than purchasing land, appear to be in fairly good financial shape. As one large cash cropper on the urban edge described his acquisition of more than 2,500 acres of rental land and associated cropping strategies, “We’ve made some smart [real estate] decisions.”

Other operations have improved their financial security by emphasizing value-added activities: on-farm processing, greenhouse operations, farm shops, wineries, pick-your-own arrangements, and other types of direct sales. On one pick-your-own fruit-growing operation, a son came back to the farm and opened a farm shop and winery, which now provides him with a living income. Another operation illustrates the advantages of the diversified extended family enterprise. Ten years ago, the family switched from dairy farming to market gardening, cash cropping, a winery and agritourism (which includes a pumpkin patch and petting corral). Each part of the business is owned and operated by a different family member.

On-farm processing is another way to increase the value-added component of farm income. A good example is a goat cheese farmer who milks a 600-head herd and makes cheese on site, which is sold to stores through a wholesaler. One niche sector that seems to be doing particularly well is sod-farming. A sod farmer in Niagara told us, “I would never have believed that financially I could have done so well.”

Some farm operations have improved their financial security by emphasizing value-added activities: on-farm processing, greenhouse operations, farm shops, wineries, pick-your-own arrangements, and other types of direct sales.

6.5 Supplementing farm income

Surprisingly, only a minority of those interviewed reported doing non-farm or off-farm work themselves, which is not consistent with the general figures for non- or off-farm income for the region. However, several farmers did farm work for other operations, such as combining, while others reported income sources such as interest on investments, pay from work as chair or member of a marketing board, or working for a seed dealership or grain elevator.

One farmer said that his equipment repair business, which he carried on from his farm, gave him enough work that he did not have to rely on the farm to make a living, but he also added that he would rather just be farming. This sense of non-farm work as a second choice to full-time farming seemed to be fairly common. Another farmer had left his off-farm job as a carpenter, but was taking on more and more carpentry jobs, because local demand was there and because he needed the extra income while he tried to establish his goat milk business. But his long-term plans are to concentrate fully on the farm.

Working mainly in white-collar and professional jobs that include nursing, teaching, social work, travel agencies, and retail, wives bring as much as two-thirds of total family income from off the farm and are essential to the survival of some operations.

The most common source of non-farm income came from a spouse - and in a group that consisted almost exclusively of male farmers, this usually

meant the wife's job. Working mainly in white-collar and professional jobs that include nursing, teaching, social work, travel agencies, and retail, wives bring as much as two-thirds of total family income from off the farm and are essential to the survival of some operations.

Then there are what we might call hobby farmers. One medical professional has run a successful pick-your-own operation for years, but his main source of income is his medical practice. He said, "The farm carries itself, but I couldn't live off it." Although he receives at least a third of his total income from the farm and claims to work 60 hours on the farm in addition to the 25 he puts in at his practice, another "hobby" farm couple we interviewed both worked full-time off the farm in professional jobs. This brought in 90 percent of their income, which allowed them to raise sheep without having to worry about making a living from it.

FARMING NARRATIVE: THE LAND KEEPERS

Some farmers make some of their living from the enterprise and have a strong attachment to farming as way of life and to staying on their farm. One such farmer runs a small cow-calf operation and keeps ewes for producing market lambs. He owns 100 acres and also has the use of 170 acres on his father's farm, which is directly across the road. About two-thirds of his total family income comes from the farm, and the rest from an equipment repair business that he runs from the farm.

Before he took over the farm, he had a full-time job as a mechanic, and was able to continue this work as he built up the farm business. His repair business is doing so well that he says, "I could sell the cows tomorrow and would not want for work." Yet his first love is farming and he says that he'd close the repair shop tomorrow if he could make enough money from the farm alone. He intends to take over his father's operation "when he's done" and expand his cow-calf operation.

This farm has been in the family for five generations, and with a large extended family farming in the area, the farmer is deeply attached not only to his land, but also to the local community. He and his wife would like teach their children (currently elementary school age) the values of farming and care for the land, but think it will be hard for them to make the decision that he has about staying on the farm. The farmer's commitment to caring for the land is evident in his participation in the Kawartha Lakes Healthy Futures Program, which involved fencing cattle out of streams and installing a solar-powered water source. He is also working with the Wetland Habitat Fund to fence off a Class 3 wetland on his land.

This farm family clearly sees itself as keepers, not only of their family farms but also of their local heritage, and are concerned about the influx of non-farm residents onto severed lots and the non-farm values they bring with them. The farmer also worries about the costs of keeping up with standards, such as those for nutrient management. But overall, he is content with what he's doing and seems likely to continue doing it for the foreseeable future.

6.6 Government

Talk to farmers and before long, they will get onto the subject of the government's role in agriculture. Generally the observations are negative: most farmers want more financial support and less regulation.

We heard plenty of arguments for more help from government so that farmers could make a decent living. They ranged from criticism of the compensation for the BSE crisis to more abstract concerns about government failure to provide adequate protection from foreign competition and U.S. protectionism. But if there was one issue that seemed to raise the blood pressure of most livestock farmers, it was the *Nutrient Management Act*. While some farmers accepted the need for improved regulation, most were upset by what they saw as an unnecessary new level of regulation brought in for largely political reasons in response to the Walkerton tragedy.

Two major concerns were evident. First was the potential cost, especially for larger operations, which, coming on top of BSE, was clearly causing considerable resentment in the livestock farming community. The second was the government department that administered the *Act*. Many farmers pointed out that it would make more sense to put the Ministry of Agriculture and Rural Affairs in charge of a regulation that affects farmers, rather than leaving it in the hands of the Ministry of the Environment.

A few were positive, arguing that the *Act* was “a valuable tool because there are always poor stewards of the land,” that “it should have been done 15 to 20 years ago,” and that they “could easily comply.” But the majority expressed strong reservations or downright opposition. They said that it is “kinda silly, [it] makes us look like we need policing,” or “you can't legislate common sense,” or “farmers have been good stewards of the land for years without regulations,” or “I feel like I'm being watched by Big Brother.” Others were concerned about cost and paperwork. One chicken farmer said that he was considering putting up another poultry barn, but has changed his mind since the *Nutrient Management Act*, because he doesn't want to deal with more regulation.

6.7 Family commitment

A common theme that emerged in our interviews was the importance of family labour and the benefits of formal intergenerational family partnerships and corporations. Husband-and-wife partnerships were the most common, followed by a variety of permutations involving parents, offspring, and their spouses. Indeed the most successful and secure operations appear to be those in which new investment and expansion has been associated with the involvement of one or more offspring.

In three cases, a father-son partnership involved the son's being set up in another farm at some distance from the father's operation, but with

Most farmers want more financial support and less regulation from the government.

Many farmers pointed out that it would make more sense to put the Ministry of Agriculture and Rural Affairs in charge of administering and enforcing the Nutrient Management Act, rather than leaving it in the hands of the Ministry of the Environment.

The most successful and secure operations appear to be those in which new investment and expansion has been associated with the involvement of one or more offspring.

the two farms being run as one enterprise. Another family partnership involves an income-sharing agreement among the parents, their three sons, and the sons' wives. Each son owns his own cows and milk quota, but operates under the same farm name. They had to expand to support more families. Another operation has expanded into a four-family partnership, which is in the process of incorporating and attributes its profitability to the family commitment to the business. In a few cases, this has involved a son or daughter opening up a value-added activity such as a winery or farm shop.

FARMING NARRATIVE: THE EXPANDERS

With the highest reported gross farm income in our sample, this fruit-growing operation supports four families - two brothers and their wives and their two sons and their wives - who have made strong socio-economic, generational, and environmental investments in their farm and farming community. The farmer we talked to believes that expanding the operation in terms of technology and land, increasing the volume and quality of the produce, and taking advantage of economies of scale whenever possible, are all necessary strategies, given the current state of agriculture. He said, "If you sit still, you will die!"

The support of an effective fruit marketing system has enabled the families to remain competitive with American producers. The operation renews its orchards annually and is always looking for new fruit varieties as well as additional land, although they will "probably farm better [rather] than more."

This operation is an excellent example of farming as both a business and a lifestyle. Besides supplying full-time jobs to four family members and three who work on the farm part-time, the farm employs more than 100 local and off-shore workers seasonally. The family has a relatively stable financial outlook, contributes substantially to the local economy, and looks forward to a future in farming. The farmers are committed to environmentally sustainable land management practices, to keeping the land in the family, and to policies to preserve farmland - as long as they include protecting the ability to run a successful farming business. This enterprise represents a modern and successful family farm.

Despite these examples of extended family commitment, most farmers did not expect their children to take over the farm. Some have already seen their sons and daughters leave for other careers, while those with younger children saw better futures than farming for them and did not want to encourage them to stay on the farm. For one it was "for the same reason my father questions why I bother trying [to make a go of the farm]." Others said, "I want the kids to go to university," "I would never force them to stay on the farm," "It hasn't been a family farm from generation to generation, so it's not important for the kids to take over," or "I see no future in farming for my children."

Most farmers did not expect their children to take over the farm. Some have already seen their sons and daughters leave for other careers, while those with younger children saw better futures than farming for them and did not want to encourage them to stay on the farm.

A few expressed a desire to keep the family farm going, but accepted that this was unlikely: “I would like to see it kept in the family, but my 15 year old is too smart to stay in farming, one daughter is already a teacher, and the other is at university.” As another farmer put it, “The kids are not interested because, growing up in a farm community, they have witnessed the difficulty that farmers face in making a living.”

7. Common themes: Farming in a metropolitan region

Some of the themes identified in the previous section overlap with the specific conditions of farming in a metropolitan region. Indeed, all of the factors that affect the business of farming in general are affected by operating in urbanizing areas (Bryant and Johnston, 1990). In our conversations with farmers, it was clear that decisions made in response to general market conditions are strongly influenced by the constraints and the opportunities of urban land markets, non-farm residential development, and local land use regulations.

7.1 The land market

Land, and its value for uses other than agriculture, takes on central significance in all the localities where we conducted interviews, even those as far from urban development pressures as Lindsay. Retaining development rights and the freedom to sell land to the highest bidder is important to many farmers.

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The dominant message that we heard was the desire to be free to be active players in the land market, by selling land for development, buying other land for agriculture, or taking advantage of the rental land that the development process supplies. In Caledon, Halton, and Alliston, most farmers said they had received good offers from real estate agents to buy their land. Many had already sold the land (which, in some cases, they were renting it back from developers), while others were planning to sell as soon as the price was right. One farmer in Alliston had received offers of \$20,000 an acre but thinks he can get more. Another plans to sell 400 of his 650 acres this year and, if he is not successful in pulling himself out of debt, may “just decide to give it all up and sell his remaining land and operation.” However a common theme was that of wanting to “cash in on their property” and farm elsewhere, something that several farmers in the Markham/Whitchurch-Stouffville area had already done.

Although a common theme was that of wanting to “cash in on their property” and farm elsewhere, some farmers are more interested in holding on to their land.

Despite the obvious enthusiasm among many farmers for taking advantage of rapidly rising land prices, some are more interested in holding on to their land: “I’ll likely hold on to it until I’m done,” said one; another said, “I might consider selling at some point, but I enjoy farming, and I’m not desperate to get out of agriculture.” In the Lindsay area, all but one farmer was not interested in selling land, mainly because market prices for land are still low (around \$2,000/acre). But here and elsewhere in the region, farmers who want to stay on and expand their operations complained about the difficulties of acquiring more land. Even in the Lindsay area, one farmer reported being “outbid by an urbanite” for a 100-acre parcel, and in areas with higher land values, the only option most farmers have is renting land.

FARMING NARRATIVE: THE RELOCATORS

Some farmers sell their land and use the proceeds to buy farms elsewhere. Three of our interviewees had already done this and several others who said that they would sell land for the right price indicated that they would probably buy land elsewhere to continue farming. This represents an opportunistic strategy for taking advantage of regional variations in land values.

A good example of this is the father-and-son partnership which, until recently farmed land in two different locales. Forty years ago, the family sold the original family farm in what is now a subdivision on the edge of Toronto. The proceeds of this sale were used to buy land that was then well beyond the urban edge. Over the intervening years, the family sold successive land parcels, and bought another farm 20 kilometres up the road, which was sold within a few years. Then the family acquired two farms in the Lindsay area, and have now assembled a sizeable acreage there.

With the rented land closer to Toronto, the business now has enough land to grow its own feed to support a large beef herd and a flock of sheep, most of which are kept on the farm near Lindsay, which is run by the son. Managed as a single enterprise, this spatially split operation will increasingly consolidate near the newer farm, as the son acquires more acreage there and as the land on the urban fringe is given up .

The business has been hit hard by the BSE crisis, but has been able to weather this and the economic fluctuations of the beef sector because their financial assets, which they attribute to “smart real estate decisions” have limited their borrowing needs. With investments in better land stewardship and environmentally sustainable practices, the son sees a “slow and steady growth” in the enterprise, despite the uncertainties of the beef business and continually increasing operating costs. He attributes this to coming from a long-time farming family and to being in partnership with his father: “There’s no way I could have done this on my own.” Yet, like his father, he is not averse to selling up and moving to a better location should the opportunity present itself. He would certainly not like to be restricted in the disposal of his land, especially if increased non-farm population starts to encroach on his farm operations.

Competition for rental land is increasing, making it difficult for farmers to expand, while the short-term nature of most leases discourages long-term investments. “I’m being pushed out by development ... I don’t want to make any more investments because the land I’m renting is going to be zoned industrial,” one Halton farmer told us. Some farmers see the availability of rental land as an opportunity for expansion, although this is generally associated with the short-term perspective of cash croppers who assemble large acreages of scattered rental parcels.

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FARMING NARRATIVE: THE RENTERS

One farmer is a cash cropper who owns no land and rents about 1,200 acres. Although his average field size is only 15 to 20 acres, he has enough land within his local area, but is concerned that the supply of rental land is diminishing. This type of operation and land tenure offers the cash cropper great flexibility in terms of crop choice and marketing opportunities, but only as long as the rental land remains in relatively good agricultural condition and is in continuous supply. The main problem is the need to avoid bidding wars with other land users for available rental land, and the investment and consequent debt-load incurred in buying and maintaining machinery to cultivate and harvest crops. However, inputs such as labour, fuel, fertilizers, and pesticides remain the biggest costs to the operation.

This farmer worries about the loss of a local and regional institutional culture that can deal with farm financing, and the global competition for agricultural export commodities. This theme was not as prominent among farmers' concerns as we had initially expected when developing this study. However, farmers who rely on local sales and are affected by the non-regional purchasing trends of large grocery chains and by international and continental trade relations, and are aware of the pressures and problems associated with the increasingly globalizing food system.

Even though he does not own land in the area, this farmer feels that a viable farming community, albeit fractured, does exist in the region, and he is genuinely concerned about sustainable agricultural practices. However, the sustainability of the operation depends largely on economic trends and on the availability of rental land in the area.

7.2 Farmland preservation

Given the dominant feeling about retaining land disposal rights, it is not surprising that only 19 out of the 64 farmers in our survey supported farmland preservation policies. The rest were either completely opposed or supportive only as long as their development rights were not threatened. For some, it was a matter of principle: "We should have the right to sell our land; it represents generations of investment." For others, it was influenced by financial self-interest: "The farm is my RRSP," "I can sit here and say, 'Preserve all farmland,' but if someone came and offered me \$10 million, I might look at it differently," "The only light at the end of the tunnel is the opportunity to sell your land some day," "In the long run it [farmland preservation] needs to be done, but please don't let it affect me."

"Look after the farmers and they'll look after the land" was another common argument. "If farmers made a decent living, they wouldn't sell the land." "What is needed is preservation of the farmer." A few were more resigned: "Why should we preserve farmland when we're so locked into a global market?" "There's plenty of good land in this country," "They're paving over some of the best land, but there's still so much out here. None of them would miss us if we were all gone. If the entire Peel region was gone, we wouldn't be missed."

Only 19 out of the 64 farmers in our survey supported farmland preservation policies. The rest were either completely opposed or supportive only as long as their development rights were not threatened.

Some of the farmers we talked to, however, felt very strongly about the need to protect good agricultural land from development. While this was often expressed in terms of ensuring that land use regulations did not affect farmers' ability to make a living, it also included unequivocal support for tighter policies. One farmer said, "I hate to see good farmland where you have heat units taken up by development, because that is something you can't get back ... good farmland is like gold."

Some farmers argued that the greatest priority should be "the preservation of the farmer," others were resigned to the continued disappearance of farmland, while still others felt very strongly about the need to protect good agricultural land from development.

Some of the reservations about farmland preservation represented unease about the introduction of new layers of land use regulation with the Oak Ridges Moraine Conservation Plan (ORMCP), the Greenbelt Plan, and provincial growth management policies. Several farmers expressed frustration with the impact of the ORMCP on their land values and on their freedom to make land use decisions, while a couple saw the Greenbelt legislation as yet another attack on farmer's development rights.

7.3 Non-farm residential development

Although there was general opposition to increased land use regulation, which included restrictions on severances and the ability to raise money by selling small parcels of land, most farmers told us about the problems of farming in areas which are increasingly dominated by non-farm residences and populations. This ambivalence was summed up by a Lindsay area farmer: "I don't like seeing an acre severed off the farm for mum and dad, because they won't live in it for ever, and then you have non-farm buyers moving in. Next thing you know, you have to deal with a row of houses occupied by people who don't understand farming."

Most of the farmers we spoke to were concerned about adjusting to operating alongside non-farm neighbours. Some had received complaints about smell, noise, and pollution from livestock operations, fertilizer and manure spreading, pesticide spraying, dust from field preparation and cultivation, and noise from farm equipment. However, most farmers said that they were generally on good terms with their non-farm neighbours. As one Niagara farmer put it, "There's just the odd jerk." Severed residential lots were regarded as more of annoyance by a Lindsay farmer, because they require the modification of practices, such as being careful when spraying.

Most farmers were on good terms with their non-farm neighbours. As one Niagara farmer put it, "There's just the odd jerk."

However, with the exception of the Lindsay area, which is still regarded as largely an agricultural community, there is a more general concern about the intrusion of non-farm values and the decline of the farming community. It is not just that, in the words of one Caledon farmer, "Urbanites don't understand farmers or farm practices," but that non-farm residents have different values and agendas. Several farmers expressed a growing sense of social isolation as the number of their farm neighbours declines and more "urbanites" move into the area. They also spoke of the loss of influence of

farmers in local politics, although in Caledon we were told that three farmers were on regional or local councils and that the farm community there had a strong local influence. Increased taxes to support new services for non-farm residents coming on top of the reduction in local farm services was another common complaint.

We also heard about the impact of development on sewage and water systems, especially on groundwater levels (a big issue among farmers in the Markham/Whitchurch-Stouffville area, where the installation of the “big pipe” has affected farm well levels). Other problems include the dumping of topsoil, damage from road salt, and vandalism and theft. The biggest complaint of all, however, was the increase in traffic. From workers commuting to and from the Honda plant in Alliston, to “rush hour” along highway 7 in Oakwood (Lindsay area), to almost continuously congested roads closer to the urban edge, farmers are experiencing increasing difficulty moving equipment between fields, getting produce to market, and receiving deliveries. This was particularly problematic for large cash crop operators who were farming scattered parcels.

Of course, some sectors thrive on being located close to residential areas. Sod farmers (who grow a product to install on the very subdivisions that displace farming), pick-your-own operations, market gardens doing direct sales, greenhouse operations, and horse farms (although the latter were excluded from this study) generally do well on the urban edge. In the words of a large sod farmer, “Development is our bread and butter. If there was no development, there would be no sod farming.” A greenhouse producer of herbs and specialty salads in Niagara regarded increased development as something that would benefit his business, because it brings road improvements that make it easier for him to deliver his product.

Non-farm residents have different values from farmers. Several farmers expressed a growing sense of social isolation as the number of their farm neighbours declines and more “urbanites” move into the area.

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8. Conclusions

Despite the limitations of a relatively small sample, the study illustrates the value of micro-scale research at the farm and local level. In the first place, it helped us understand farming in the region from the perspective of the farmers. They provided us with privileged insights into the economic challenges of running their operations and the nuances of the farm as a social unit. Second, the interviews generated a rich body of information about the business of farming, that is, the factors that influence decisions on investment, production, land use, and marketing. Finally, they produced stories that show that each farming situation is unique and that we should be cautious in generalizing about the regional agricultural economy.

Each farming situation is unique and we should be cautious in generalizing about the regional agricultural economy.

8.1 Factors influencing the reproduction of the farm

The diversity of farming situations presented us with a challenge in analyzing the information from the interviews. This diversity is a function of the dynamic relationship between a particular farming situation and the range of factors that affect all farmers.

The future of a farm depends largely on its land base, its financial prospects, its generational commitment, and its social surroundings. Our study uncovered a wide range of situations, from those who are clearly committed to the long-term sustainability of their operations, to those who are struggling to survive or are just waiting for the highest bidder for their land. But within this range lie the many individual circumstances that affect farming futures.

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This diversity is apparent in how each farmer responds to the general agricultural economy and to the specific characteristics of operating in a metropolitan region. Some energetic and entrepreneurial farmers adapt to changing market situations, but how and why they do this varies between operations even in the same sector and locale. Where farmers are more risk-averse, their decisions to continue with existing production modes and commodities or to reduce investment reflect specific financial circumstances and personal and family goals.

However, although the study emphasizes the importance of individual farming situations, we identified several common themes that reveal much about the nature of agriculture in the region and the issues affecting farming in peri-urban areas.

First, farmers are amazingly flexible and innovative. They are skilled in computer applications that, for example, control and monitor milking, determine pesticide and fertilizer applications, or maintain farm and on-

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farm business accounting operations. Some operations are astonishingly complex business structures, in which one person or a couple manages to grow, support, harvest, process, and market their products, while dealing with full-time, part-time, and seasonal labour requirements, not to mention market fluctuations, labour availability, consumer demand, and the vagaries of nature.

Many are prepared to change the mix and type of farm production, depending on markets and personal preferences, and to apply sustainable practices where feasible. Those who have diversified or moved into niche markets appear to have the most promising futures. Farmers are also flexible in their responses to urbanization pressures, prepared to sell land and move elsewhere to farm, or to take advantage of the supply of rental land to increase their acreage and of the market opportunities presented by a growing local non-farm population.

Second, most of the farmers we spoke to felt financially secure or at least fairly stable economically. However, financial security is more likely a function of levels of family capital and sources of non-farm income than the profitability of the farm itself. No matter how they characterized their overall financial situation, most farmers complained of low returns and the cost-price squeeze, matters over which they have little control. This was especially true for those affected by the closure of the live cattle trade with the United States. For those with no other sources of capital or income, the cost-price squeeze translated into a grim financial outlook for their farming operations.

We conclude that, even though among the farmers we interviewed the majority of household income still comes from the farm operation, in general the farm does not generate enough income to support the household over the long term. This fact limits expansion plans and makes the sale of land to developers an increasingly attractive alternative. But many of those we interviewed would like to continue farming, despite the financial challenges. This reflects its continued importance as a lifestyle choice.

Finally, while the economic prospects of the farms we surveyed vary, their future as social units is generally less certain. Except for a few strong family operations, most farmers saw no likelihood that the farm would stay in the family. This low level of intergenerational transfer represents a significant impediment to the sustainability of certain farms. It means that older farmers tend to avoid new investments, oppose farmland preservation policies, and sell land as the urban boundary advances. And yet we encountered some operations where capital from earlier, profitable land sales had enabled parents to set up their offspring on farms elsewhere. This behaviour may be repeated if other farmers generate large revenues from the real estate market.

Financial security is more likely a function of levels of family capital and sources of non-farm income than the profitability of the farm itself.

Most farmers saw no likelihood that the farm would stay in the family. This means that older farmers tend to avoid new investments, oppose farmland preservation policies, and sell land as the urban boundary advances.

8.2 Responses to urbanization pressures

The future of agriculture in the Toronto region will be determined by the dynamic relationship between farming and the urbanizing region. It is a relationship fraught with contradictions. On one hand, the general difficulties of farming are compounded by peri-urban problems such as problems with moving equipment on congested roads, complaints from non-farm residents about farm practices, lack of affordable land to purchase, shortages of rental land, loss of local farm services and of a farm community, and lack of local government support for agriculture. On the other hand, farming in peri-urban locations presents new opportunities, such as the availability of rental land from developers and other non-farm landowners, which provides an affordable means of expansion, and a market for direct sales through farm shops and pick-your-own operations.

We can draw several conclusions from these contradictions. First, the farmers we spoke to are faced with difficult choices. The large renter who makes a success of his cash crop operation, but only by renting many scattered parcels, has to deal with congested roads when moving equipment between these parcels and with the uncertainties of short-term leases. The livestock farmer gets complaints from non-farm neighbours about manure smells, but also opposes restrictions on his or her right to sever a land parcel. The pick-your-own operator has to shift more sales to roadside carts, because suburban consumers prefer convenience over the experience of picking fruit.

Second, most farmers are active participants in the land market. Farmers have been selling land to speculators and developers for years. Our research confirmed that most want to retain their right to continue doing this and that many intend to sell their land to the highest bidder when the time and the price is right. This was particularly evident among the farmers we interviewed in the Alliston, Caledon, and Halton Hills-Milton areas.

Probably the greatest contradiction that emerged from many of our interviews is the significant proportion of rented land. In some cases, especially at the urban edge, farmers rent all their land. That so much agriculture occurs on land rented from non-agricultural interests places the largest question mark over the future of agriculture in the region. The spatial fragmentation of these operations alone presents significant operational challenges.

Moreover, although most farmers reported engaging in good land stewardship practices, it is not clear how sustainably they will manage their rented lands over the long term. More serious is the uncertainty in the supply, cost, and location of rented land. Lack of affordable rented land already appears to be constraining the expansion of some enterprises. At the same time, some of those who farm large acreages of rented land, like cash-croppers, are acting as land banking operators, and have no real prospects for long-term farming of these lands.

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9. Policy implications

This study has been carried out against the backdrop of unprecedented land use planning policy developments in the Toronto region. Of particular significance for agriculture is the recently enacted Greenbelt legislation, which placed large areas of specialty crop and prime agricultural land in a “Protected Countryside” designation. According to the provincial government, this move will “ensure that these lands can continue to provide Ontarians with fresh produce, a secure food supply and residual health benefits now and into the future” (Ontario, 2005a).

This raises a number of questions. First, how much do Ontarians depend on these lands for fresh produce and a secure food supply? We have only crude estimates of how much regional agricultural production is consumed locally (Walton, 2003); more research needs to be carried out on this question. Second, in providing “residual health benefits,” are farmers to be faced with additional costs and operational constraints? Finally, and most significant for our study, how can land use designation ensure the sustainability of the farming system to achieve these objectives?

This study found that the reproduction of farms in the region is not assured. In fact, it is reasonable to wonder, as some of the farmers we spoke to did, whether there is *any* future for agriculture in some areas and sectors. This is especially true of the urban edge, where the prospect of urban expansion and constraints on farming practices create great uncertainty for farmers.

Nevertheless, we sensed an underlying resilience in many farmers and, in some, a real determination to develop profitable farm enterprises. Given the high quality of agricultural land across most of the region, the recognized value of agriculture to the regional economy (Walton, 1999; Regional Niagara Agricultural Task Force, 2003; Walton, 2003), the opportunities for enhancing local food systems, and the new provincial policy initiatives for agricultural land and greenspace protection, there is clearly a potential for a sustainable regional agricultural economy. The recently enacted *Greenbelt Act*, combined with changes to the Provincial Policy Statement, embeds the protection of large areas of specialty and prime agricultural land in regional growth management policies.

However, although removing the uncertainties of a heated land market may give farmers the incentive to plan over the longer term, we found that many farmers are uncomfortable with land use regulations that would depress the market value of their land and restrict their freedom to liquidate their principal capital asset. This is particularly evident in areas with high land values. Given the significant amount of land in urban fringe

Greenbelt legislation raises some important questions. How much do Ontarians depend on these lands for fresh produce and a secure food supply? And in providing “residual health benefits,” are farmers to be faced with additional costs and operational constraints?

It is reasonable to wonder, as some of the farmers we spoke to did, whether there is any future for agriculture in some areas and sectors. This is especially true of the urban edge.

Given the significant amount of land in urban fringe areas that has already been sold to real estate interests and continues in agriculture only under insecure rental arrangements, the future of farming in these areas is doubtful.

areas that has already been sold to real estate interests and continues in agriculture only under insecure rental arrangements, the future of farming in these areas is doubtful.

The policies for the “Protected Countryside” areas of the Greenbelt are supposed to provide “a continuous and permanent land base to support long-term agricultural production and economic activity” (Ontario, 2005, p. 12). Yet the realities of farming indicate that securing the long-term sustainability of agriculture in the Greenbelt will require more sophisticated strategies than mere land use regulation.

At the aggregate level, agriculture may contribute significantly to the regional economy, but, at the level of the individual farm enterprise, the picture is more varied. The vulnerability of some farm sectors, the unprofitability of many of the farms we visited, the extensive use of land rented from developers, the widespread dependence on non-farm income, the prevalence of “lifestyle” farming, and the lack of generational stake in the farm enterprises indicate the need for targeted strategies to improve the prospects of a sustainable farm economy.

We conclude from our study that support for a sustainable future for agriculture in the region needs to be based on a detailed knowledge of specific farming situations. In particular, the likely impacts of the Greenbelt Plan and the new Provincial Policy Statement need to be assessed. Many farmers see the Greenbelt as yet another burden added to a long list of difficulties in making a living, forcing them to absorb the costs of farmland and greenspace protection. How inclusion in or exclusion from the Greenbelt will affect different locales, sectors, and individual farms is not yet clear.

Our conversations with farmers have persuaded us that the most effective policies will be those with significant farmer “buy-in.” Despite their opposition to more land use regulation, many of the farmers we interviewed would accept further regulation, as long as it is accompanied by increased support for the business of farming. This suggests the need for a comprehensive policy for agriculture in the Toronto region that would integrate land use regulation with strategies for a sustainable regional food system.

Our study also suggests that strategies for niche markets, value-added activities, and tax reforms that support agricultural operations would be among the more effective approaches. But the development of appropriate strategies will involve significant input from farmers and farming communities. The Niagara Region Agricultural Task Force offers a promising template for this approach (Niagara, 2003). It involved extensive farmer participation and therefore combines farmland protection with a good understanding of the constraints and opportunities of the farm economy.

Given the special nature of agriculture in Niagara, duplicating its success across the rest of the Toronto region presents different challenges. The

Support for a sustainable future for agriculture in the region needs to be based on a detailed knowledge of specific farming situations.

The most effective policies will be those with significant farmer “buy-in.” Strategies for niche markets, value-added activities, and tax reforms that support agricultural operations would be among the more effective approaches.

GTA *Agricultural Action Plan* is long on generalities, but short on specifics (GTA Federations of Agriculture et al., 2003). Differences between farming locales in land quality and proximity to urban development will demand locally specific strategies. The distinctive problems of farming close to the edge of urban development must be addressed, especially in the Protected Countryside areas of the Greenbelt. The impacts of the Greenbelt on different sectors as well as on individual enterprises is also an emerging issue. The costs of farming in the Greenbelt, especially as they relate to environmental protection and recreational land uses, will demand special attention.

The long-term protection of agricultural land that the Greenbelt promises represents an opportunity to establish a sustainable agricultural system in the Toronto region. By examining individual and local farming situations, our study provides some insights into the challenges involved in achieving this objective.

The costs of farming in the Greenbelt, especially as they relate to environmental protection and recreational land uses, will demand special attention.

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