

Chapter 9 Issues, Trends and Conclusions

9.1 Issues

As a result of completing this study, observations were made of certain issues and trends that are affecting the agricultural sector in Niagara. These are discussed here as the observations of the study team. They are not reflective of the position or opinions of the Steering Committee.

Agriculture in Niagara is multi-faceted but, perhaps because of the uniqueness of the tender fruit and grape lands, some of the more traditional sectors are overlooked. Amongst the general public there seems to be an awareness of Niagara's fruit production. There is not the same awareness of the other agricultural production. Efforts should be made to build a comprehensive profile because it is the strength of the agricultural sector as a whole that will keep the industry strong.

In profiling agriculture in Niagara it is important to report the good news as well as the bad. While generally the agricultural industry in the region is doing well, it is plagued by the issues facing agriculture in other parts of the country. Cheap food policies, foreign subsidies, adverse weather, labour shortages, border porosity and land speculation all negatively impact the industry. Understanding of these issues and support for Canadian agriculture from the public, all levels of government and other agricultural producers is required to address them.

Between 1996 and 2001 there was a 14% decline in the number of farm operators in Niagara reported by Statistic Canada. This precipitous drop was noted by the Niagara Training and Adjustment Board in the September 2001, Environmental Scan. The reason for this decline is not clear but it something that should be investigated. Such a precipitous decline is a concern.

There is an ongoing debate about the definition, value and role of agri-tourism. In the context of this study, a broader definition was used and since this was not a study about tourism but about agriculture, the comments on agri-tourism were limited. However it can be said that main issue associated with this topic, aside from the definition, seems to be degree. When does the presence of a tourism component cause the agricultural operation to become less important and the tourist operation to take over. What is the difference between rural tourism and agri-tourism? What is the nature and critical mass necessary for an activity to qualify as agri-tourism? The one group that seems to be unconcerned with these issues and have a clear understanding of what agri-tourism is and what it is meant to achieve, are farmers. Most see it as a supplementary source of income through direct sale to the consumer and as a way to educate and connect society with agriculture.

The environmental impacts of agriculture have been the subject of recent debate. It is important to emphasize the positive contributions agriculture makes to the environment and the steps that are taken to manage potentially negative impacts. Farmers have always understood and been good stewards of the land. Their role as stewards needs to be emphasized and appreciated.

Agriculture in proximity to urban areas benefits urban dwellers. Amongst other things, it provides attractive landscape, habitat, wildlife corridors and carbon sinks to improve air quality. As concerns about environmental quality in the Golden Horseshoe grow, the positive contribution of agricultural becomes increasingly valuable and needs to be factored into land use decisions.

While the agricultural community in Niagara shows an admirable ability to work together, there are issues which are causing dissention. Concern was expressed by grape growers about difficulties in

dealing with processors. All operators need to be sensitive to the issues affecting other commodity groups and work to address them. The industry is only as strong as its weakest link.

Practices associated with road maintenance are an issue for farmers, particularly tender fruit and grape operators. The increase in traffic on the roads in the tender fruit and grape areas has increased demand for maintenance and the associated use of salt. Salt adversely affects productivity in the short term and the land in the long term.

A significant amount of greenhouse production in Niagara is focused on production of potted plants. This component of production, unlike most other agricultural products, is subject to federal and provincial sales tax. This adds additional cost to greenhouse products that other producers do not have.

There is much discussion about redirecting the greenhouse industry to the top of the Escarpment. While this may be a reasonable goal over the long term, this industry, which is currently responsible for in excess of 40% of the gross farm receipts generated in Niagara, cannot wait to expand until the necessary infrastructure is in place somewhere else. In the words of one grower, if expansion plans must be put on hold for 15 years until roads and services are in place, there will be no industry to expand.

While the greenhouse sector has been very successful in expanding the industry, it is extremely vulnerable to increases in the price of gas and electricity, slow downs at the border and international trade issues. Care should be taken not to take the success of this sector for granted so issues that could adversely affect it are monitored and addressed.

This analysis looked at the economic contribution of agriculture to Niagara. However in managing this resource, it is critical to consider more than economics. Agricultural land is essentially a non renewable resource which once developed for non agricultural use, is lost. This translates to a loss in the ability to produce food. The issues associated with preservation of the land go far beyond purely economic considerations and include food security, safety and national self sufficiency

Operators expressed concern about the lack of research and development support that is specifically available in Niagara and about the failure to develop Canadian expertise. A number are buying expertise from Europe because it is not available in Canada. Failure to nurture knowledge and understanding of agriculture in young Canadians seems to be a problem across the board.

Fragmentation of agricultural areas makes it difficult to carry out the business of farming. Not only do conflicts occur because of proximity of incompatible uses, there is a practical reality of economy of operation. Today's farmers share services and resources. Increasing the distance to be traveled to access the services increases the cost and difficulty of doing business.

Access to employment is difficult on a number of levels. Entering the profession as an operator is difficult because of the capital commitment required to acquire an operation. Entry level positions are difficult because of seasonality and ability to get to the job site. Many potential farm employees do not have private transportation. Public transit in rural areas is non-existent so the result is that there is a demand and a supply that cannot connect. Many potential candidates for apprenticeship programs do not have the required Grade 12 level of education and so cannot access programs.

Development of infrastructure (roads, rail, gas, water and sewer) is both a benefit and a detriment to agriculture. Agriculture relies on it for services and access to markets. However when it is provided there is pressure for growth. Planning and management of infrastructure needs to be done with the needs of the agricultural community in mind.

Flexibility is critical to managing agriculture. We may not even be aware of a commodity that will be the leader tomorrow. Therefore comprehensive decisions need to be made that will allow agriculture to grow and evolve. Choices must be made that will maintain flexibility so as the market changes, the land base is available to support a response.

With recent world events there is growing concern about food security. Related to this is the fact that in many of the major agricultural areas of the world, water supply is uncertain. For future generations management of the superior agricultural resource in Niagara which has access to an abundance supply of fresh water should be a priority. However to do this, it is not enough to just protect the land. We must also make sure conditions are right to ensure that farms can be profitable and farmers make a reasonable living. The land is not of much use without the farmer.

9.2 Trends

Some of the recent successes in agriculture in Niagara are being enjoyed by the non traditional sectors. Greenhouses have established a strong market niche. Farm to table programs are a success. Expanding operations beyond just production to include value added activities, seems to be part of this success.

There is potential for agriculture to make a meaningful contribution to the search for alternative sources of energy. Ethanol produced from corn is now being produced as an alternative fuel. Work is being done to develop a process whereby manure is used to generate electricity. These non traditional applications of agricultural production are important components in environmental sustainability.

As the wholesale market becomes increasingly concentrated it is more difficult negotiate reasonable prices for produce. A number of farmers interviewed are establishing co-operatives and direct to consumer networks to address this. These types of solutions should be aggressively pursued so farmers can break the agricultural dilemma of “buying retail and selling wholesale”

There is growing understanding that agricultural land provides a critical habitat for the conservation of biodiversity. In areas subject to urban growth pressures, farmland provides linkages for wildlife corridors and critical habitat for all species. To maintain healthy ecosystem there must be opportunity for landscape biodiversity. This important contribution to the environment in urbanizing area should be promoted and farmers should receive credit for acting as environmental stewards.

Horse racing has seen a resurgence as a result of the upgrading and renovations that have been carried out at racetracks. Although the addition of expanded gambling facilities has not been viewed by all as desirable, there is no question that it has resulted in an increase in attendance at the track. This in turn, has allowed the offering of larger purses for the races and been a tremendous boost for the horse industry. According to one horse operator, the increased purses have saved the standard bred industry and resulted in significant expansion in this component of agriculture. In Niagara between 1986 and 2001 the number of horse and pony operations more than doubled. Expansion in this sector has significant spin-offs in the balance of the agricultural industry as horse operators purchase supplies and services. This provides direct benefits for farmers who sell goods to the horse industry and indirect benefits to all because it creates additional demand for, and strengthens the availability of agricultural services.

Water may well be the oil of the twenty first century. In Niagara there is access to a reliable and plentiful source of fresh water, a benefit that makes the area the envy of other agricultural areas in the world. This advantage needs to be acted upon with programs such as the one developed by the

farmers in Niagara-on-the-Lake, to provide water for irrigation through municipal systems. There is great emphasis on providing water for residential development; this emphasis needs to be expanded to agriculture.

There is a growing consumer demand for fresh nutritious produce grown under controlled conditions. Niagara with its smaller farms and specialized crop base is perfectly positioned to develop this market. Direct links with consumers could further strength the potential for this type of product. Wineries are making effective use of internet sales. The same could be done by other sectors.

9.3 Conclusions

Niagara is recognized as one of the most significant agricultural areas in Canada. It is blessed with unique agricultural resources including grape and tender fruit growing areas as well as strong traditional agricultural operations. Taken as a whole, the components of the industry combine to form a strong and successful industry within which the different components are mutually supportive. The diverse membership of the steering committee for this project is reflective of this strength and diversity. The ability to cooperate in an initiative such as this, is one of the reasons the agricultural sector is as strong as it is in Niagara.

The combination of climate, physiography, soils and location make the Niagara region one of the most productive areas in Canada with the unique ability to support crops that cannot be grown elsewhere in Canada.

Niagara has gone beyond most municipalities in identifying and mapping agricultural land. In 1989, the region was successful in securing a soil resurvey which resulted in publication of a report entitled "The Soils of Regional Niagara - 1989" prepared by the Ontario Institute of Pedology. In preparing this report, geological and physiological features; soil groups and types; soil moisture characteristics; drainage and variability; common properties of soil groups; schematic cross sections of relationships and relative depths of soils; climatic zones for grapes and tender fruit; agricultural land suitability ratings for certain crops and land use and management comments were all considered. This detailed assessment has allowed Niagara to produce a rigorous, accurate classification of land upon which to base planning policies.

The majority of the Niagara land base (both above and below the Niagara Escarpment) qualifies as prime. In addition to the Class 1, 2 and 3 lands, there are large areas of specialty crop production lying between the Escarpment and Lake Ontario. Other areas of special crop production are the Fonthill Kame and portions of the Wainfleet Marsh, west of Port Colborne. Soil resources and agricultural infrastructure provide the necessary conditions for special crop production. Given that only 5% of the Canadian land base qualifies as prime land, the high incidence of prime land in Niagara is extremely significant.

From a microclimate perspective, the area along the Lake Ontario shore to the Escarpment is well suited to the production of specialty crops. The microclimate is influenced by the location, near the temperature moderating waters of Lake Ontario and the proximity to the Escarpment. The proximity to the Escarpment is important with respect to the cold air drainage down the Escarpment and out to Lake Ontario. Areas of Niagara such as the Town of Niagara-on-the-Lake have enhanced this natural advantage with comprehensive, municipality supported irrigation programs. All of these factors combine to make Niagara a unique zone for the production of fruit and vegetable crops.

In making decisions that affect the land base, the value of the resource must be considered. Only by understanding the value of the resource and the implications of removing portions of it from production, can informed decisions on growth management be made.

Niagara has been more successful in protecting agricultural land than other regions in the Golden Horseshoe. This success is attributable to a number of factors which include:

- The nature of the land base which supports an agricultural industry with a somewhat higher level of financial security than is experienced elsewhere;
- The ongoing inclusion of the agricultural community in policy decisions that have the potential to affect the land base;
- The existence of many active agricultural organizations which represent different sectors of the industry;
- Flexibility in the agricultural land use policies which allow the farm community to make the adjustments required to remain competitive; and
- Consistency in the application of land use policy.

There are a number of issues, both local and provincial, that have the potential to affect agriculture in Niagara. These include the current review of the Provincial Policy Statement (PPS), the Smart Growth initiative, the debate about a mid peninsula transportation corridor running down the spine of Niagara, and the agricultural preserve initiative that has been proposed.

Out of the 49 regions, counties and districts in Ontario, Niagara ranks 38th in geographic size. With respect to agriculture, it ranks 25th in total area farmed, 10th in the number of farms and 4th in gross farm receipts. The region contains 3.7% of the farms; 1.7% of the total farmland acres and generates 5.6% of the gross farm receipts in Ontario. Approximately 52% of the total regional land base is farmland.

In 2001, Niagara generated \$511.13 million in gross farm receipts. In Ontario, only Huron, Perth and Oxford Counties generated higher gross farm receipts in 2001 than Niagara. On a national basis, Niagara generates higher gross farm receipts than any of the Maritime Provinces. The average gross farm receipts, in Ontario is \$674 per acre, in southern Ontario \$995 per acre and in Niagara \$2,195 per acre.

The top ranking municipalities in terms of average gross farm receipts per acre are Lincoln, Niagara-on-the-Lake and West Lincoln. These are the municipalities where fruit, poultry and greenhouse products dominate. These commodities are high value and require smaller acreages to produce. Municipalities with lower gross farm receipts per acre, have higher numbers of land extensive agricultural operations such as cash crop and livestock.

In 2001, 39% of the land being farmed in Niagara was rented. This percentage is higher than both the provincial average of 31% and the southern Ontario average of 34%. However, it is lower than the incidence of rental land in the Greater Toronto Region (GTA) where it is at 54% in Halton and Peel and 57% in York. The majority of rental agreements for farmland in Niagara are short term or on an informal basis.

The pattern of rental land in Niagara suggests a relationship with the type of agriculture that occurs in certain areas. In the municipalities where fruit predominates, there is a lower incidence of rental land. This could be related to the time it takes to bring a fruit tree into production. Orchards that take five to ten years to come to full production will not be planted on land that is available on a short-term basis. Crops such as cash crops that have a short production life, are much more likely to be found on rental land.

The fact that the incidence of land rental is less marked in Niagara than it is in the regions of the GTA is a good indicator of the stability of the industry. Characteristics that generally characterize areas

experiencing pressure for development include a high incidence of rental land, multiple landlords, short lease terms and scattered operations.

In 2001, the average farm size in Ontario was 245 acres, in southern Ontario 214 acres and in Niagara 115 acres. The difference in farm size in Niagara can be attributed to the different nature of agriculture in the region. The four leading commodity groups, greenhouse, fruit, poultry and egg and nursery require much smaller areas for a profitable operation.

There is a striking difference between the average farm size in Niagara South as compared to the farm size in Niagara North. This speaks to the diversity and range of agriculture in Niagara. In Niagara South where cash crop and livestock operations are more prevalent, the average farm size is larger. The distribution of farm types is consistent with the average farm size for the various municipalities. Niagara-on-the-Lake, with 281 fruit farms reported in 2001, has an average farm size of 60 acres. West Lincoln, reporting 60 wheat grain and oilseed operations, has an average farm size of 163 acres.

Niagara has a very diverse agricultural base. The breakdown in number of farms by farm types and by municipality illustrates this diversity of operations across the region. Fruit may be dominant but the other commodity groups, notably poultry and egg, wheat grain and oilseed, dairy and cattle are also significant.

The municipality that generated the highest gross farm receipts in 2001 was Lincoln (\$160 million), followed by Niagara-on-the-Lake (\$110 million), and West Lincoln (\$68 million). Welland generated the smallest amount of gross farm receipts which is not surprising since it had the smallest amount of farmland in the region.

Of the 12 municipalities in Niagara, Fort Erie, Port Colborne and Thorold have per acre average gross farm receipts lower than the provincial average. Wainfleet and Niagara Falls are higher than the provincial average but lower than the average for southern Ontario. The remaining seven municipalities have average per acre gross farm receipts considerably higher than the provincial average. These numbers reflect the very high productivity of the area and the high value of the crops produced. The lower per acre values in Fort Erie, Port Colborne and Thorold are reflective of different geographic conditions and crop profiles. Overall, Niagara is an area of very high productivity and profitable agricultural operations.

In 1986, poultry and egg was the largest commodity group in Niagara followed closely by fruit. Greenhouse was a distant third and dairy was in fourth position. Over time dairy increased, then dropped below the 1986 value in 2001. Fruit has held it's own and grown as a commodity group. Grain and oilseed has more than doubled in value over the 25-year period but it is the greenhouse sector that has gone from generating gross farm receipts of \$47.66 million in 1986 to \$217.60 million in 2001.

There has been a continual increase in the value of agricultural production in agriculture in Niagara. In 1985, when Statistics Canada began reporting the number of operations generating in excess of \$500,000 in gross farm receipts per annum, there were 91 operations in this category in Niagara. In 2001 there were 223.

In 2001 the average operating cost per farm in Niagara was \$192,348 (per farm reporting total farm expense) and the average operating cost per acre was \$1,872. The latter figure is higher than the average cost per acre in Ontario, (\$580 per acre) or in southern Ontario, (\$840 per acre).

In 2001, agricultural activities in Niagara generated just over \$500 million in gross sales. The top 10 agricultural commodity groups accounted for more than 90 percent of this output. This reflects the diversity of agriculture in Niagara with greenhouse operations accounting for the largest share of total farm receipts (43%), followed by poultry (18%), grape farming (10%), and tender fruit (9%).

In total the agricultural sector of Niagara generated more than \$500 million worth of output in 2001. It would not be unreasonable to assume this level of output represents the lower limit of output in all subsequent years. To sustain the production of more than \$0.5 billion in agricultural output annually (e.g., poultry, hogs, flowers, grapes etc.), the various sub-sectors of agriculture must be purchasing hundreds of millions of dollars worth of inputs from various sectors of the regional economy (e.g., labour, chemicals, fuel, financial services etc.). Given that the Niagara economy represents a relatively mature and diversified economy, it is reasonable to assume that the Region is able to capture a large percentage of these transactions.

All sectors of the Niagara economy, including all 10 individual commodity groups, have substantial multiplier effects associated with them. This is typical of mature (and diversified) regional economies. The large multipliers for most sectors (including the agricultural commodity groups or sub-sectors) reflect the fact that the bulk of the inputs required by all sectors of the regional economy can be produced by sectors in the Niagara economy (i.e., locally), as opposed to being imported from another region (or country).

Many sub-sectors of agriculture possess output multipliers that are as large, or larger, than those associated with high value-added sectors like manufacturing.

In 2001, the greenhouse sub-sector recorded over \$217 million in gross farm receipts, making it the largest component of the region's agricultural complex. For the greenhouse sub-sector of the region to generate \$218 million in gross sales, the broader Niagara economy must generate \$769 million in combined output to cover the direct, indirect and induced effects of this production.

Gross farm receipts of approximately \$511 million per annum stimulate a total annual output impact across all regional sectors of nearly \$1.8 billion or \$960 million if the open model is used. Included in this figure is more than \$344 million in labour income earned by employees across all sectors of Niagara's economy. Within the Niagara agriculture sector itself, those commodity groups (or sub-sectors) that are most propulsive (i.e., have the largest multiplier effects associated with them) are:

- nursery (3.12)
- tender fruit (2.99)
- grape (2.94)
- beef (2.94)
- hog (2.94)
- greenhouse (2.87)

No commodity group in Niagara has a multiplier below 2.60 (including induced effects) meaning all have a propulsive impact on the economy. In terms of magnitude, the greenhouse sector clearly dominates this sector of the Niagara economy.

Between 1989 and 1999, Niagara experienced a 14.7% decline in employment in the overall manufacturing sector, which compared to a slight but positive 0.6% increase in Ontario and a 4.3% growth in Canada. However, when the food, beverage and tobacco products manufacturing component is analyzed, employment in that sector in Niagara was found to be positive and surpassed both the provincial and national performance.

A total of 61 establishments under the categories of Food Manufacturing, are located in Niagara. Of these, almost 40% are concentrated in Niagara Falls and St. Catharines, with the balance distributed throughout the rest of the region.

With respect to the employment characteristics of the food manufacturing sector, fruit and vegetable processing operations employ the largest number of persons (673 or 23.2% of the total), followed by meat product manufacturing (646 or 22.3%) and grain and oilseed milling (393 or 13.5%). Five of the food manufacturing establishments in Niagara employ over 200 people.

There are a total of 46 Beverage Product Manufacturing Establishments listed in Niagara. The dominant industry is clearly the wine industry. The wine industry is concentrated in Lincoln and Niagara-on-the-Lake. Of the 2,204 employees identified in beverage product manufacturing establishments, 1911 or 86.7% are in the wineries. The size of the operations varies considerably, from single person operations to facilities with over 1,000 employees.

There is a strong service sector for agriculture in Niagara. In the survey of farmers for the neighbouring City of Hamilton, a large number of Hamilton farm operators reported relying on a variety of businesses located in Niagara, both for distribution and processing of goods and to obtaining various services.

With respect to service industries, a total of 33 construction related firms employing 1,792 persons, a total of 42 equipment firms employing 1,763 persons; and a total of 26 operational sales establishments employing 615 persons, provide agriculturally related services.

The transportation and warehousing services constitute the largest sectors providing service to agriculture. An estimated 29 transport companies employing 1,000 persons, and 11 warehouse operations employing 167 provide agriculturally related services. A significant number of agricultural operations operate their own trucks.

The estimated contribution of the agricultural sector to the local general property tax levy in the twelve area municipalities in Niagara is in excess of 3.96 million dollars. This ranges from a high figure of over \$787,000 in Lincoln to a low figure of \$94,000 in Welland. If the total tax contribution attributable to the agricultural sector throughout the Region of Niagara were projected, the total contribution would be in the range of 13 to 16 million dollars.

In Lincoln, Wainfleet, West Lincoln and Niagara-on-the-Lake, the agricultural component of the levy exceeds 10% of the total tax base, and represents the second largest contributor to the tax base, behind the much larger residential assessment component.

Current value assessment for property tax purposes remains based primarily on the market value of property although there is some adjustment for productive value. While it is intended to be based on values related to other properties in the same property class, in regions with overall higher property values, the current value assessment will be higher. True "farmer to farmer" sales may be rare. This results in a situation where farms in the vicinity of larger urban centers or in areas that are desirable for a variety of reasons have higher assessments than similar farms in areas with lower property values. Because property taxes are paid on the basis of assessment, farms in areas of high property values are paying higher taxes than similar farms in other areas of the province. This is an issue in Niagara.

Studies in the United States have confirmed that for each dollar of farmland property tax collected, the municipality spent 77 cents or less on services to those properties. For residential use for each \$1

collected in taxes, an average of \$1.14 was spent on services. The conclusion was that farmland generates a positive net contribution to municipal tax revenue.

There are many benefits that a healthy and productive agriculture sector provides to our society. It is critically important that both urban and rural dwellers understand this. An informed citizenry, including all levels of government, that understands and supports the farming community, is essential, if the benefits from agriculture in this province are to be sustained.

In 2001 there were 3,335 farm operators in Niagara. This number had declined from 3,990 in 1996. Of these operators in 2001, 2,390 were male and 940 female.

The average age of farm operators in 2001 was 51.3; in 1996 it was 50.7 years. It is of note that as the value of production rises, the average age of the operator falls. In the lower value range, the majority of operators are over 55. However in the sectors that generate in excess of \$100,000 per annum in sales, the majority of operators are in the category between 35 and 54 years of age. 62% of the operators in the class that generates in excess of \$500,000 in sales per year are between the age of 35 and 55.

The majority of farmers surveyed for this study, do not work off of the farm to augment their income.

Agriculture has tended to be an industry where training occurs on the job and is supplemented by external programs. The capital investment required to start a farm means that many operators move into an existing family operation. This tends to affect the types of training that are needed and makes it difficult for certain portions of the labour force to move into the field.

In addressing the issue of training for agriculture, one of the problems in encouraging students with a non-farm background to consider a career in agriculture, is the lack knowledge about agriculture as an industry. The curriculum in Ontario schools does not focus on this industry and with the continuing urbanization of the Ontario population, fewer students have any contact with the rural community. There is potential for work opportunities in the agricultural field in Niagara but more work is required to introduce individuals with non-farm backgrounds to the industry.

Agriculture requires a diverse bundle of skills. More work is required to determine how to structure apprentice and cooperative programs so they are accessible and will introduce students with non-farm backgrounds to the opportunities that exist in farming. Agri related businesses employ huge numbers of people. Rather than focusing on directly related agricultural jobs, programs to encourage careers in agri- related businesses would also be appropriate.

In conclusion, this study has confirmed that agriculture is of tremendous importance to the Niagara economy both directly and indirectly. This industry, which generated in excess of \$511 million in gross farm receipts in 2001, in the same year would have generated a total output impact across all regional sectors of the economy of \$1.8 billion. While it is not without problems, agriculture is generally healthy in Niagara. It is a resource that should be nurtured.