Economic Resilience for Local Food: *Hastings County*

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Overview

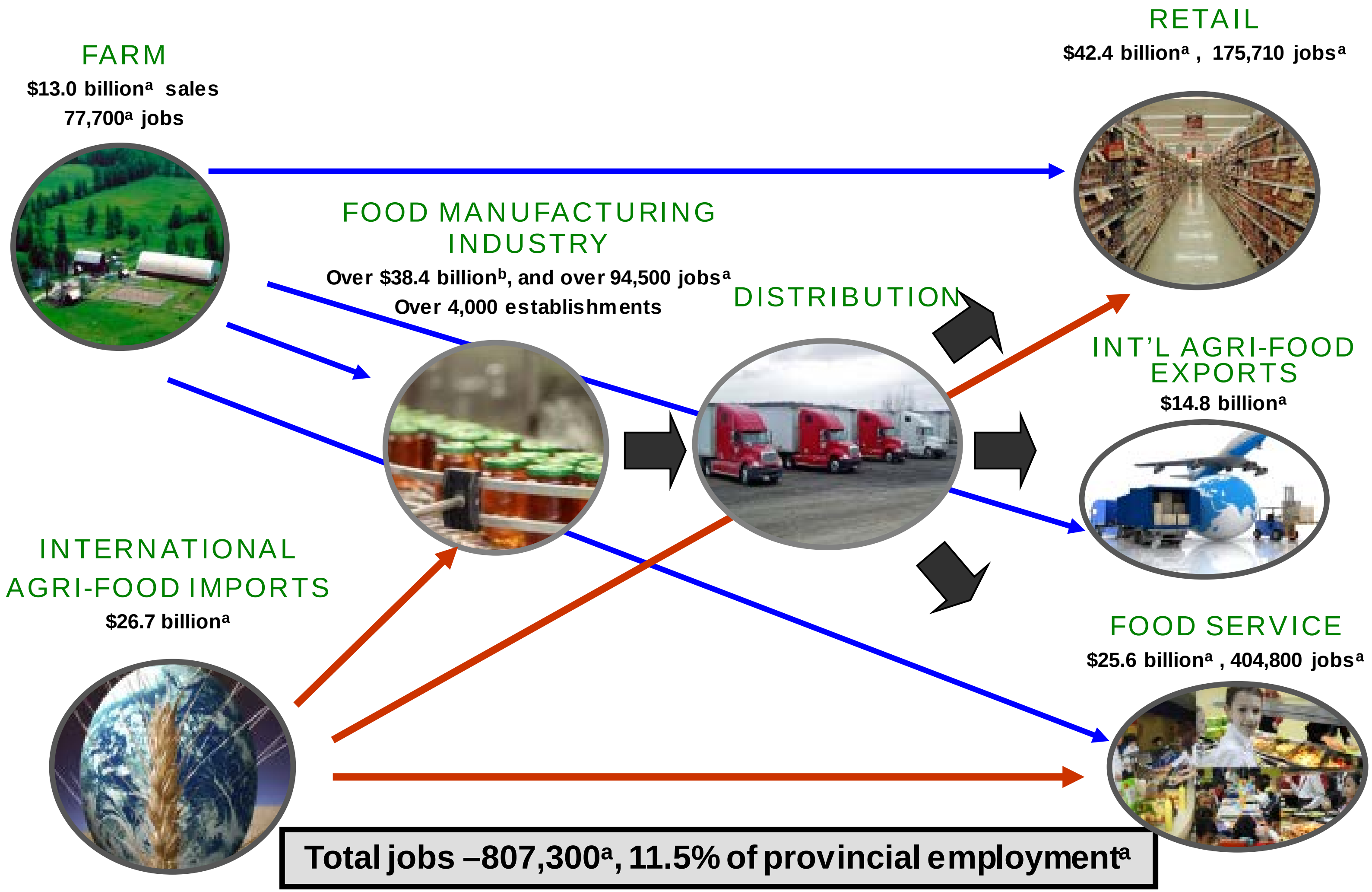
- How does a shifting global trade environment affect our local food systems?
- What does the profile of agriculture and the rural population of Hastings County tell us about opportunities for the local food system?
- How does the local food system create economic value both for its consumers and its producers?

Overview

- Ontario's Agri-food sector
- Agri-food Trade
- Ontario Agriculture Profile
- Hastings County Agriculture Profile
- Cost of Living in Rural Ontario
- Local Food Consumption Example
- Economic Resilience of Local Food

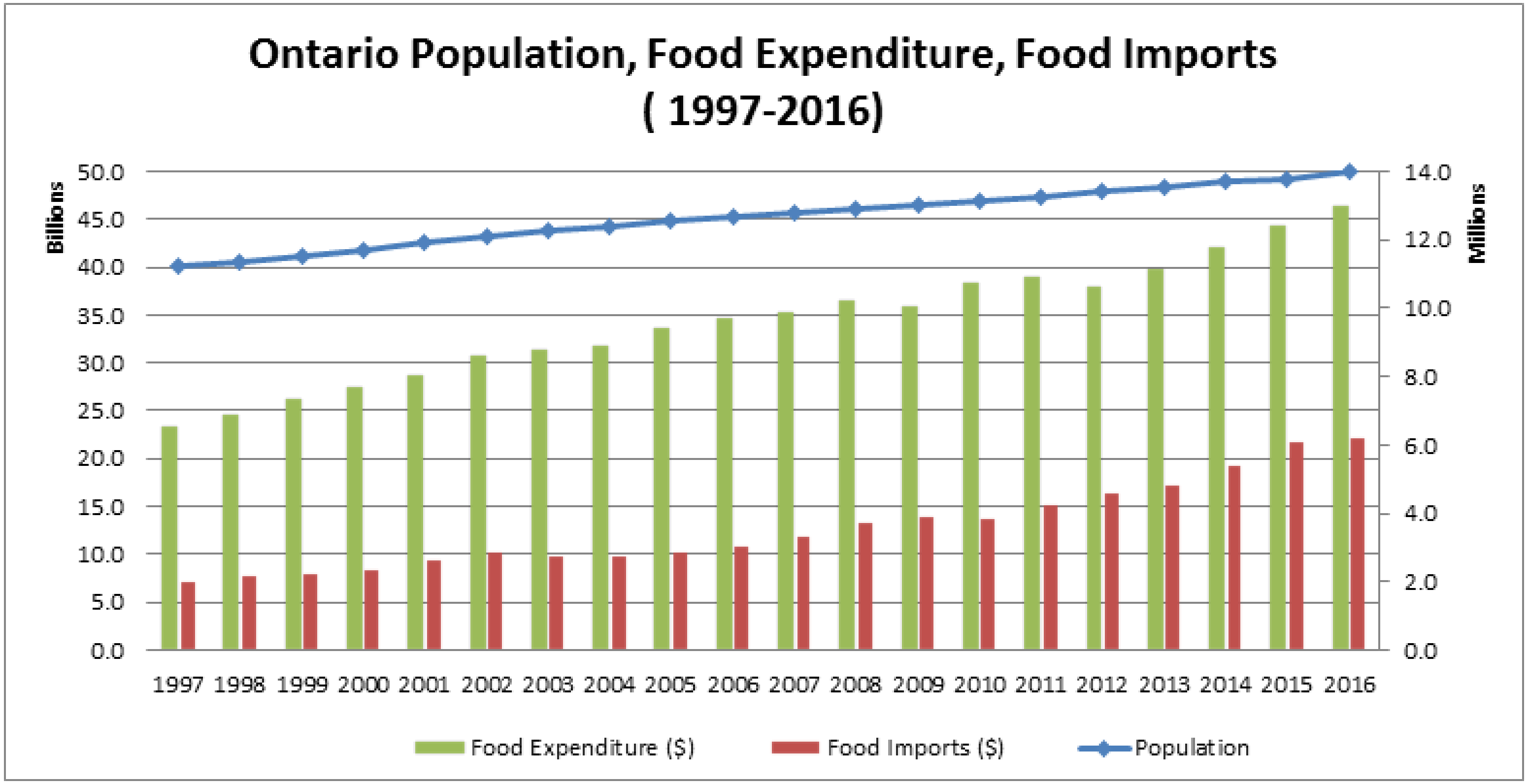
Ontario's Agri-food Sector

ONTARIO AGRICULTURE AND FOOD AT A GLANCE, 2016



Source: [a] OMAFRA statistics 2016; [b] OMAFRA Statistics 2015

Ontario Food Consumption



Source: Statistics Canada, [OMAFRA website](), OMAFRA calculations

Integrated North American Food Market

- Since World War II - steady increase in % of imported foods due to rising incomes, population, changing demographics
- Now about 40 percent
- Top imported foods to incl fruits and nuts, beverages and spirits, vegetables, and pasta and other grain preparations.
- Fully integrated North America and world food market
- Global trade has led to specialization which has helped to keep food prices low, but has also increased complexity in the food sector.
- Growing complexity has led to a rise in efforts by companies, and governments to design and implement food traceability initiatives.

Integrated North American Food Market

- Ontario's vast scale and geographic and climatic diversity, and its immense reserves of fresh water, provide a wealth of natural resources to support food production.
- Combination of our cold climate and a relatively small population means that the potential for domestic growth is somewhat limited
- Companies seeking to expand significantly are putting a large focus on growing their businesses through exports.
- We can create the conditions that support growth while contributing to safe and healthy food, sustaining our environment, and providing greater access to food in Ontario, Canada and around the globe.

Integrated North American Food Market

- Exports are not the only way to create opportunity.
- Another strategy is to tailor products to specific markets or in some cases market niches.
- Strong opportunity to displace imports in many specific markets but to do so in large volumes requires cost competitiveness.
- It is not always about the lowest cost and largest scale.
- Sometimes it is about innovating to explore specific markets.
- Tailoring to specific strategies are often easier for smaller firms to pursue.

Integrated North American Food Market

- Food sector in Ontario is in a unique position today.
- Some aspects of food are highly integrated, involving complex relationships and supply chains around the world.
- Other aspects of the sector are intensely rooted in local communities.
- We have the opportunity today to create the conditions that will support growth in both these aspects of Ontario's food sector
- The two together can provide a strong provincial and local economic engine, contribute to safe and healthy food choices and sustain our environment.

Agri-food Trade

Trade in agriculture and food

- What is it?
  - commodities trading
  - foods goods, beverages, alcohol
  - Equipment, technology

- How does it fit into the current trends?
  - growing & more diverse Canadian population
  - local foods / 100 mile diet
  - healthy living
  - food sovereignty

- The prevailing issues: market integration, mature economies and comparative advantage

Agricultural trade: Canada / Ontario

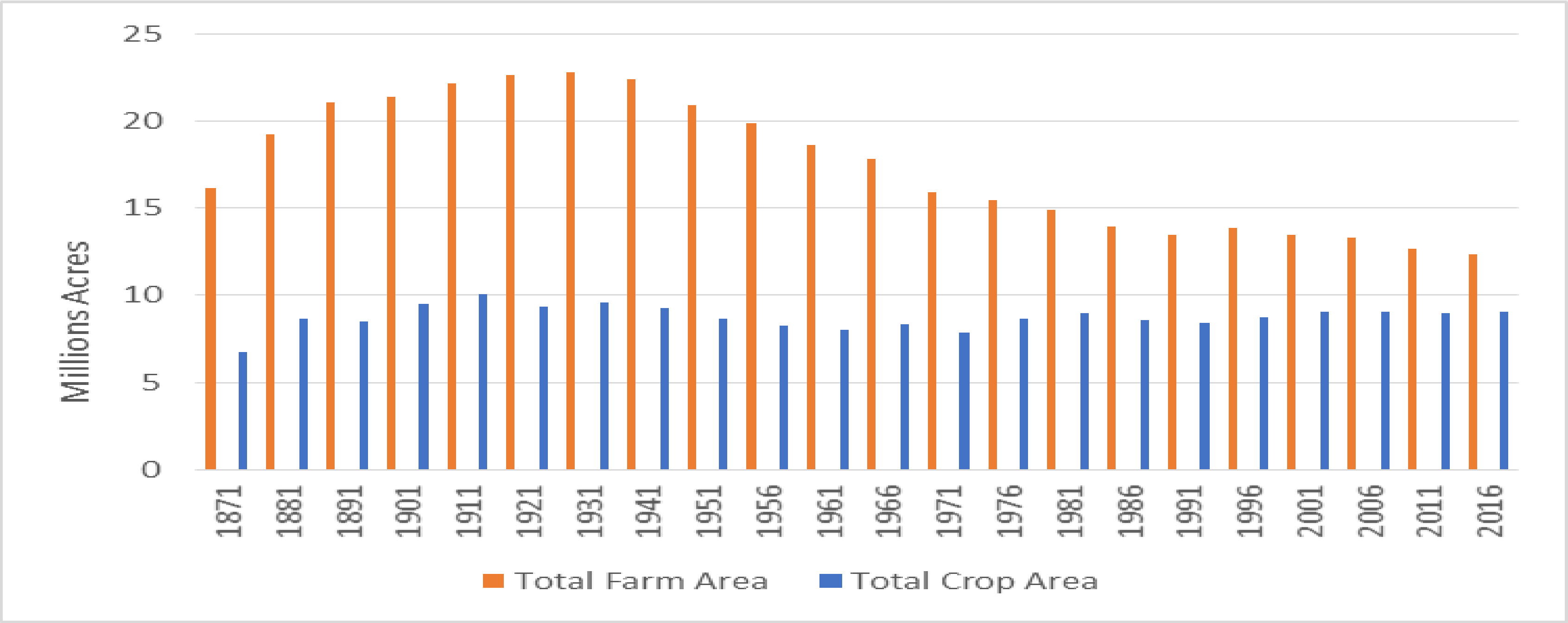
- Canada is the sixth largest agri-food exporter after the European Union, the US, Brazil, China and Australia
    - Also world's sixth largest agri- food importer
- Ontario's agri-food export interests tend to be distinct from western commodity focus:
    – 84% of Ontario agri-food exports are intermediate or consumer-ready products – pasta, bakeries/tortilla manufacturing, grain and oilseed milling and meat product manufacturing, and beverages
- About 74% of Ontario exports are destined for the US market – Mexico, EU are other key markets
    - About 53% of Canadian agri-food exports to US
- The vitality of trade activity in the region in perspective: two-way trade crossing the Ambassador Bridge between Michigan and Ontario equals all US exports to Japan
    - one truck crosses the Canada/US border every 2.5 seconds

Ontario Agriculture Profile

Total Farm Area - Ontario

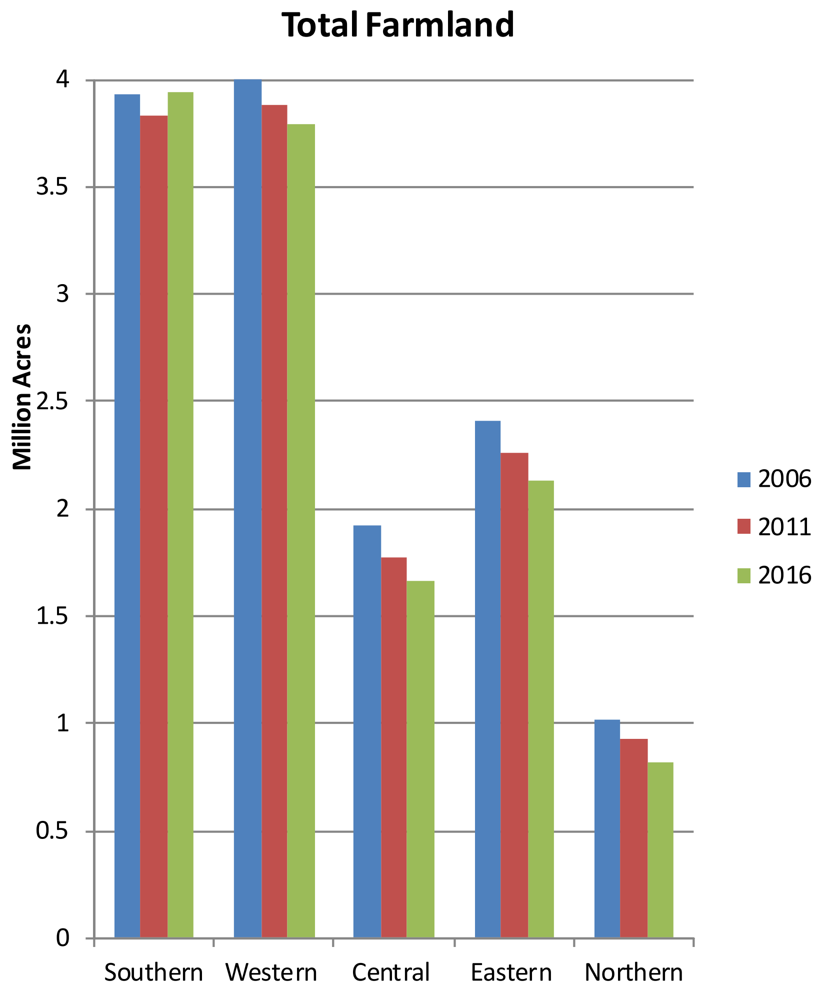
- The **Census of Agriculture** takes place every five years and is conducted by Statistics Canada
  - Only true inventory of farm production assets
  - Only inventory of assets at a sub-provincial level

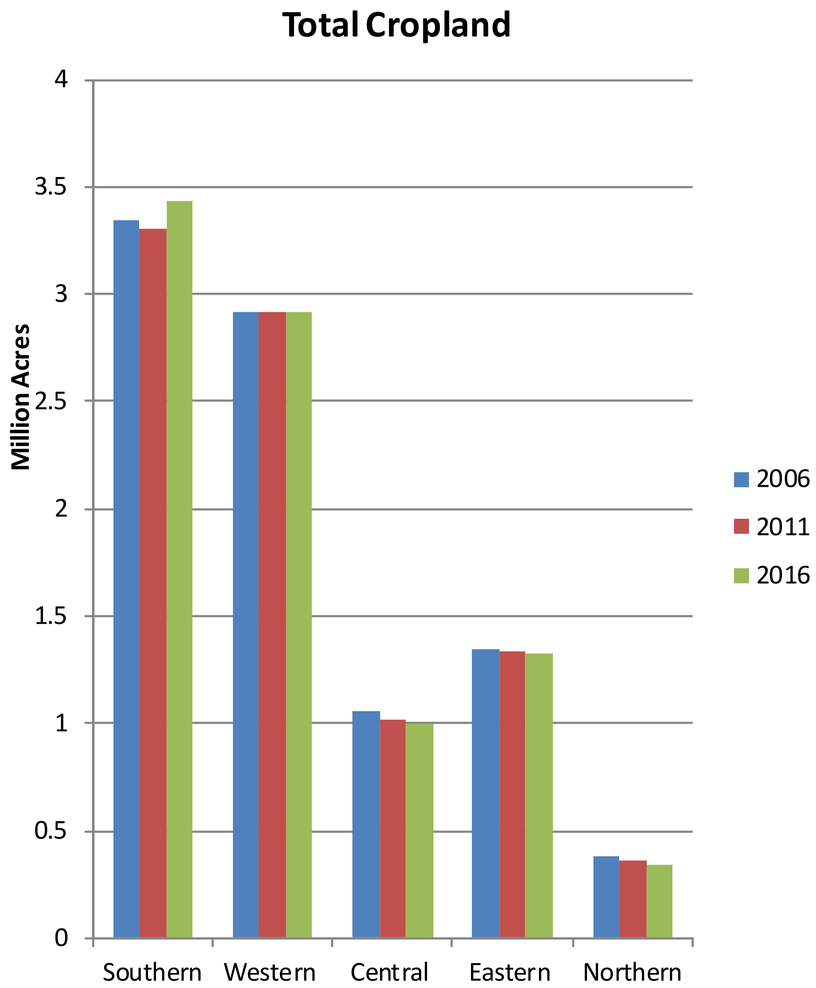
- Total farm area measures the land used by farmers
  - Includes both owned (workable and non-workable) and rented land (generally just workable)
  - Does not include vacant land could be used for agricultural purposes



Source: Statistics Canada, Census of Agriculture

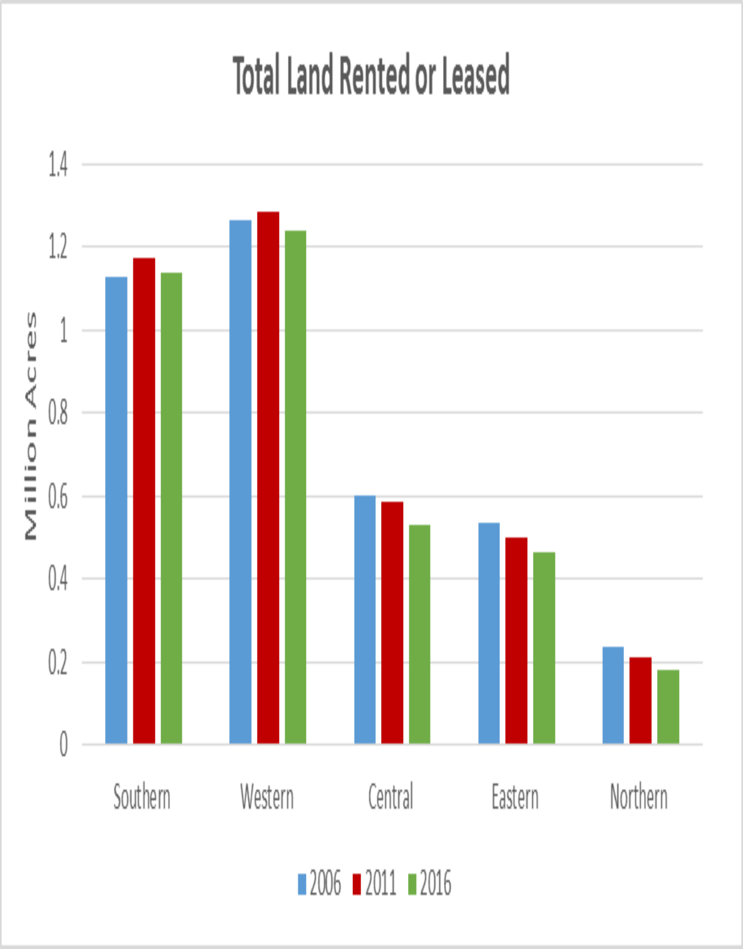
Total Farm Area and Crop Area - Regions

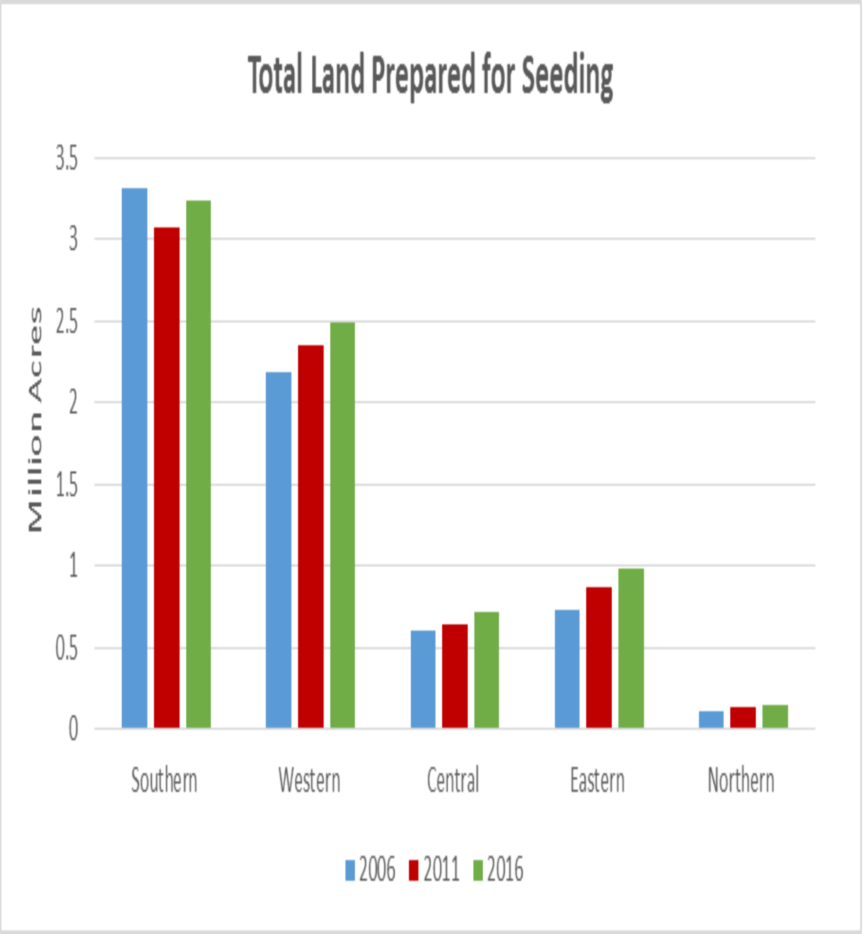




Source: Statistics Canada, Census of Agriculture CANSIM 004-0002 CANSIM 004-0203

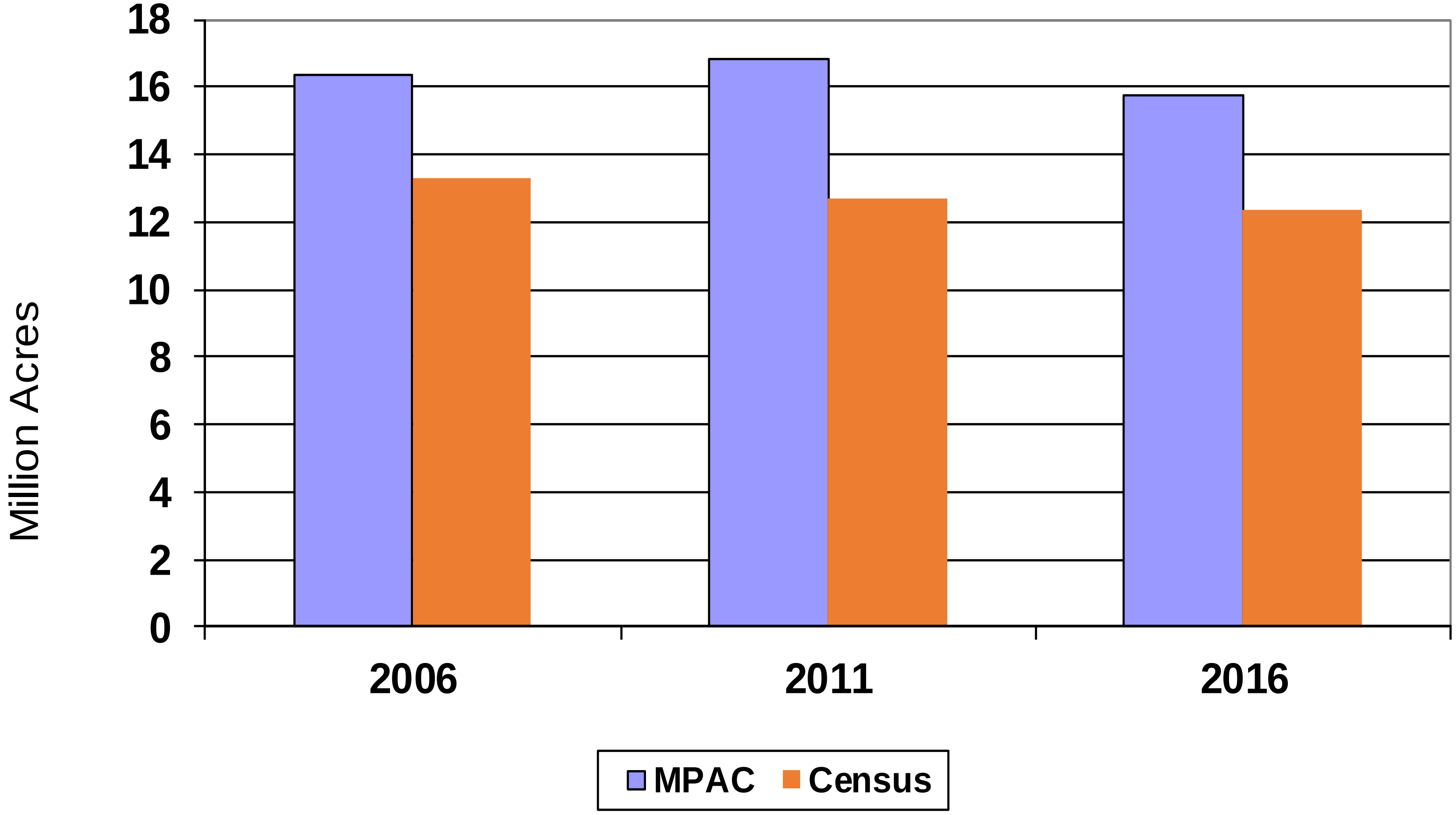
Tenure and Land Prepared for Seeding - Regions





Source: Statistics Canada, Census of Agriculture [CANSIM 004-0002](#) [CANSIM 004-0203](#)

Land Assessed for Farming (MPAC) vs Total Farm Area (Census) - Ontario



Source: OMAFRA calculations based on MPAC and Statistics Canada data

Observations about Ontario Farms & Farmers

- Average farm family has a before tax income of roughly $132,000 – ($25,000 in net farm income and $107,000 in off farm income)
  - Provincial average household income is about $98,000
- 51% of Ontario farm operators don't work full-time on the farm
- As farm sales rises – off-farm income decreases in importance
- Even the largest farms in Ontario have significant off-farm income
- Off-farm income isn't just employment, it can be other businesses, rental or investment income
- It generally takes a large scale farm to on its own generate a total family income equivalent to the provincial average family income
  - Sales of at least $750,000
  - Minimum of about 1,000 acres of cash crops
  - About 100 dairy cows
  - Minimum 250 beef cows
- Farming today is much more of a complement to other forms of employment and income

Hastings County Agriculture Profile

Observations about Hastings County Farms & Farmers

- Compared to the provincial level, Hastings County has seen a more rapid:
  - Loss of total farm numbers, total farm area and total land in crops
  - Increase in land prepared for seeding
  - Increase in the number of farm operators under 35 years of age
  - Reduction in the number of farm operators working full-time on the farm
  - Increase in farms less than 10 acres

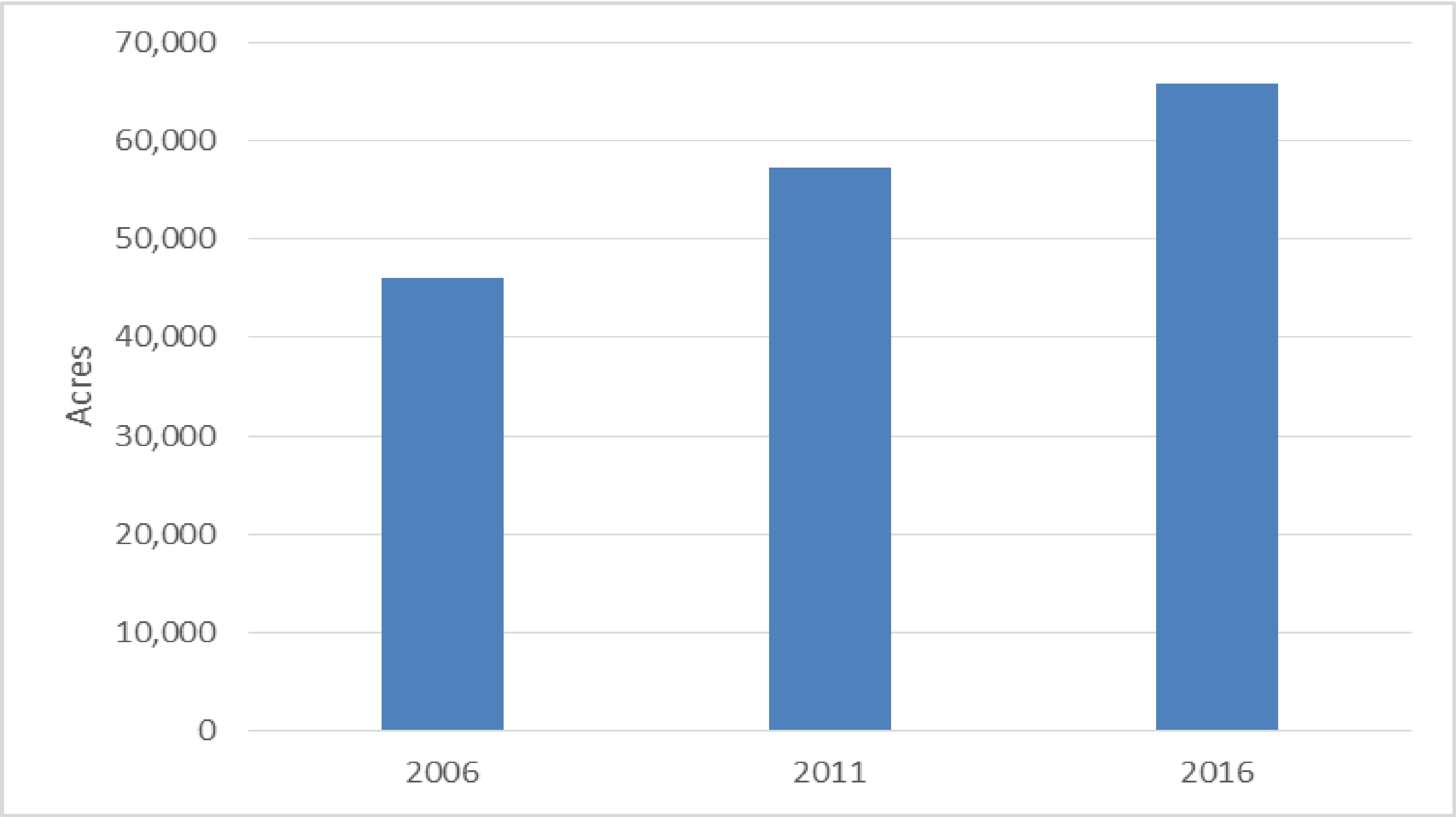
Observations about Hastings County Farms & Farmers

- Characteristics of farmland in Hastings County like many parts of central and eastern Ontario has meant that large scale agriculture is not the norm:
  - 41% of farmers work full-time on the farm compared to provincial average of 49%
  - 27% of farmers work full-time off the farm compared to provincial average of 27%
  - Proportionally less farms under 129 acres
  - 70% of farms have under $50,000 in gross farm sales compared to provincial average of 50%
  - Proportionally more beef and small livestock farms and less fruit and vegetable farms

Observations about Hastings County Farms & Farmers

- 30% decline in number of farms involved in organic production over last ten years
  - 15 farms are certified organic
- 220 farms sell direct to consumer which is 23% of total farms compared to provincial average of 15%
- 7 farms participate in Community Supported Agriculture type sales

Land Prepared for Seeding – Hastings County



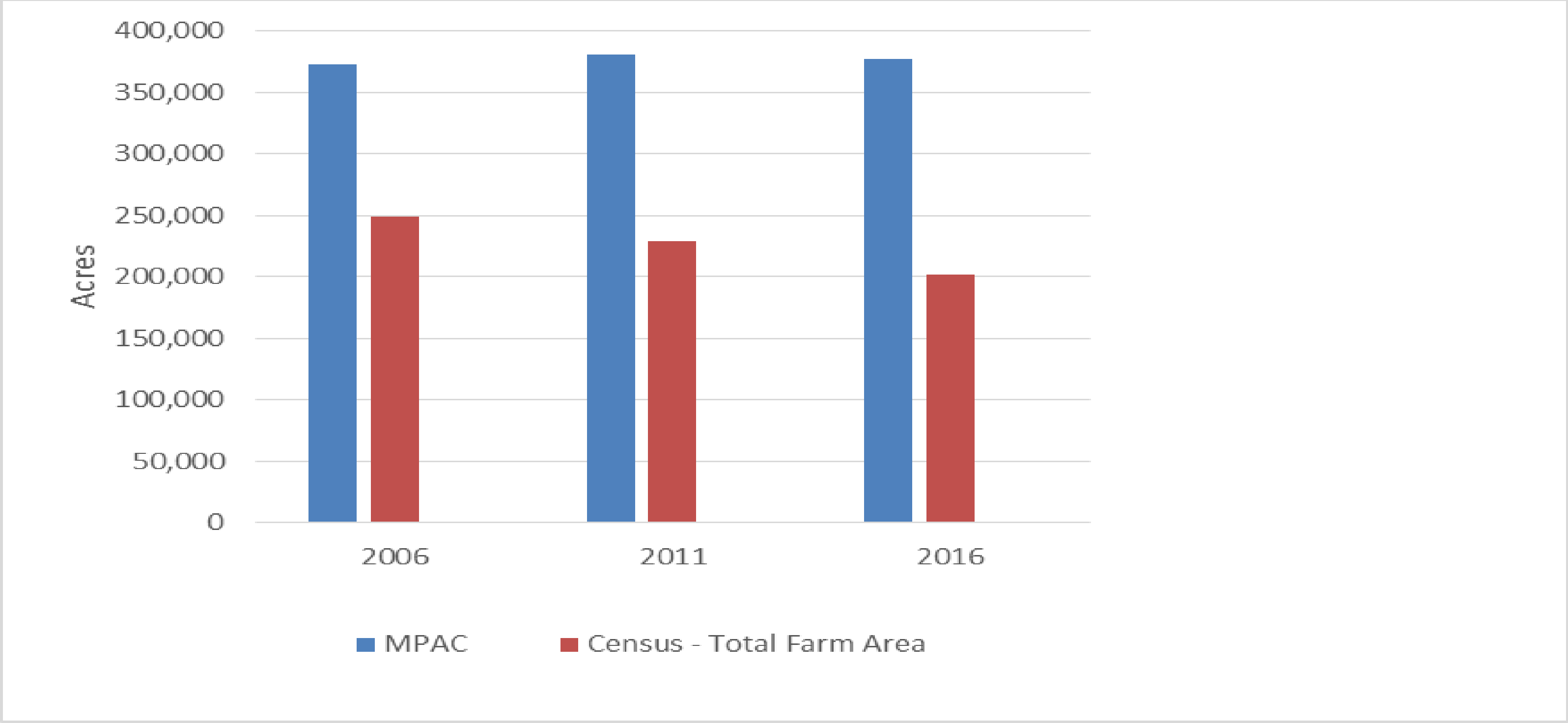
Source: Statistics Canada, Census of Agriculture; **CANSIM 004-0205**

Further Observations about Farmland in Hastings County

- 51% of total land used by farmers is unimproved land compared to provincial average of 22%
- 49% of total land used by farmers is for crops compared to provincial average of 78%
- In 2016, average value of land and buildings per acre was $3,971 up 125% from 2006 and compared to provincial average of $9,580 in 2016
  - Land values on average have risen about same as the provincial level
- In 2016 and 2017, UofG Deaton survey suggests median farmland rental rate of about $25 per acre and sale price of $3,000 per acre

Land Assessed for Farming (MPAC) vs Total Farm Area (Census) – Hastings County

- Over 328,000 acres assessed for farming that isn't being actively farmed



Source: OMAFRA calculations based on MPAC and Statistics Canada data

Further Observations about Farmland in Hastings County

- Another roughly 9,700 acres of vacant land not assessed for farming – hard to know quality of this land
  - Average parcel size of roughly 40 acres
- Since 2006, 84 parcels of vacant land not assessed for farming totaling 4,600 acres are now actively farmed – 18% increase
- Since 2006, the land being actively farmed where the land owner is not a farmer and has a residence on the property has fallen 29 parcels and 5,590 acres
  - County total is 954 parcels totaling 75,720 acres
- Since 2006, the land being actively farmed where the land owner is a farmer and has a residence used by someone else on the property has fallen 7 parcels and 778 acres
  - County total is 23 parcels totaling 2,208 acres

Cost of Living in Rural Ontario

Rural Ontario Living Expenditures

- Based on a custom run of the Statistics Canada 2016 Survey of Household Spending, the average Ontario rural household spends $28,377 per household member per year on living expenses including food, shelter, transportation
  - Almost $3,000 more than in Toronto or average Ontarian

Category	$ per Person	% Compared to Toronto
All Expenditures	$28,377	112%
Food	$3,889	115%
Accommodation	$7,006	90%
Heat & Hydro	$1,907	208%
Transportation	$5,554	127%
Clothing	$1,005	68%
Recreation	$2,652	184%

Hastings County Living Expenditures

- Average Hastings County household has 2.3 people meaning their total annual living expenditures equal roughly $65,267
- Average Hastings County household has an annual income of $73,527 before taxes – leaving very little for savings, investments, unknown expenses etc
- Some townships in Hastings county exceed this annual income while others are much lower

Hastings County Living Expenditures

- Rural Ontario residents and especially residents in lower income communities are facing living costs across the board that are putting significant stress on personal budgets
- In today's society, consumers have more discretion in controlling food costs than they do transportation, or housing as an example
- This means that many rural Ontario and Hastings County residents are likely to look at their food purchases, sources and budgets in a much different manner than the average Ontarian.
- Rural residents as well as any lower income consumer are increasingly concerned with stretching their food dollar

Hastings County Food Expenditures

Category	$ per Household	% Compared to Toronto
Total Food expenditures	**8,945**	**115%**
Food purchased from stores	**6,469**	**125%**
Bakery products	564	118%
Cereal grains and cereal products	347	118%
Fruit, fruit preparations and nuts	935	130%
Vegetables and vegetable preparations	697	105%
Dairy products and eggs	924	133%
Meat	1,518	171%
Meat (except processed meat)	761	127%
Processed meat	577	199%
Fish and seafood	179	82%
Non-alcoholic beverages and other food products	1,476	119%
Food purchased from restaurants	**2,477**	**96%**

Sources: OMAFRA calculations based on Statistics Canada custom run of 2016 SHS

Local Food Consumption Example

Local Food Demand vs Production

- Like the province itself, no one county or community in Ontario is truly self-sufficient in balancing food demand and production

- In most rural communities while food is a much larger portion of incomes, food is also something with much greater visibility and understanding.

- Inherently food production is intensely rooted in local rural communities.

- The ability of a community, and its food producers to understand the local balance of food demand and production and the income situation of its residents is vital to maintaining an economically resilient local food system

Local Food Demand vs Production

Hastings									
	Annual Consumption per Capita[1]		Ontario Average Production[2]	Area Required to Feed the Population - Annually		Crops Grown in 2016 from Ag Census	Fresh Produce Required for a Three Month Summer		
Produce	Fresh (kg/cap)	Total (kg/cap)	Yield (kg/acre)	Fresh (acres)	Total (acres)	Total (acres)	Total County Consumption (kg)	Total Area Required (acres)	Fresh - SqFt Per Household
Apples	**10.16**	**17.45**	**10,676**	**127**	**219**	**82**	**339,623**	**32**	**23.84**
Asparagus	0.64	1.01	2,093	41	65	19	21,394	10	7.66
Beans (Green &	0.91	2.15	2,915	42	99	14	30,419	10	7.82
Beets	**0.87**	**1.19**	**12,736**	**9**	**12**	**12**	**29,082**	**2**	**1.71**
Broccoli	2.70	3.79	3,518	103	144	6	90,254	26	19.23
Cabbage	4.28	4.28	11,395	50	50	8	143,070	13	9.41
Carrots	**7.50**	**9.59**	**20,560**	**49**	**62**	**15**	**250,706**	**12**	**9.14**
Cauliflower	2.87	3.03	7,062	54	57	7	95,937	14	10.18
Peppers	4.06	4.06	10,478	52	52	9	135,716	13	9.71
Potatoes	**22.71**	**55.98**	**8,618**	**352**	**869**	**61**	**759,139**	**88**	**66.00**
Pumpkins	3.26	3.26	7,623	57	57	52	108,974	14	10.71
Radishes	0.58	0.58	5,496	14	14	2	19,388	4	2.64
Rutabagas & T	1.07	1.07	10,326	14	14	4	35,767	3	2.60
Spinach	0.93	1.37	2,807	44	65	3	31,088	11	8.30
Strawberries	**3.18**	**3.97**	**3,178**	**134**	**167**	**42**	**106,299**	**33**	**25.06**
Sweet Corn	3.07	6.67	4,507	91	198	299	102,622	23	17.06
Tomatoes	8.19	30.52	29,617	37	138	43	273,771	9	6.93
Total				**1,544**	**2,670**	**717**		**386**	**289.19**

1. Statistics Canada, "Food avaiable in Canada", CANSIM 002-0011;
2. Fruit and Vegetable Survey, Statistics Canada.

Economic Resilience of Local Food

Ontario

Local Food Value Proposition

- How a person/family/community defines what foods are or are not local, depends on the nature and context of that person/family/community.
- No agreed-upon definition of local.
- Local food does however resonate with three major ideas:
  - Close relationship with those who grow food;
  - More likely to be grown and distributed in a sustainable and ecologically-sound way; and
  - Helps support local businesses
- To foster economic resilience, a fourth point needs to be considered which requires there to be a value proposition to the farmer – presumably in the form of larger returns

Local Food Value Proposition

- Every product needs a value proposition
- Value proposition is how a product is distinguished from all others in its domain so that target customers consciously select it as a superior option.
- Well-defined and effectively articulated value propositions can transform ordinary products into extraordinary experiences.
- A strong value proposition is an attempt to achieve customer loyalty by setting appropriate expectations about a product and ensuring these are consistently confirmed at high levels.
- Setting appropriate expectations is extremely complex

Local Food Value Proposition

Hastings County example: In summer, local stores offer California strawberries, at the same time as local strawberries

- Consumers: taste, freshness, convenience, assurance of safer production methods or price?
- Farmer: increased production, reduced costs, reduced waste, higher price
- Are these value propositions enough for the farmer to ensure a reasonable profit and for the consumer to choose local over California?
- An economically resilient local food system balances these questions.

Economically Resilient Local Food

- A local food system balances these questions by first recognizing that the answers lie at the individual farm and consumer level.

- Farmers need to:
  - Know their costs in order to appropriately price their products
  - Develop a sound value proposition to articulate to consumers

- Consumers need to:
  - Understand what value propositions matter most to them: price, quality, other attributes
  - Understand what attributes the product offers
  - Recognize seemingly similar products may be different due to value propositions that are not physical in nature – e.g local food

- Balancing these questions enables each party to maximize its own value proposition and adjust their decisions if their value propositions are not adequately met

Summary

- Ontario and Hastings County are part of an integrated North American food system
- In many respects all food produced in Ontario is local
- Like the province itself, no one county or community is truly self-sufficient in balancing food demand and production
- Local food production in Hastings County is extremely visible but of smaller scale and size than most other parts of Ontario.
- Food is also a much bigger issue for many residents due to higher overall living costs and lower average incomes.
- The ability of a community, and its food producers to understand the local balance of food demand and production and the income situation of its residents is vital to maintaining an economically resilient local food system.
- The data would suggest Hastings County has already to some degree embraced this reality but there is considerable room for growth of this trend