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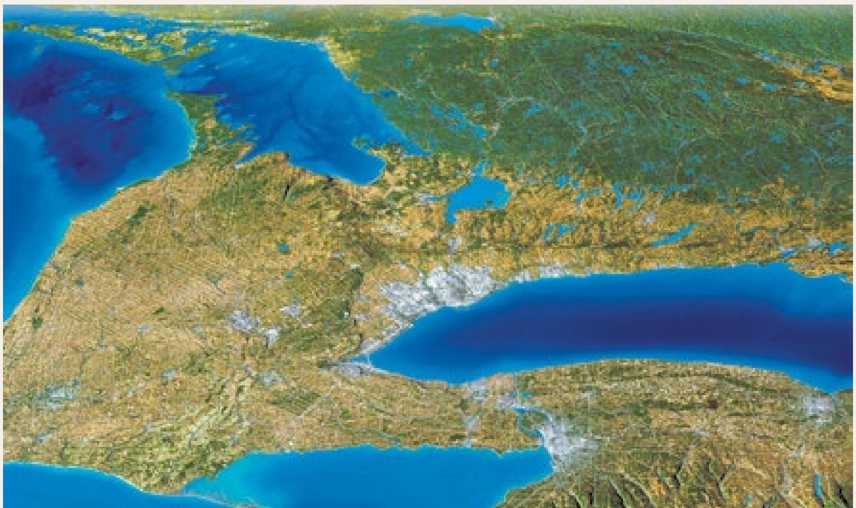
City Region Food System

of Toronto and the Greater Golden Horseshoe

:: Describing the city region food system

In Canada over 80% of the population lives in cities, with almost ¼ of Canada's total population living in the Greater Golden Horseshoe (GGH) area, home to the City of Toronto. Toronto's City Region –defined as the GGH area- stretches in a curve around the western side of Lake Ontario, with the city of Toronto occupying the northern side of the horseshoe.

The GGH is an area of high potential food production as well as rapid population growth, creating a mix of legitimate demands for housing, infrastructure and preservation of prime agricultural lands that are difficult to reconcile. Food insecurity is a significant challenge in Toronto and in surrounding areas. The City of Toronto's Neighbourhood Equity Index shows some communities facing challenges in accessing healthy food.



Greater Golden Horseshoe satellite image (Source: Neptis Foundation, 2009)

The Cultivating Food Connections study for Toronto also shows that expenditures are not going to local farmers or local economies. The average journey for food from farm to table was estimated at 4 497 kilometres in 2015.

It is in this context that the vision for a sustainable city region food system in Toronto was defined as **"Healthy food for all, sourced as regionally as possible, and as sustainably produced, processed, packaged, and distributed as possible"**.

:: Who feeds the city region?

Food production

There were 19 266 farms in the GGH (2015). Counting all workers in primary agriculture– farmers, farm managers and farm related jobs not including part time or seasonal workers – the total is 35 584. **The GGH experienced a decline in farmland between 2006 and 2011 of more than 65 000 hectares, about 4.4% of its agricultural land representing an area larger than the city of Toronto.** While farmland is being lost, farm size remains mid-scale on average. There are an estimated 218 certified organic farms and 54 transitional. There are more than 100 food growing gardens on Toronto city property.

The total revenue for the GGH is more than USD12 billion. The 2015 GHFFA report calculates 630 325 jobs for the entire value chain. Farming in the GGH is more labour intensive as more production is in horticulture and organic. Despite this high economic activity, farm revenues have not changed in real dollars since the 1970s, while the cost of inputs, land, and labour have steadily increased.

Counties in the GGH produce enough oats and barley to meet local demand. Grape, peach, cabbage, sweet corn and peppers are in surplus with deficits of apples, strawberries, green and wax beans, potatoes, carrots, tomatoes and onions, as well as beef and lamb. **Currently, all vegetable deficits could be met provincially except for dry onions, cabbages, green and wax beans and potatoes.**

Agriculture at a glance

- 19 266 farms
- 27 985 farmers
- 35 584 jobs
- USD12 billion revenue
- 200 acres average farm size
- 5.6 million tonnes GHG emissions/ year
- 47% of farms depend on off-farm income

Food processing and manufacturing

Food processing and manufacturing is concentrated in the study area with over 50% of Ontario's food processing and manufacturing jobs in the GGH valued at close to USD40 million. Food processing accounts for over 200 000 jobs equal to 13% of all food related jobs. The City of Toronto houses over 21 615 food manufacturing jobs, and almost 17% of food-related jobs. Except for labourers, pay levels in food manufacturing are high relative to other food sectors. Despite this robust presence, Ontario has steadily lost processing and other supply chain infrastructure over the last few decades. **The agri-food sector in the GGH shows a significant gap in fruit and vegetable preserving and meat product manufacturing.** The GGH shows signs of increased processing capacity with a new agri-food shipping terminal in Hamilton, and a new tetra-pak facility. In addition to adding nearly 15m tonnes of CO_2 emissions, food processing accounted for around 18% of waste across the supply chain.

Processing at a glance

- 36.9 billion revenue (Ontario)
- 50% of food processing jobs in ON
- 200 000+ jobs
- USD15 billion revenue Toronto only

Distribution

Food merchant wholesalers in the GGH employ 35 794 people while farm product and beverage wholesalers add another 5000 jobs to the total. **Emissions from the food system overall are estimated 831 903 tonnes CO_2 emission in southern Ontario with more than 50 000 tonnes attributable to distribution.** The sector accounts for about 3% of waste in the food system.

Distribution at a glance

- USD1.5 billion revenue (Golden Horseshoe)
- 35 794 jobs
- Approximately 50 000 tonnes CO_2 emissions (southern Ontario)

Retail, food service, restaurants, institutions

The food service sector is the largest and fastest growing of the food system sectors. In Ontario, the sector is valued at almost USD41 billion (Statistics Canada 2015). In Toronto, the figures show that grocery stores command a high percentage of the sales. 68% of agri-food jobs are in the food service sector, with retail only accounting for 3% and the majority in food service (hotels, restaurants, institutions) (GHFFA 2016). **The number of jobs in the GGH for food retail total 130 972 for retail and 345 924 for food service** (GHFFA 2016). Wages in this sub-sector are low, ranging from USD21 000 to USD35 000.

The contribution of these jobs to the local economy is probably lower than other sectors, as corporate food outlets are owned by foreign or transnational companies in many cases. Even for large domestic corporations, the revenues most likely do not remain in the community. Likewise, large retail grocery annually widens their private label offerings, many of which are manufactured elsewhere and imported into Canada (GHFFA 2016).

Retail at a glance

- USD40+ billion revenues in Ontario
- 130 792 jobs in food retail
- 345 924 jobs in food service
- 4 "less healthy" retail stores for every 1 "healthier" food retail in Toronto
- 25% of transport emissions

Consumption

Despite a wide diversity of sources and cuisines, food is not available equitably or evenly across Canada. Food insecurity varies between 10 and 17.6% in the GGH. While food makes up a relatively small part of household budgets with less than 10% of household income spent on food in Ontario, Toronto Public Health found that "**Alongside hunger, approximately one in three Toronto children (age 2-11) is either overweight or obese**".

Consumption at a glance

- 10-17.6% households are food insecure
- 350+ agencies provide 6.5 million+ meals (Toronto)
- 116 community kitchens (Toronto)
- 3 459,410 people self-report as obese

A shift towards ethnocultural cuisine, which is often higher in vegetable ingredients, is predicted for the GGH, as 40% of the population are currently newcomers. The World Crops Project through Toronto Food Policy Council, Toronto Food Strategy and the Toronto Urban Growers, as well as the Vineland Research and Innovation Centre in Niagara, have worked to develop varieties and markets for ethnocultural foods in the region to capture the more than USD800 million market.

Food and organic waste

The total tonnes of waste annually for the GGH food system is estimated to be 207 326.5 tonnes. The value of discarded food in Ontario is estimated at USD12 billion (Ontario Waste Management Association 2016). Few Canadian businesses realise the savings that could be generated from reducing (rather than disposing of or recycling) waste. Even on a relatively small scale, diverting waste into composting as does FoodShare in Toronto has been shown to save thousands annually in the city's processing costs.

Waste at a glance

- 207 326.5 tonnes annually
- USD12 billion in value wasted (ON)
- 9% agriculture
- 18% packaging/ processing
- 3% transportation/ distribution
- 11% retail
- 8% food service
- 51% consumers

:: Food flows

A food flow analysis of key foods – including carrots, apples, potatoes, chicken and eggs – was undertaken in 2016. The strong export focus of the food system made it difficult to track precise flows for any food category. The food flow estimates and case study research for the GGH confirmed that either: 1) food leaves the region while comparable foods are imported; for example, carrots where it is estimated that 25% of carrots produced are exported and 20% of carrots consumed are imported; and 2) production does not meet local demand; the deficit for carrots is about 2.9 million pounds, apples 283 million pounds, 535 million dozen eggs, and 109 million kilos of chicken meat.

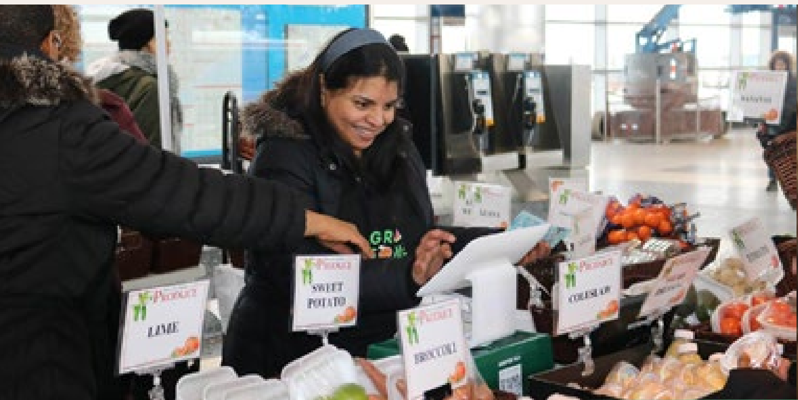
A key reason for these flows is a lack of mid-scale infrastructure within the city region. Accordingly, the top policy recommendation is to create mid-scale infrastructure and provide financial, regulatory, public food procurement, and educational supports such as food hubs to further develop regional food flows.

Opportunities for strengthening the city region food system (CRFS): Stakeholder input identified eight key Policy Recommendations (PR):

1. Develop and support transition to increased mid-scale infrastructure (regional processing, distribution, marketing)
2. Establish financial resources that support a range of scales and stages
3. Establish scale-appropriate regulations and feasibility assessments for mid-scale infrastructure like regional food hubs
4. Increase research and educational opportunities directed at regional agriculture and regional infrastructure needs linked to shorter supply chains
5. Provide sufficient social assistance, through a guaranteed income or other measures, to ensure that everyone can afford to eat healthy food
6. Establish a national food policy and a national school food policy
7. Ensure widespread formalization and implementation of public procurement policies for local food (with percentages and budgets to meet policy goals)
8. Revise the labour practices, government support and subsidy programs to ensure the necessary skilled labour for all food system areas with tenure security and fair compensation for work.

:: Policy and planning interventions for CRFS

The policy recommendations were assessed and grouped to identify priorities that are being addressed at by other levels of government. An Ontario pilot project was launched to test a Guaranteed Minimum Income in three jurisdictions over the next 3 years (PR #5). An on-going consultation process is being led by the federal Department of Agriculture to identify whether to implement a National Food Strategy (PR #6). It was recognised that the remaining six PR were interconnected by the need for mid-scale infrastructure. Three food hub scenarios were developed (Processing and distribution; Distribution; and, Food Access). Scenario building results provide specific recommendations for Finance, Regulatory, Planning, and Engagement initiatives needed to achieve these next steps.



TTC Subway pop-up markets
(©Toronto Public Health)

Food and employment skills training for low-income residents
(©Toronto Public Health)

References and contacts

Adapted from Miller 2015, 2016 and 2017, City Region Food Systems Project (RUAF, Centre for Sustainable Food Systems and FAO).

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