

DESIGN BRIEF

Ontario Tender Fruit Lab

October - December 2014

CONTENTS

ABOUT	/ Ontario Tender Fruit Lab - Challenge / About the Lab / Ontario Tender Fruit Lab - Research	1.
-------	--	----

KEY TRENDS	/ Consumer Demand / Retail Strategies / Processing Capacity / Production Activity	4.
------------	--	----

PERSPECTIVES	/ Producers / Researchers / Processors / Distributors / Retail / Not-For-Profits / Government	13.
--------------	---	-----

KEY ISSUES		29.
------------	--	-----

PROMISING SOLUTIONS		31.
---------------------	--	-----

DEFINITIONS		33.
-------------	--	-----

Authors

Ola Tjornbo
Hyun-Duck Chung
Sam Laban
Claire Buré

Design

Terrie Chan

THE CHALLENGE

The tender fruit industry in Ontario faces a watershed moment. Fierce competition from foreign imports, as well as between large retail chains, has put pressure on prices. At the same time, the closure of processing facilities has led to the loss of jobs and deprived many producers of an outlet for their fruit. Meanwhile, demand for fresh fruit is rapidly increasing, largely driven by a broader consumer trend of purchasing products to help improve health and wellness. Much of this new demand is currently being met by increasing imports of exotic fruits such as mangoes, while the volume of exports is declining and value-added processing is carried out abroad. These challenges are forcing the industry - growers, distributors, processors and retailers - to change.

While the changes in Ontario's tender fruit sector pose significant challenges, they also create opportunities. With appropriate interventions, we think it is possible to rebuild this sector to meet the shifting demands of our 21st century food system. This could have many positive spinoff effects, including stronger businesses across the value network, more jobs, a better environment and healthier living.

As with any market, people's expectations around food are evolving. Today, consumers want their food supply to be safe, reasonably priced, appealing and in reliable supply, but also increasingly sustainable, healthy and local. Demand for organic and local products continues to rise, although this still represents a relatively minor segment of the market. New investments are also being made into new niche processing facilities in Ontario. It is apparent that the current food system favours some of these demands and trends but seems to neglect others. And some demands seem contradictory. To meet changing needs we must reconcile these different, seemingly conflicting demands. And we need everyone in the sector - from producers to processors, retailers and consumers - to make that happen.

In the past months, we have spoken to over 70 stakeholders and experts across the Ontario food system. We see challenges but also opportunities to produce more organic products, improve farming practices, grow local brands, harness technological and logistical efficiencies and create a stronger fruit industry for the long term. But we need to work together in order to realize this. By meeting these opportunities and finding new and innovative solutions to the current challenges, a revitalized tender fruit industry could act as a beacon for the entire Canadian food system.

ABOUT THE LAB

The **Ontario Tender Fruit Lab** is developed to help reimagine and bring about change in the Ontario tender fruit industry along the entire value network. It is a new approach that convenes key stakeholders to generate a strategy and actions for system change. The lab is founded on the belief that it is only by sharing unique insights and acting in collaboration that we can create a food system that meets the demands of all Ontarians.

Ultimately, the workshops and resulting interventions are designed to bring about positive change in the tender fruit industry in Ontario. We hope that participants will share in that goal, and act on and support elements of the strategy.

There are two phases to the lab process:

1. Research: This phase set the focus on tender fruit and allowed us to gather different ideas, information and perspectives from the industry. This work has been summarized here in the Design Brief.

2. Workshops: We are convening a range of key stakeholders over three workshops to see the system, identify barriers and opportunities, and develop and prototype innovation strategies. The strategies will be a set of proposed actions to be taken by different stakeholders.

What should you expect at the workshops? You are a member of a select group of approximately 20 key participants from across the tender fruit value network: growers, processors, distributors, retailers, government, NGOs and researchers. Each workshop will take place in a comfortable setting conducive to creative thinking and frank conversation, and although the days will be full we'll make time for good food and refreshments. The workshops provide a safe and neutral space where different perspectives can be heard and we can explore solutions together.

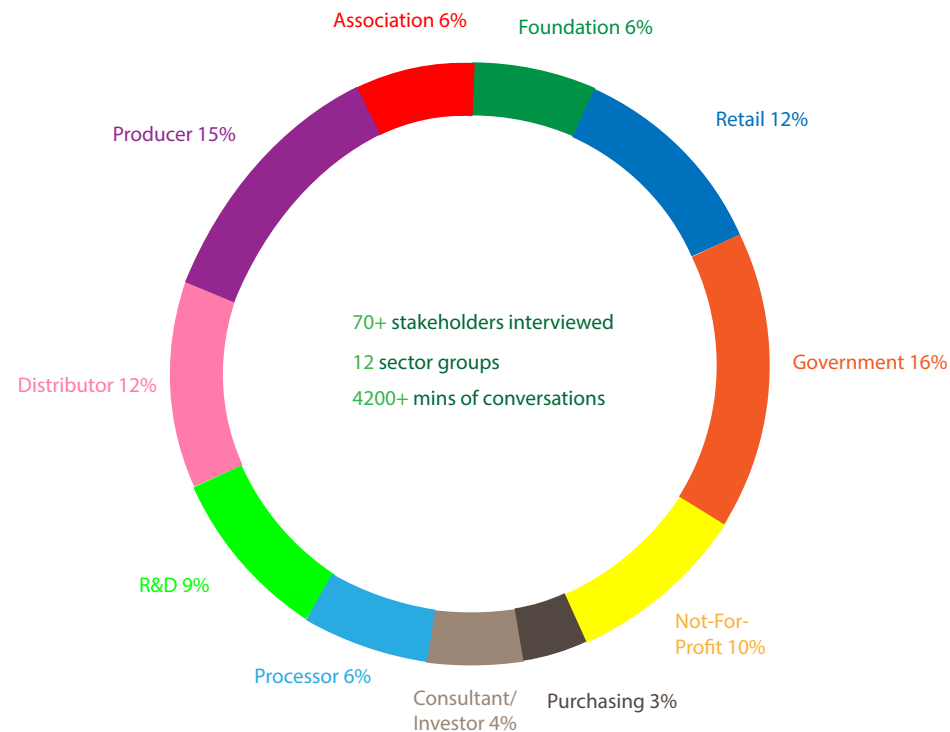
*The Ontario Tender Fruit Lab is an initiative from **MaRS Solutions Lab**, the **Waterloo Institute for Social Innovation and Resilience**, in collaboration with the **Vineland Research and Innovation Centre**. The lab is made possible through the support of the **J.W. McConnell Family Foundation**, **Ontario Trillium Foundation**, **Greenbelt Foundation** and **Metcalfe Foundation**.*

ABOUT THE DESIGN BRIEF

This design brief is a summary of the Ontario Tender Fruit Lab research conducted between fall 2013 - spring 2014. The contents are distilled from interviews with over **70 stakeholders** in the food system, including producers, distributors, processors, food service providers, retailers, and food and agriculture experts from government agencies and non-profit organizations. It also covered **175+ published sources** of statistics and related research.

The following '**Key Trends**' section pulls together some of the key issues, stakeholder concerns and priorities, and a sampling of facts and figures related to Ontario tender fruit. It is not an all-encompassing summary of research, but rather a collection of insights that will help to move the discussion forward. We encourage you to use these materials, in addition to your own expertise and insights, during the workshops to challenge existing assumptions and take a systems view – so that we can work towards creative action and real change.

Who we talked to (divided by sector)



KEY TRENDS

CONSUMER DEMAND

“The Canadian consumer is clearly on its way to becoming ‘greener’. Like the personal health-driven paradigm that remains a powerful influence for consumers and producers of food, this new way of thinking has the potential to impact all parts of the food production value network. It is important to note that despite this swell of mainstream consumer interest and concern about the environment over the past few years it is still not the primary driver of consumer food purchase decisions. **Quality, nutrition, freshness, price, and pursuit of individual health** continue to trump concern for the health of the environment when selecting and purchasing food, including fruits and vegetables.”¹

- Over the past 20 years, Canadians have increased their consumption of fresh fruit by 12% and Ontario has been recognized as an attractive market for fresh fruit. ²
- From 1999-2001, Canada ranked 8th in world fresh fruit consumption which totaled \$1.1 billion dollars per year. ³
- Ontario households, on average, spent \$443 per year on fresh fruits (2010 - 2012). ⁴
- Ontario consumers spend about \$470 per month on food-related groceries, with some spending as little as \$100 or as much as \$600+ monthly. ⁵
- In 1969, consumers spent 18.6% of their annual household budget on food, and this has steadily declined to 10.2% in 2009. ⁶
- In 2012 Canadians spent 9.6% of their disposable income on food, compared to consumers in the U.K., (9.1%) and the United States (6.6%). ⁷
- Consumers want to buy healthier food, but they also want smaller portions and to spend less time preparing them. ⁸
- 78% of Ontario consumers would like a fresh food diet, while 6 out of 10 say that fresh food is consistently a part of their daily meals. ⁹
- 93% of Ontario consumers identified that they were likely to buy Ontario-grown or produced food if it were the cheaper option, and 65% were extremely likely to do so. ¹⁰

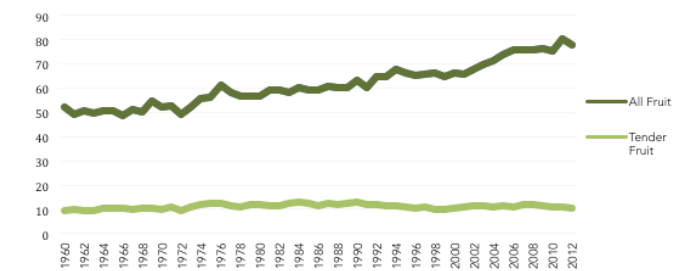
Notes

1. Gooch, M. et al., Consumer Market Research Strategic Study for Fresh Grapes and Fresh & Processed Apples & Tender Fruit, 2009.
 2. Vineland & Deloitte, Fifteen year comprehensive strategic plan for the Ontario Apple, Tender Fruit, and Fresh Grape Industry, 2010.
 3. Huang, S. W., Global Trade Patterns in Fruits and Vegetables, 2004.
 4. Statistics Canada, CANSIM Table 203-0028.
 5. Ipsos Reid, Foodland Ontario Usage and Attitudes Survey, 2013.
 6. Davison, J., Food eats up less of our spending, but costs us more, 2011.
 7. Expenditures on food and alcoholic beverages that were consumed at home by selected countries, 2012.
 8. Gooch, M. et al., Consumer Market Research Strategic Study for Fresh Grapes and Fresh & Processed Apples & Tender Fruit, 2009.
 9. Gomes, L., Consumer Food Trends to 2020, 2008.
 10. Ipsos Reid, Foodland Ontario Usage and Attitudes Survey, 2013.

Notes

- Canadian consumers between the ages of 20 and 34 would prefer an online medium such a website or social media to learn about food information on topics ranging from price to nutrition. ¹¹
- Local foods are perceived by 50% of Ontario consumers as being foods produced within the province, while 4 out of 10 people view local as being ‘within 100 miles.’ ¹²
- There are approximately 154 farmers markets in Ontario that had over 15 million shopper-visits in 2008. On average they spent \$28 per visit. ¹³
- Organic foods make up 1 to 3% of retail trade in Canada and is growing by 15 -30% per year; where 1 out of 4 consumers are now regular purchasers. ¹⁴

Fresh Fruit Available in Canada (kg per capita). ¹⁵



11. Ipsos Reid, Foodland Ontario Usage and Attitudes Survey, 2013.
 12. Ipsos Reid, Foodland Ontario Usage and Attitudes Survey, 2013.
 13. Ipsos Reid, Foodland Ontario Usage and Attitudes Survey, 2013.
 14. Farmer’s Market Ontario, Impact Study, 2009.
 15. Statistics Canada. Table 002-0019.

RETAIL STRATEGIES

“In 2013, grocery retailers showed healthy growth over the previous year despite declining consumer spending, increasing competition due to new entrants, rising square footage in comparison to population growth and relatively harsher weather in relation to 2012. Grocery retailers mainly focused on increasing their selling space by growing their retail networks, expanding existing stores and through new acquisitions. Due to the ever growing competition in an already overcrowded grocery industry, most grocers competed heavily in terms of price slashing or price matching activities. [...] The ethnic grocery category, despite being a rising trend over previous years, did not receive as much focus from major chained retailers as it deserved. 16

- In 2013, fresh fruit sales from Ontario producers to retailers exceeded \$117 million while tender fruit sales totaled over \$18.5 million. 17
- In 2010, Canada’s fruit export market presence grew in Germany (23.3%), The Netherlands (47.1%), and Taiwan (65.5%). 18
- There are over 90 Asian grocery stores in the GTA, and about 200 across Canada. 19
- Loblaws remains the leader in the retail selling space compared to the other three retailers (Sobeys, Metro and Wal-Mart), accounting for 26% of the total modern grocery market’s retail selling space. 20
- For example, the Nations Fresh Food Market “where East meets West” opened in Vaughan in August 2011, followed by another outlet in summer of 2012. Stores are positioned as upscale, and feature products from around the world. The company plans to open 10 stores in total by 2017. 21
- 1998 to 2008, annual compound growth in direct sales at producers’ markets was 7.3%. (Note: this equals an approximate doubling in total volume) 22
- Over the forecast period, the total grocery retailers industry is projected to record a marginal CAGR of 2% to reach C\$154 billion in 2018. 23

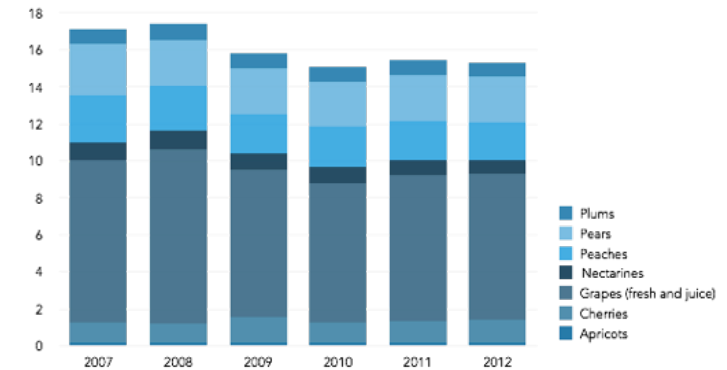
Notes

16. Euromonitor, Grocery retailers in Canada, 2013.
 17. Fruit and Vegetable Production, Statistics Canada; Ontario Tender Fruit Producers’ Marketing Board; Grape Growers of Ontario, Area, Production, Value and Sales of Specified Commercial Fruit Crops, 2013.
 18. Agriculture and Agri-Food Canada, Canadian Fruit, 2011.
 19. Caicco, P. et al., CIBC Institutional Equity Research, December 12, 2013 as cited in Taking out the Mystery of Food Inflation Prospects for 2014.
 20. Euromonitor, Grocery retailers in Canada, 2013.
 21. Farmer’s Market Ontario, Impact Study, 2009.
 22. Statistics Canada, Table 002-0011, 2009.
 23. Euromonitor, Grocery retailers in Canada, 2013.

Notes

- Whole Foods, which operates in the U.S., U.K., and Canada, is the 12th largest food retailer overall that focuses on natural and organic foods with gross sales of almost 13 billion USD in 2013. 24
- Global organic food market was \$67.2 billion (revenues) in 2011. Nearly half of that market is represented by the Americas (Canada, Mexico, United States, Argentina, Brazil, Chile, Colombia and Venezuela). 25
- The fruit and vegetables segment of the global organic food market was the most lucrative in 2011 with revenues estimated at \$22.1 billion. 26

Tender Fruit Products in Canada by Fruit (kg per capita) 22



24. Whole Foods Market, Annual Report, 2013.
 25. MarketLine, Global Organic Food Industry Profile, 2012.
 26. MarketLine, Global Organic Food Industry Profile, 2012.

PROCESSING CAPACITY

“... [N]ew local processing will emerge in the areas where an intensity of processing industries already exists: Windsor, Grand River, Toronto, Niagara, and Quinte. Other important agricultural areas are the Waterloo, Chatham-Kent, and Norfolk regions. The wide distribution of Ontario's farmlands creates challenges for the centralized models and technologies of processing and post-harvest handling. [...] there is a shortage in Ontario, especially for small producers, of facilities for post-harvest handling. The lack of facilities, infrastructure, and knowledge prevents primary producers from gaining access to the processing sector or even the fresh markets.” 27

- Canada has 491 establishments involved in Fruit and Vegetable Preserving and Specialty Food Manufacturing (NAICS 3114). Ontario's share is 211 (43%). 28
- There are 3,000 to 3,500 food-processing facilities in Ontario, operated by 1,500 firms. 29
- Food manufacturing firms in Ontario generated \$34.5 billion in revenue in 2011. 30
- 143 Canadian food plants closed from 2006 and 2014, resulting in 23,807 job losses, and 52% of these losses were in Ontario. 31
- There are 170 food-processing facilities that have certified organic capability in Ontario, and 43 certified organic processors were in operation in 2003. About 2% of all processing is organic. 32
- Agriculture Canada projects that by 2020, consumption of processed fruits will increase 39% in frozen fruit, 13% in dried fruit, and 10% in canned fruit consumption. 33
- In 2013, Ontario fruit growers' sales to processors totaled \$109 million. The value of tender fruit for processing was \$5 million. 34

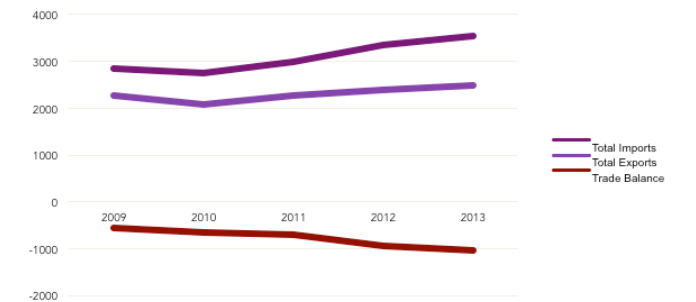
Notes

27. Carter-Whitney, M. et al., Nurturing Fruit and Vegetable Processing in Ontario, 2010.
 28. Statistics Canada, Establishments: Fruit and Vegetable Preserving and Specialty Food Manufacturing (NAICS 3114), 2012.
 29. Carter-Whitney, M. et al., Nurturing Fruit and Vegetable Processing in Ontario, 2010.
 30. Sparling, D. & E. Cheney, The Performance of Canada's Food Manufacturing Industry, 2014.
 31. Sparling, D. & S. LeGrow, S., The Changing Face of Food Manufacturing in Canada: An Analysis of Plant Closings, Openings, and Investments, 2014.
 32. Carter-Whitney, M. et al., Nurturing Fruit and Vegetable Processing in Ontario, 2010.
 33. Gomes, L., Consumer Food Trends to 2020, 2008.
 34. Fruit and Vegetable Production, Statistics Canada; Ontario Tender Fruit Producers' Marketing Board; Grape Growers of Ontario, Area, Production, Value and Sales of Specified Commercial Fruit Crops, 2013.

Notes

- Domestic consumption of table grapes in Canada is met by importing 95% of these fruits, while local Canadian grapes (75% of which are produced in Ontario) are mostly used for wine making. 36
- Canadian processed fruit imports were valued at CAD \$912 million compared to exports valued at CAD \$190 million; resulting in a trade deficit of about CAD \$722 million. 37

Fruit & Vegetable Preserving and Specialty Food Manufacturing Canadian Trade Balance (in millions) 38



36. Fruit and Vegetable Production, Statistics Canada; Ontario Tender Fruit Producers' Marketing Board; Grape Growers of Ontario, Area, Production, Value and Sales of Specified Commercial Fruit Crops, 2013.
 37. Lupescu, M., Canada Fresh Deciduous Fruit Annual, 2013.
 38. Statistics Canada, Fruit and Vegetable Preserving and Specialty Food Manufacturing Canadian Trade Balance, 2014.

PRODUCTION ACTIVITY

“With farm size growing and with land, quota, machinery and equipment all rising in price, the cost of entry into commercial agriculture as the sole or leading manager is extremely difficult for many young people to do. For many farm families, the older generation has and can source capital and has experience. Their daughters and sons have energy and ideas. The generations work together to leverage each other’s strengths.” 39

- Ontario has the largest area used for growing grapes, apples, peaches, sour cherries, pears, and plums in the country. 40
- Ontario fresh tender fruit production totalled about \$40 million in value in 2012; in 2013 it increased to \$43 million. 41
- There are 51,950 farms in Ontario, making up 25% of all Canadian farms. 42
- Ontario has 8.9 million acres of cropland, with fruits making up 0.6% in 2011. 43
- 25,414 migrant workers entered Canada under the Seasonal Agricultural Workers Program, in 2012. 44
- About 52% of Canada’s Class 1 farmland is located in Ontario. 45
- Within Ontario, almost 75% of major fruit production occurs in Southern Ontario and Western while Central Ontario dominates the other 25% of fruit production. 46
- There are 774 farms with certified organic and/or transitional production in Ontario, or about 1.5% of all farms in the province. Nationally, 2% of all Canadian farms are certified organic and/or in transition to becoming certified. 47
- In 2012, the Canadian fruit market was valued at \$869.1 million and the Ontario fruit market value was \$176.7 million, or about 22% of the Canadian fruit market. 48

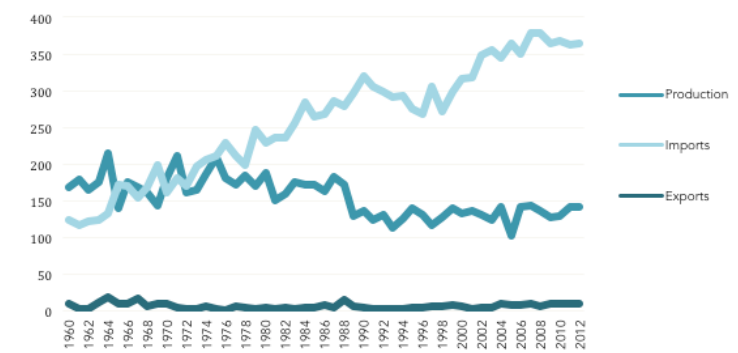
Notes

39. George Morris Centre, Canadian Farms Becoming Larger with Greater Capital Investment, 2012.
 40. Statistics Canada, Highlights and Analyses by Province of 2011 Census of Agriculture, 2011.
 41. Ontario Tender Fruit Producers’ Marketing Board, Annual Report, 2013.
 42. Statistics Canada, Highlights and Analyses by Province of 2011 Census of Agriculture, 2011.
 43. Statistics Canada, Highlights and Analyses by Province of 2011 Census of Agriculture, 2011.
 44. Citizenship and Immigration Canada, Facts & Figures, 2012.
 45. Ministry of Municipal Affairs and Housing, Sustainability: The Intersection of Land Use Planning and Food, 2010.
 46. Planscape, Ontario Fruit and Vegetables: An Agricultural Impact Study, 2011.
 47. Statistics Canada, Highlights and Analyses by Province of 2011 Census of Agriculture, 2011.
 48. Agriculture and Agri-Food Canada, Statistical Overview of Canadian Fruit Industry, 2013.

Notes

- Export value of Canadian fresh fruit in 2012 was C\$19.5 million and the import value was C\$23.2 million during the same period resulting in a C\$3.7 million trade deficit. 49
- 57% of fruits imported into Canada come from Mexico and the U.S. 50
- Import value of Canadian fresh, frozen, and dried fruit in 2013 was C\$4.2 billion and the export value of fresh, frozen, and dried Canadian fruit was C\$606.2 million in the same year, resulting in a C\$3.6 billion trade deficit. 51

Annual Ontario Tender Fruit Supply (tonnes) 52



49. Agriculture and Agri-Food Canada, Statistical Overview of Canadian Fruit Industry, 2013.
 50. Huang, S. W., Global Trade Patterns in Fruits and Vegetables, 2004.
 51. Huang, S. W., Global Trade Patterns in Fruits and Vegetables, 2004.
 52. Statistics Canada, Table 002-0010.

PERSPECTIVES

ABOUT THIS SECTION

The Perspectives section highlights some of the insights our interviewees shared with us from each of the following 7 segments of the Ontario tender fruit value network:

- PRODUCERS
- RESEARCH & DEVELOPMENT
- PROCESSORS
- DISTRIBUTORS
- RETAIL
- NOT-FOR PROFITS
- POLICY EXPERTS

Many of our interviewees hold cross-sectoral perspectives, such as a producer who is also a processor, meaning that many individuals were able to speak towards different segments of the value network.

The following quotes highlight the varying challenges and opportunities the people we spoke to see in the tender fruit sector in Ontario. They do not represent an all-encompassing idea of every challenge and opportunity, but rather are meant to spurn discussion.

*Quotation marks indicate direct quotes from the interviewee. Where there are no quotation marks, the statement is a paraphrased quote, taken from detailed notes during the interview.

PRODUCERS

International players in the domestic market makes it hard for Ontario producers to compete on price

Minimum wage increases are a serious challenge for the industry

SMEs find it hard to meet the big retailers pricing demands

There is a lack of business services and financing options for small farm startups

There is limited access to land for production; it very expensive to buy land and rental land is unavailable

Producers want to find ways to differentiate Ontario tender fruit products, to take advantage of changing consumer demand

"Over the past five plus years there has been a tremendous increase in the amount of foreign grown produce in Canadian grocery stores. It comes from places such as Chile, Argentina, Mexico and as well some Asian countries. Typically the costs of production in these countries are much lower than here in Canada yet our farmers are expected to meet the price of these foreign products. The price the farmer receives for his or her produce is not reflective of their input costs but rather of what the wholesaler or retailer are prepared to pay and that is driven by cheap imports."

"The minimum wage increase of 75 cents an hour will force many of our farmers out of business. The total cost of this wage increase will be about \$30-\$35 million annually and this represents about 40% of the sector's crop value margins. This is a new cost that the farmer cannot recover from the marketplace and for many with already paper thin margins it will force them out of business or into other crops that are not so labor intensive. Hundreds of acres of peaches have already been removed!"

"They are trying to play the supermarket game... eventually, they lose because... it's all about price."

"There's a big gap because the banker and the accountant are used to dealing with large farms. [They talk] about government programs... that I don't think are really useful to a small startup farmer."

"There are many challenges when you start a farming operation; Unless you have inherited your farm or you have no mortgage obligation to think about then the business will be operated from a different perspective. Nowadays I am hearing that it is very hard to be a start farming operation as the most valuable asset you have is your land, which if you look at land values they have risen substantially ... It's a challenge to find farmland in Niagara right now below \$1 million."

"...we have found a steady growth in the number of people who love white peaches....They love them because they offer something different than the traditional classic peach....the taste is more mild and less acidic....and has a very pleasant pear like aroma."

Farmers Markets are crucial to sustainable farming

More processing operations would create more options and greater price flexibility

Change and innovation in agriculture takes longer because of its seasonal nature

Producers are still earning now what they earned 4 decades ago

Farming is progressive and technologically advanced

A valuable innovation would be telling the story of Canadian producers

It is important to work with distributors who have a commitment to local food

Introduce new technologies and infrastructure to help Ontario compete

"Personally we're able to keep our farm operational because we sell direct to retail at farmer's markets. To me that is the key right now....especially because we specialize in tree-ripened fruit at it's maximum nutrient value, so it becomes important to go to market every day."

"... there's a number of cider producers now that are really getting on the bandwagon. This provides a secondary revenue channel for growers and growth for the local economy."

"Innovation and investment in agriculture is hard because it's so seasonal. You may try something new or invest in one season and then you have to wait a whole year to try something else or see a return on your investment. It's not like other industries where you can adjust something and you'll see the results the next week. In agriculture you could see the results in three years..."

"My guys get the same what they get per bushel as what they got in the '70s. [...] Inflation, true inflation actually went down for fruits and vegetables."

"We had GPS in fields well in advance. We're using drone technology to be able to map out nutrient values inside of fields. We're using technology [...] for the better interest of the industry as a whole."

"If you're going to tell your story, that's innovative. It's never been done before. [...] In Canada, despite what people may or may not think, we have a real ability to tell a story because 97% of our farms are actually owned by farmers. They're not corporate. We have that right, that touch."

The distributor had no commitment to supporting the local market, they were bringing in carrots at the height of the season. [Elsewhere], they stored our carrots for 3 weeks unrefrigerated then accused us of shipping bad product.

"[We need] newer varieties[...] Cold chain improvements... We need to increase cooling capacity to maximize opportunities for sales across Canada and export."

R & D

Production methods are slow to change

"And our production systems are traditional, and that they haven't largely changed for 100 years. So there's conventional orcharding, with very large trees that need ladders and tons and tons of people. [...] And that's our other core problem, that there hasn't been a fast enough shift from these old production systems to new hedge-row systems that can be way more mechanized and create much lower cost peaches and that of course brings you margin"

From a sustainability point of view, organic may be more important than local

"If we're concerned about energy and greenhouse gas emissions, organic may be much more important than local. If you look at transporting organic from California, it is still better from an energy and greenhouse gas point of view since organics from California that does not have nitrogen fertilizer applied is going to have less energy input than conventional from Ontario."

There has been a loss of land due to industry pressure from grapes, residential use.

"The industry itself is under great pressure from grapes... 'cause grapes are turned into liquor and we all like that! So that industry, although it's actually tiny in agricultural terms, it's certainly very sexy, and it's very rich for some of the people that are in it"

There is a lack of directed marketing to consumers

"We have very good tasting peaches, relative to the California ones that get shipped up here, those kinds of things - but the marketing piece just isn't there, the marketing boards typically are focused on lobbying. And they're mostly lobbying around risk management dollars, so, this is getting paid out by the government for whatever ails you - and they don't spend a lot of time or money trying to find ways to get to consumers"

Local brands need to develop relationships with consumers that are based on quality

"Well, I think the local food is going to be based more and more on relationships. It has to do with short value chains, especially produce. I think if consumers can start identifying their food at the particular farms or a particular farm group or co-op or whatever, they can think about it as a relationship. [...] There should be some quality feature and value that is better than what they would get otherwise. So there might be peaches that are particularly sweet."

It's important to grow what consumers demand

"... in horticulture, unlike commodity agriculture like wheat and canola, people care what [produce] looks like, so it's very important that you understand what people like, and use that to create things that people want."

Changing immigration demographics is creating demand for new varieties

"Immigration patterns have changed quite drastically over the last 20 years [...] and I think that there's been a comprehensive failure to recognize that opportunity. So for example, in peaches, you know that if you're Asian you know that it's white peaches are the peaches of choice [...]. And we just aren't playing in that space, despite the fact that, whatever it is, by 2017 - more than half of Toronto will be a visible minority, many of them will be eating white peaches."

Producers are less willing or able to invest in innovation along the tender fruit value network

"We need to think about different models of getting money to companies to be innovative. I guess, the NCIRC-engaged type programs are probably one possible solution. But even access to expertise. So if there's someone who has an idea, there's no where they could go test out an idea."

Some Class 1 and Class 2 farmland is getting lost to development

"We develop on that [Canadian Class 1 and Class 2 farmland] and then those farmers go out and buy Class 3 farmland, and continue farming."

Producers can extend the season through new tender fruit varieties

"We have 3 new tender fruit varieties coming into the market this year - so this is all about season extension: you need to have more time in the marketplace, that's what's key. You need peaches that ripen earlier and peaches that ripen later to get more weeks of time in the grocery store."

Consumers have lost the ability to differentiate between varieties and to look at more than price

"...peaches are generic, a peach is a peach, right? And whether it comes from California or whether it comes from Ontario, they're not heavily differentiated. That hand - the consumer's hand - will switch from one box to the next very easily, just based on price for example. Cause they look the same, they don't sell them by variety like how apples are sold. And people don't anymore have a visceral connection to the region and to peaches and to the blossom time."

There should be more emphasis on protecting the domestic market than international trade

"Right now, in agriculture there is a real drive toward becoming good at trading, like we want to become very good agriculture traders, because there is a lot that we can sell. But if you're going to trade, you've got to bring in something, you've got to import some agricultural commodities and sometimes we're in such a hurry to improve our opportunity for sales that we end up importing what we neither want nor need."

PROCESSORS

There is (mis)-labelling and misperception that robs producers of opportunities to reach markets

"If 90% of "Fruit" snack products are made primarily out of sugar but sold as if they are a "real fruit" product..... both the consumer is misled but also the farmers have lost a significant opportunity to supply to this portion of the market."

Ontario lacks a good supply of organic produce

"Well, the thing is that I've never really had an opportunity to buy fruit products from Ontario... The reality is, nobody in Ontario can supply the quantity of puree and concentrates needed for a business that is set up to supply medium to large grocery chains. Unfortunately we don't have the land mass [in Southern Ontario] to get that volume... We were probably too late in setting up the Greenbelt."

Market protections can pose challenges

".. going back 15 or 20 years when I was in the Okanagan. If we had a short crop in Canada, for me to buy apples from Washington (which had lots of apples), I had to get permission from the marketing board, which was controlled by the growers who owned our competition. No company wants to be in that position. We essentially made a strategic decision and we put a plant in Omak, Washington. This plant is now the largest employer in that town."

Interest in healthy processed food is growing

"We do a lot of private label business. We manufacture for a lot of grocery chains, and they want to have natural, 100% fruit snacks for their own label mostly because they see that as the future but also many buyers understand that selling a sugar-based candy-like fruit snack is not really honest....especially with the problems we're seeing with obesity and diabetes. We're seeing the same thing in Europe, Australia and, just recently, we've started to manufacture for a grocery chain in South Africa."

We need to have different markets for different grades of soft fruit

"What I've seen in my experience in the twenty-five years doing this, a project only survives if it can sell three grades in soft fruit... grade A for the fresh market. Secondary, processed fruit for processors like me which don't care whether the strawberry hasn't got the right size etc Then you have a third grade which you might use for puree or juice or something like that."

Product of Canada labeling can be misleading for consumers

"A few years back there was a canning company that was able to... actually call a product that they sell 'Product of Canada'...It was Product of Canada, even though the only thing Product of Canada was actually the label and the can that the juice came in."

Greenbelt land restrictions are restrictive for processing

"You couldn't put in a processing facility on that property because that means that you're breaking the laws of the Greenbelt. Yet, in Lincoln, you're in the middle of the heart of tender fruit. Why in the hell wouldn't you want one there? You're saving the farmland, but for what?"

We lack infrastructure to process fruit

"... At the end of the day there is no infrastructure [for processing fruit] and we can't deal with substandard fruit which might already smell a little bit when it comes into the plant."

In food processing you need access to diverse markets, particularly into the US, to be successful

"... In the food processing business you have to make sure you have sales into the U.S. [...] There's just not enough big customers [in Canada]. You need diversification to be successful in the long term."

Farms need to meet global food safety standards

"I think it's impossible to go backwards and go to the dark ages of food quality and food safety... I have my SQF level 2 standards. This is the specification for the food I buy, so the only possibility to work with farms locally is that the farms can step up to a global specification rule and regulations which we have to follow..."

Consumer interest in organic processed food is growing

"I shouldn't even say [organics is] a marketing trend. This is a consumer trend. This is a grassroots development where consumers have said, "No, we really don't want to go with a monoculture, highly degrading way of agriculture; pesticides, herbicides in water, in our cattle, in our milk, we have ... It's really a consumer action"

We need to embrace the reality of the global markets and increase free trade agreements

"We'd like to have a free trade agreement with Europe so that we can ship to Europe without having an 18% duty put on our products. In my view business is about quality, service and price... protecting a business through marketing boards should only be a temporary situation to achieve a strategic goal. If after 10 years a business cannot compete without protection the business was either never sustainable or the owners of the business did not use their advantage correctly. We should simply accept that we live in a global market and we need to compete globally... and work really hard (and smart) to be successful."

DISTRIBUTORS

Retailers answer to shareholders and consumers in Canada spend relatively little money on food

Distribution is the main barrier in the food chain process

Canada's regulatory environment is stifling exports

Organizations in agriculture are siloed

The closure of processing plants affects many

Government regulations should 'open doors' not dictate to business owners

Create hubs/ auxiliaries for the Toronto Food Terminal spread throughout the province

Need to collaborate for a stronger Canadian brand

"At the end of the day, there's [...] two things that people forget about. First, all the companies that we deal with have to answer to their stakeholders—they're shareholders of a company that's publicly traded [...]. In Canada, particularly North America, we spend the least amount on food than any other globalized nation in the world."

"Distribution's always the heavy point when it comes to food, regardless of how you look at it."

"We've been stymied by our own rules and regulations. The Feds and I fight about this all the time. The reality is that we've tried to export. [...] We wanted to do more. We were looking at expanding marketplaces in India. [...] There are so many rules and regs and things that are in front of you, that you just shake your head and you go, "Why would we even bother anymore?"

"There's three hundred different ag organizations. Stakeholder relations in agriculture is a nightmare. There's forty in the Niagara area that I can think of alone. [...] The truth is that a lot of these organizations [...] won't talk to each other. They should, but they don't."

"The St. Thomas plant, the Heinz plants... everybody looks at [processing plant closures] and they say, "Well, that's only going to impact a few people." It doesn't. It's a domino. When St. David's closed, that hurt a lot of farms, not just guys doing processed peaches. It hurt a lot of guys all the way across."

"Politically, I'm one of these guys that want government out of my business, but intellectually speaking, I also want them to be the leaders in being able to do this. They're there to open doors and provide opportunity. They're not there to tell me how to do it."

"How do you improve it? I'm figuring that you put in half a dozen hubs throughout the province. Those hubs should be auxiliaries, spokes, for the terminal. Movement flowing in and out, ability to access into other market places, not just local, but into the U.S. [...]."

"I think we should be working far closer together in order to develop, not just branding. [...] The one thing that everybody knows us for is water. Why wouldn't you go after and do a Great Lakes brand and work with your other states and work together to be able to penetrate markets collectively?"

Food regulation in Canada is broken

Producers are squeezed by lower prices

Medium-sized producers largely left out of traditional distribution

Overall opportunity of scale and growth in local food

Overall opportunity of scale and growth in local food

"The role of government in food is spot on but the execution of it is horrible. [...] the idea is there for the right reasons [...] The way that we regulate food is really really broken because we don't measure anything. It's not data-driven [...] we have technology within the food system that would allow us to render our food very safe but [...] the protectionist nature of this marketplace, and the very very thin margins that we have on food, force us to look at this from a specific point of view, which is 'good enough safety'..."

"I think traditional food systems download all the price pressure to the producer. They're constantly squeezed for lowering their own prices, all the while trying to compete with food grown abroad with very low labour costs and possibly questionable labour practices. One of our founding principles is that the the farmer sets their own price, then we buy at that price and markup accordingly. We think it's very important that the farms are a socially and economically viable piece of this puzzle."

"There's a big need between the urban chef and the rural farmer, and a big gap in the middle, specifically, with small and medium-sized producers, because they are largely left out of traditional distribution channels. They're too small to distribute to a grocery store, for example... For the small and medium-sized producer who wants to stay that size, and aren't looking to aggregate thousands of acres, there's a big gap, in terms of market access."

"I think that's an important role we play in the middle is smoothing that transition from farm to chef. [...] Once the system started coming into place, and chefs got used to the ordering, the farmers got used to working with us, we then had the relationships on both sides we could work with making that more efficient. I joke, too, that we kind of act as translators between chef and farmer."

"I feel like the opportunity is huge... It's scalable. We've grown tenfold since our inception [in 2007]. Overall, fruit included, the demand for our business has grown by about forty percent year over year. I think that would be tree fruit and tender fruit included. We still are selling grapes [in December] that are grown locally and stored. They're beautiful and taste amazing."

RETAIL

Competition from new operators (e.g. Walmart and online stores) is driving down prices

The people in leadership positions are primarily concerned with profit and tend towards short-term thinking

Relationships with regular suppliers need to be maintained year round to ensure continuity of supply

The premiums that consumers are willing to pay for local/organic are limited

Sustainable and local food is seen as a way to raise brand profile even if consumers don't buy it

Diversity in supply makes it harder to maintain consistent standards

"Discount stores [like] No Frills, FreshCo, Food Basics [...] and of course Walmart and Costco [...] put a lot of pressure on prices. [...] It's fundamental because it's taken the market pricing down, and it keeps the pressure down. So you've got quite a shift of shoppers wanting to buy more lower priced items. And you've got these discount formats - the ones that have been growing [...] - to the exclusion of the [...] quality oriented ones. And so it's put a wicked amount of pressure on pricing".

"Senior guys, vice presidents... Even regional presidents at the president level [...] are accountable for driving the financial part of the business. They see [changing the system] as being a risk. They're not compensated for how much local content there is, it's just [...] what's the top line and what's the bottom line? It's lower prices. [Senior leadership] are used to thinking about this week, this quarter, not 8 years away. [...] This is the leadership challenge."

"Certainly continuity has become even more critical to some degree. [...] We can buy strawberries 12 months a year now, if they're all imported.[...] So if a local source is coming in and it's unpredictable [...] it's tough planning for these merchants, who are tasked with driving sales every week. [...] Oh gee, it's been rainy this year, the yield is down 50%. All of a sudden, they have booked a deal, or a focus on Ontario strawberries for \$2.99, but now they can only get half the volume. Holy smokes. How do they fill that with the stuff from California? So those are real issues for sure."

"Right, and that's been the trouble in organic for years. I was involved in the organic sector for a long time and what they say in the parking lot is different than what they do when you follow them into the store. Survey after survey shows that."

"Then why did you do it? And they said because our consumers expect that we're going to have organic available and even if they don't buy it, they think it's a better store and we have better food if we have organic available..."

It's more difficult to monitor and maintain quality standards with a wider portfolio of suppliers.

The wine industry is willing to pay twice the price for land growing soft fruit

Local suppliers can work well with local stores but they are inconsistent

Supporting local is related to supporting diversity, and in turn sustainability

There are exciting local Canadian products in the pipeline

Retailers have a genuine interest in local food

Retailers prioritize meeting consumers demands

Some retailers are concerned about long term sustainability, and are working behind the scenes as this issue does not resonate with all mainstream consumers

It is easier for the large retailers to work with large scale suppliers who can supply all stores consistently

One of the challenges they're facing in Niagara is that the soft fruit-growing land is being bought up by the wine industry who are prepared to pay twice the price.

I think it is [an intractable problem]...how do you support the guys who are local? The problem with those types of relationships is when they work well, they are fabulous; but when they don't work well they are a disaster and can do more harm to the business.

... Supporting local tends to support diversity. And quite frankly, I think that's absolutely critical. In a way, with climate change, the actual growing practices of areas that have been a bit of a challenge, will increasingly become more viable...

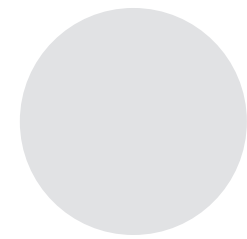
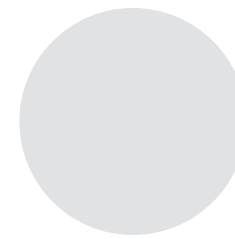
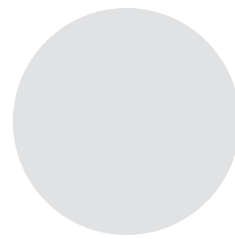
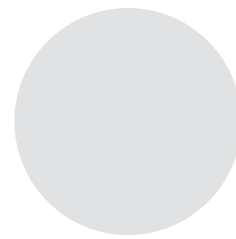
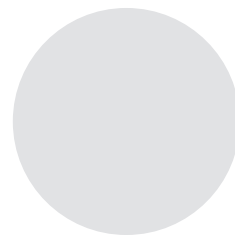
I'm a huge fan of [local]... ultimately we have a very exciting Canadian food industry prospect - wine... artisanal cheese - and actually I'm quite positive about what's coming down the pipe.

[There is] no question that [a major retailer] is very committed to supporting local - very much a personal view of [our Executive Chairman President] and as a result for the past 4-5 years...in the [autumn], [there has been] a very specific focus [on] promoting local foods and produce. ...It goes beyond just marketing; its part of their CSR commitments.

"I think every retailer is agnostic. They're just trying to cater to everyone... If you look at the larger guys I think a lot of them are sort of like 'OK, we're here to give the public what they want', some of them may be more values-based than others."

"...I think a lot of the consumer goods companies and retail companies are doing [work towards greater sustainability] behind the scenes because they know it has to happen but [they know] they can't just engage the values-based customer. Maybe they won't get the recognition for it, but they know they need to do it."

The small little guys can't get to the warehouses - they don't have the volume.



Consumers are led to chose unhealthy food

There's a massive crisis in our food system, with respect to environment, health, equity and community perspective

Working with procurement is a way to bring about change

We need producers with their own distribution channels

Food is a public good, not a commodity

Small producers are vulnerable to food safety scares

We need more diversified distribution that also understands the end producers' needs

"I think government [and companies] have a massive responsibility [...] They frame it about responsibility and personal choice. [...] And it's not that we don't have a personal responsibility but it's very hard to avoid the addictive, cheap, marketed, food that tends to be not very good"

"There's a massive crisis in our food system - whether you look at it from the environment, health, equity lens, or climate change, or what we're doing to our soil ... also from a community lens - commonality, connection."

"I think procurement is a very important player because if you aggregate the dollars, it's very very significant." [...] "The problem is how do you create the voice and volume to bring about this kind of change?"

"We need 4 mini food terminals, we need lots of [producers like the New Farm and Pfenning's; producers with their own distribution channels]."

"...food is not your average floating commodity - it's a signifier of love... if everyone has it, we'll have safer and happier societies. So to think of food as a public good is to start to create a societal consensus that to put our tax dollars and rethinking our food system"

"[Food safety requirements] can become onerous for the smaller producers... and whether that could provide better food safety or not or whether this provides the chain of custody that would allow liability to flow - that's another fear for small farmers who don't have the access to legal recourse that if anything goes wrong, that liability will flow straight back to them and they're least able to defend themselves..."

"There's a fair bit of enthusiasm from the retail restaurant and even institutional side in terms of offering this [local] food. The biggest challenge then is bringing through distribution because they don't feel the same... They're not exposed to the end user."

Challenge of scale and centralization of current system

Large scale food system is less able to handle diversity/ differentiated products

We can educate consumers to look at more than just price, eg. nutrition, flavour, quality

Regional brands/ food culture needs to be protected and promoted

We need leadership to create change

Language and imagery that evokes local food resonates with consumers

NOT-FOR-PROFITS

"When we look at regional value chains, we see that many problems are centred in the middle of the food chain, and on mid-sized producers. While the smallest and largest producers do well, it's those middle ones that struggle- they are too large to survive on direct marketing and too small to access large buyers. Yet they represent a diversity and a source of innovation which is vital to a resilient food system."

"Currently the only way to access those channels is to be a big player. This limits the ability for diversity. For example, Sysco in Toronto will only carry a limited variety of tomatoes. They won't list a tomato in Guelph, another one in Niagara, another from Kitchener or Kingston. They only carry one type of tomato for all of the province."

"So you can make a 4 ounce chicken breast 6 ounces! But when you go to cook it, you only have 4 ounces worth of protein! [...] And you actually have to look at the value of food. Not just the price."

"When you think regionally first, then that gives you an ability to then think 'OK how do we take care of the small guys and help them grow their businesses' but at the same time, compliment that with the international system."and when you think about it. You really cannot have a strong export strategy, without developing strong local farmers first."

"[...] then you have the champion, the guy who will push the boundaries, that will change the rules, that will change policy, they'll push their imagined change- and they become the people who become leaders."

"...if you walk in any of the major retailers, you're seeing packaging... I mean, if you go to Loblaws, in their bakery, and in their fruit and veg aisle, is the Farmer's Market brand. It can't be a coincidence. There's something about Farmer's Markets that resonates with people... and so they do really pay attention to what's happening out here."

POLICY EXPERTS

Money invested in risk mitigation, not innovation

We look at competitive policy - I think if you look at dollars spent from [agriculture skills development (ASD)] the majority go to what had been called our 'business risk management' suite - much of the funds that go out federally are the agro recovery etc to deal with stabilizing farm income and that's where the majority of our money goes. And from an ASD perspective there has been a slight shift to lessen that amount and invest instead in innovation - but very difficult to do because risk management is what protects the bottom from falling out.

Food Safety regulations will expand in horticulture to capture a wider group

Right now in horticulture there is no federal oversight at the production-level. There are support programs but no oversight on the farm but with a new safety oversight approach there will be requirements for even small-scale producers to be licensed federally.

Loss of processing capacity

"Were we premature in closing down these tender fruit plants in the surrounding areas? Probably! And there are people reestablishing some of these facilities now - the problem is that when you're talking about supplying tender fruit - you can't plant, seed, and grow a tree within one to three years."

Industry leadership is ageing and there is a lack of new voices

"I had lunch with another one of our associations, and they were talking about [...] how the age is creeping up there [...] but how do you get people to want to volunteer for positions at leadership, because if you have the same voices around the table, you're only ever going to get the same answer."

Organic producers are less supported by associations

"There is a growing demand for organic, but from an association perspective, it's a tough slab. If you're the Ontario Fruit and Vegetable Growers Association, you have stability of funding, because you have these called container totals, so you know you have money in the bank, you have staff... You have this little organic association, it's a very small group, their executive director right now is even a volunteer..."

Growth of interest in local food

"In Ontario, there has been an explosion of interest in local food. [...] All it takes is a small shift around the general public to have a kind of huge impact."

Government is sensitive to food safety concerns

"Government always gets blamed. Government gets blamed when something small happens, and government gets blamed when something big happens. [...] Public servants feel personally potentially criminally liable. So, [...] they need to have an inspection regime that eliminates the [...] liability risk."

Increasing demand for organic and local produce

Not all stakeholders are accustomed to applying for government funds

We need education about local food

Other countries break labeling rules and sell imports as local

Provincial government not yet tuned to the opportunity of local food

We should emphasize the importance of food sovereignty

Ontario already has many relatively small operations (SMEs)

"I think there is an opportunity in that [organics] category. Retailers are doing it because of consumer demand."

On September 16th, we launched a local food fund program... we have \$10 million a year for three years, so it's a \$30 million program [...] I think that's available to individual growers, it's available to retailers, it's available to food service distributors, anybody through the value chain. But some people in the value chain are more used to going to programs for dollars. We have stakeholders through the value chain who understand government relationships, and then you have a stakeholders that are totally outside that box [...] and we would like to see more applications from throughout the value chain.

"Being able to have a program that can educate and say, "This is what's in season." We have a seasonality guide, we have a nutrition chart. Stuff like that really, to me, is important."

"I've talked to processors... they see retailers buying stuff from other countries, and putting an Ontario label on it, which is illegal, but it's very hard to police. [...] ... they will label some things local because it's a higher value. [...] So some small-scale organic processors ask the government for more policing around organic labeling. But, who's gonna pay for that? That breeds a whole new layer of regulations"

"Local food is an opportunity to drive change [but] hasn't yet become a value within bureaucracy."

"Food sovereignty is a sense that we have to be able to feed ourselves. [...] And the ability to produce our own food [...]. We should be relatively self-sufficient in food because food is such an important foundational aspect of life. In Europe, especially, they were talking about the EU restricting people playing the markets around the commodity prices. To restrict profit-taking on commodities"

"There's Heinz closing in Leamington. But what's interesting is to offset that, we have a huge amount of small specialty processors. And in fact [...] Heinz wants to make the same bottle of ketchup efficiently. And to have multiple locations is not efficient. But as the public buys all sorts of sauces and condiments, a huge variety - we can make them here in the Toronto area, competitively and cheaper, we actually make a lot of product that's US product."

KEY ISSUES

This section provides a summary of key issues mentioned by interviewees at different points in the tender fruit value network. It is not an exhaustive list of all the issues we heard, but rather a highlight of some of the key issues that were mentioned regularly or stood out in some way.

Production

- **Labour:** The high price of labour in a labor-intensive industry makes it difficult for Ontario fruit growers to produce as cheaply as international competitors, and minimum wage increases are a heavy burden for conventional producers.
- **Vulnerability to price and climate fluctuations:** Ontario fruit growers have few options for selling their fruit in part due to the loss of processing capacity. They are therefore bound by the price for fresh fruit when it becomes ripe, which is extremely dependent on external forces such as weather and international markets.
- **Ageing workforce and loss of farms:** Many producers are very concerned about the future of their farms once they retire. Many others worry about the effects of land being taken out of fruit production and used for other crops such as grapes or grains.

Distribution

- **Difficulty in connecting small suppliers and large retailers:** Many interviewees mentioned that it was extremely difficult to work with suppliers who are unable to provide consistent, high volume, all-year round product given the demands of large retail stores and their preference for simplifying logistics.
- **Lack of distributors with a genuine commitment to local food:** Some growers mentioned being poorly treated by distributors or feeling that distributors were not sensitive to the importance of promoting local products.

Processing

- **Lack of local organic suppliers:** Organic fruit processors find that Ontario fruit growers are frequently unable to provide them with the raw materials required, due in part to inefficiencies in growing practices and market structures.
- **Ageing infrastructure:** Processing locally is often felt to be untenable due to a lack of investment in modern processing machinery and infrastructure.

Environment

- **Every part of the value network can potentially be affected by environmental changes.** Climate change will likely have a dramatic impact on international competitors as we have seen with the recent California droughts. If Ontario is suddenly less able to import fruit from international markets it will become crucial to protect the productivity of existing agricultural land by preserving soil quality, pollinators and human skills and knowledge, just to name a few resources.

Retail

- **Difficulty in differentiating products:** Consumers are not well informed about different varieties of fresh fruit, such as how to distinguish one variety of peach from another. Ontario fruit needs to find a way to attract consumers away from buying imported alternatives, perhaps by creating strong brands attached to regionally differentiated products.
- **A lack of consumer willingness to pay more for premium products:** Although consumer surveys consistently indicate that consumers are interested in buying local and organic fruit, their buying behavior in-store does not always reflect this interest. There seems to be a lack of understanding or desire on behalf of consumers of the importance and value of paying more for premium products.

PROMISING SOLUTIONS

The following are some of the ideas we heard on how to bring about change in the industry.

- **Technological improvements:**

There is room for Ontario to catch up with the latest technological innovations being used in other growing and processing regions. In particular, there is a need to improve cold storage capacity for fruit in order to maintain high quality and extend shelf life.

- **Differentiated products:**

Consumers are demanding an increasingly diverse range of differentiated products (including traditionally 'foreign' fruit such as kiwis or white peaches), and there is an opportunity for the fruit industry to respond. Partly this can be done by growing new varieties and fruits such as plumcots and also by catering to the tastes of changing consumer groups.

- **Promoting regional food brands:**

Another way to differentiate Ontario fruit may be to promote region-specific brands and to build a better relationship with consumers based on Ontario fruit providing the particular characteristics that consumers want.

- **Exploring organic and sustainable fruit production:**

There is a demonstrable demand for organic fruit that is currently being met largely through imports. Despite the challenges of growing organic fruit (certified or not), there may be an opportunity for some growers to access the market for organic tender fruit.

- **Increasing processing capacity:**

If growers had easier access to processing facilities it would give them an important alternative market to large retailers, particularly when prices for fresh fruit are low. That is, growth of the fresh fruit processing sector could help to support the industry.

Your Ideas?

DEFINITIONS

Soft and Tender Fruit: The tender fruit segment is indicated by OMAFRA to include apricots, peaches, nectarines, pears, plums and cherries and including sub-categories such as sour cherries, which are grown and sold to either the fresh or processing market. It may also be taken to include hybrids derived from these such as plumcots and pluots. It does not include grapes or apples.

Sustainable: Our definition of sustainability encompasses both ecological and social dimensions. We want to build an Ontario food system that is more resilient in the face of external changes in the coming decades; one that is able to maintain its capacity to provide affordable and healthy food in the face of changing environmental and economic circumstances. That means preserving the key resources that allow Ontario food and agriculture to flourish, including protecting fertile land and maintaining healthy soils and water systems, passing on skills and knowledge to a new generation of growers and processors, preserving critical infrastructure, and limiting carbon emissions.

Healthy: As noted in a recent Metcalf report¹, there are currently many serious problems in Ontario's public health sector that can be linked to food and diet. The Ontario food system should deliver nutritious and fresh food to consumers and make it affordable and attractive to choose to eat a balanced diet that reduces risks of diseases like heart disease and diabetes. The system should also be sensitive to the risks of products like pesticides and of food-borne illnesses, and maintain a robust inspection regime that minimizes the risks of public health outbreaks.

Local: There are many competing definitions of local food but this lab is choosing to classify food that is grown and processed in the province of Ontario as 'local'. It may seem counter-intuitive to choose a measure that is jurisdictional rather than geographic especially bearing in mind the size of the province; however, because transport is a relatively small contributor to both cost and carbon emissions, we do not consider geographic location to be critical to our measure of 'local'. Regulations and subsidies, on the other hand, often have considerable bearing on the cost and sustainability of food and thus we feel it is important to give these jurisdictional considerations primary importance.

Small to Medium Enterprises (SME): Industry Canada and Statistics Canada, two key sources of national data on firms define micro, small, medium and large sized enterprises in the following ways, which we adhere to in our definition of SME:

Firm Type	Number of Employees	Annual Revenue
Micro	1 - 4	N/A
Small	5 - 99	< \$5M
Medium	100 - 499	\$5M - \$25M
Large	500+	\$25M+

1. http://www.omafra.gov.on.ca/english/crops/hort/tender_fruit.html
 2. Metcalf 2010 (Menu 2020)

ABOUT THE ORGANIZERS

MaRS Solutions Lab

MaRS Solutions Lab is a public and social innovation lab that helps tackle complex social and economic challenges that require systems change. We convene stakeholders from across society to develop, prototype and scale new solutions. And we help to build capacity for systems change through strategic advice, training and events.

Our focus is on four areas: health, food, work and learning and government. In these areas, we see systems in need of change. But we also see many opportunities to solve the challenges of our time using the problem-solving capacity of society. With people being more educated and informed, and enabled by technology to perform complex, collaborative tasks cheaply, quickly and easily. With more private capital for social good, and many people that want to create a better world. But we need to work together to develop system-wide solutions. And to succeed, we need to experiment and learn.

MaRS Solutions Lab is part of MaRS Discovery District and was created in 2013 through a generous gift honoring the remarkable contributions of Dr. John Evans, Chair Emeritus and co-founder of MaRS Discovery District. It is part of a growing global network of public and social innovation labs. And we work with an increasing number of partners to build systems for a future that matters.

Lab team

Joeri van den Steenhoven, **Director**
 Claire Buré, **Senior Associate**
 Hyun-Duck Chung, **Information Specialist**
 Terrie Chan, **Associate**

WISIR

The Waterloo Institute for Social Innovation and Resilience (WISIR) was founded as a joint venture between the University of Waterloo's Faculty of Environment and Faculty of Arts.

WISIR is an outcome of the Social Innovation Generation project at the University of Waterloo (SiG@Waterloo), part of a national initiative focused on advancing understanding of and perpetuating social innovation. Through collaborative research projects that bridge UW's faculties, join together researchers at different universities, and work beyond the university community, WISIR is committed to generating new inter-disciplinary knowledge about social innovations and the social innovation process (the dynamics of learning, adaptation and resilience) in Canada and internationally.

WISIR seeks to mobilize this knowledge through a range of new curriculum offerings and training opportunities within and outside the university setting, including the new Graduate Diploma in Social Innovation.

Frances Westley, **Chair**
 Sam Laban, **Manager, Education Programs**
 Ola Tjornbo, **Senior Researcher**
 Kirsten Robinson, **Lead Researcher - Simulation**

