



ASSESSING THE IMPACT OF A

FOOD PROCESSING INCUBATOR

IN THE LONDON REGION

A Labour Market Partnership





EXECUTIVE SUMMARY

Food Processing Incubator

The London area is located at the centre of Ontario's agricultural heartland, with more crops grown in this region than in any other part of the province. Correspondingly, London is home to a large number of food processing companies. This industry is one that is poised for strong growth in the coming years and increasingly represents a significant portion of London's workforce. Despite this, launching and growing a business in the food processing space can be exceedingly challenging. Without the continued emergence of new firms in the space, growth and innovation may be limited. In response to this issue our research team evaluated the feasibility of developing a food processing incubator for London and region. We examined the conditions of best-fit, by analyzing the market, economy, risk, governance, regulatory regime and financial constraints that could impact the development of such a project.

We were guided in our research by community development and environmental sustainability frameworks. At its heart, this incubator needs to provide opportunities and support the activities of entrepreneurs. Special consideration was noted for outreach strategies to newcomers and First Nations. Encouraging them to come into the space and strategically utilizing events that draw families and community at all levels will be key to a successful outreach strategy.

We also noted the importance of connecting the incubator to the activities of the broader food ecosystem in the region. There are already many food processing related activities happening in the counties outside of London. With a grassroots initiative and a regional vision for food, it will be much more likely that the incubator will be successful. Unique solutions may include the adoption of mobile processing units, technology and business development opportunities that will create value for both regional partners and the incubator.

Key to the success of this venture, will be the team assembled to lead it. This incubator must be led by a manager with both a strong food industry background as well as knowledge of economic and community development. Partnerships will also play an important role in defining the shape this incubator takes in the community. It is the recommendation of the researchers that a governance model employing a multi-stakeholder approach be used to manage the incubator and that many levels of partnerships be used to expand the scope and scale of the incubator and its activities in the region.

Based on our review, we recommend the development of a 3-phased approach to this project. This has been done to mitigate the risks associated with latter, more expensive phases and to provide the team sufficient time to learn the ins and outs of this industry.

We recommend the development of an 8,000 square foot facility, with the following breakdowns:

Phase I: with 4000 dedicated to kitchen space in the form of 3-4 units, with 1500 dedicated to office and meeting space, 1000 to cold storage and 1500 dedicated to regular storage. The initial cost for this component of the project is forecast to be approximately \$4.5M.

Phase II: Involves the development of a mobile canning line and this can be upwards of \$600,000.

Phase III: Is focused on the development of a meat and alternative proteins program and the construction and equipment for this section are estimated to be over \$1.1M.

Ongoing operating costs for years 1-3 are anticipated to be over \$1M per year and the incubator is anticipated to not be financially viable without grants to support its operation at least for years 1-3.

Despite the cost of this project, we believe that an incubator is needed. An incubator will improve the sustainability of new and emerging businesses in the food production sector. It can accelerate and increase job creation and encourage the clustering of firms in the region. It helps to cement the identity of London as a food processing hub and will shape the future pathway for new and emerging companies in the food processing industry. Overall, this is a project that is worthy of investment, that will bring positive results to the community and region for years to come.





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INTRODUCTION

Food Processing Incubator Project



The London Training Centre, Inc., formed in 1987 as the London Youth Project, began by providing entry-level kitchen training for youth between the ages of 16 and 24. Today, the organization has grown and is recognized as one of the leading training organizations in Southwestern Ontario, with courses ranging from First Aid to culinary skills training. Although services have changed over the years the primary focus has continued to be on those seeking employment within the hospitality and food service sector.

In February of 2020, the London Training Centre received a Labour Market Partnership Grant from the Ministry of Labour, Training and Skills Development to develop a model for the development of a food processing incubator in the Southwestern Ontario region. The intent of the project is to:

- Create new production and processing jobs by creating and responding to demand for creative new primary and processed food products.
- Provide agricultural, food and health/wellness entrepreneurs with viable economic opportunities and cost optimized distribution pathways to reach local and regional, commercial, institutional and direct to consumer food purchasers in ways that meet all of their needs, through the creation of a locally based food lab and entrepreneurial training process.
- Return people, wealth and prosperity back to the farm and rural communities in Southwestern Ontario. This could be accomplished, in part by introducing agriculture and food system apprenticeship programs and new resilient economic strategies
- Explore and potentially create a “Venture Capital” fund to assist new entrepreneurs with start-up.
- Facilitate the increased entry of new-comers, women, indigenous people and youth into this entrepreneurial sector”

A number of factors are emerging to support the need for this project:

1. Growth of London as a Food Processing Hub

The London region in particular, continues to be a growing food space both as a centrally located hub, and as an affordable alternative to Toronto. London continues to attract high-level investment and development in the food processing sector such as Dr. Oetker, Maple Leaf and Cuddy Meats. Food production and processing represents a significant component of the economy of this region.

2. Growing Focus on Local Food

The increased focus on local food was a trend that has been in an upswing momentum for the last few years. With the advent of COVID-19, this trend has been intensified. People have a genuine interest and desire to know more about how and where their food is produced.

3. Convergence of Community Level Discussions

Finally, the community level discussion, collaboration and cooperation needed to move this project forward has coalesced at the right time and place in the community. For years, community organizations have discussed how to create a more comprehensive food system in the London area, but uniting these isolated conversations did not occur. London Economic Development Corporation (LEDC) had the vision and drive to bring together the right individuals and groups needed to move this project forward in a coordinated and cohesive way.

This project was not possible without the generous financial support from the Ministry of Labour, Training & Skills Development, and the particular feedback and support from our representative Beth Anstett. Beth was and continues to be a strong advocate for labour and community development.

This project also was not possible without the significant support of our Steering Committee members who advised, advocated and guided us in this project. Our Steering Committee included members from academic, private and institutional partners, representing the variety of interests that came together to participate in this community level project. The following is a list, in no particular order of the individuals who sat on our steering committee:

- Barbara Maly, Downtown London
- Beth Anstett, Ministry of Labour, Training and Skills Development
- Art Gibson, Huronbrae Consulting
- Joe Dales, Round House Accelerator
- Kapil Lakhotia, London Economic Development Corporation
- Paul Faris , Mitchell Soup Company
- Steve Pellarin, London Small Business Centre
- Lindsay Engel, Fanshawe College
- Reg Ash, Western Fair District
- Kristie Balatsoukas, London Training Centre
- David Corke, London Training Centre



It has been rare in the city's history that so many diverse organizations have come together to invest their time, knowledge and resources to contribute to such a project. On behalf of the London Training Centre, we thank you and look forward to seeing the next steps in this process.

Sheila Simpson & Carmen Reis
Project Coordinators

PROJECT OVERVIEW



The goals of this project are to assess the feasibility of a food processing incubator in the broader London, Ontario region.

The components of this report, shall be as follows:



- Food Processing Incubator Project
- Overview of the Food Processing Sector
- Food Facility Models in Canada
- Connecting the Region: Building a Food Processing Cluster
- Economic Impact of An Incubator
- Regulatory Considerations for Food Processing in Canada
- Partnerships & Outreach
- Governance Models for a Food Processing Incubator
- Financial Assumptions, Project Feasibility, Funding Requirements & Sources of Funding
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The end goal is to deliver a blueprint for the creation and operation of a centre in the London region.

METHODOLOGY OVERVIEW

The framework followed is a feasibility-based approach which will utilize a feasibility methodology as its primary lens. This will ensure that the project has a strong analytical component and is objective in its analysis. As a secondary lens, this project utilizes a community development lens, one that is at the same time inclusive and participatory. As such, the analysis and processes are straightforward, easy to follow and employ clear and simple language where possible. They will also consider the impact of different project components to community and regional economic development.

While venture capital and investment based strategies will demand higher returns, our approach seeks to maximize returns to the community, whether those be financial or social indicators. The approach utilized also means developing the broader food processing ecosystem in the London region, acknowledging key partners, and engaging those who will help to deliver training and business coaching, suppliers, competitors, as well as creating a broader network of food processing expertise within the London CMA and reaching throughout all of Southwestern Ontario.

IDENTIFICATION OF BIAS

As stated, all attempts have been made to be inclusive in this project and to include a community development lens where possible. This being said, neither of the authors are of First Nations heritage, visible minorities or have physical barriers. While a large proportion of our professional careers have been spent working with and providing services to these communities, the authors in no way assume or assure representativeness. These communities were consulted with and included in the analysis and all attempts have been made to ensure that this work is inclusive and reflects the needs of different communities that compose the southwestern Ontario region.

PRIMARY RESEARCH

Research for this project, consisted of primary and secondary research. The primary research was composed of over 60 interviews, consultations, and focus groups. This approach was used to provide different stakeholders the opportunity to contribute to the project and provide the authors with sufficient background information to pursue and recommend a strategic decision.

INTERVIEWS

Interview participants consisted of a wide spectrum of stakeholders. These included government at different levels, economic development, managers of other incubators, entrepreneurs, food processors of varying sizes as well as farmers. The majority of these interviews were open-ended and conducted over Zoom. They lasted anywhere from 20 minutes to well over 2 hours in length. The questions were open-ended, with notes taken by both project coordinators. The notes were then compared. A full list of the interviewed groups/individuals is available in Appendix A. The goal with each interview was to understand the role of the stakeholder and what their needs for such a project might be, or what their experiences have been in working on a similar project.

After all of the interviews, the interview notes were graded and assessed for commonalities, keywords and themes.

SURVEYS

We conducted a short 12 question survey to other food processing incubators in Canada. The aim of this survey was to identify gaps and areas of need, as well as to assess different service offerings and potential demand within the sector.

DATA ANALYSIS

The methodology and data analysis conducted were simple and straightforward. Data from interviews and focus groups was analyzed qualitatively, while the results from surveys were analyzed using simple descriptive statistics. This allowed a large amount of data to be brought together and organized in a fairly simple way.

IMPACTS OF COVID-19 TO METHODOLOGY

At the time of project design, it was intended that in addition to individual interviews, 1-2 large community Round Tables be held. One of the biggest challenges has been the ability to conduct in person group or large group gatherings as limited by COVID. Instead, we opted for higher numbers of one on one interviews and webinars. While this has not been optimal, it has been a necessary change in methodology due to the unprecedented challenges that COVID has created. The impacts of COVID for this sector will remain for some time, as such we feel it important to acknowledge COVID as a special circumstance we encountered during the course of this project.





Overview of the Food Processing Sector Report Format & Structure

The remainder of this report is laid out as follows:

1. OVERVIEW OF THE FOOD PROCESSING SECTOR IN CANADA

This will summarize both the employment, as well as economic impact of this sector to the nation and the region.

2. MODELS OF FOOD PROCESSING INCUBATORS IN CANADA

This will summarize the different models we have identified, how they are organized and structured as well as observations around what makes them successful.

3. ECONOMIC IMPACT

This chapter will focus on the economic impact of an incubator, identify the job creation potential and economic impact to the region.

4. REGULATORY FRAMEWORK

This chapter will identify the regulatory environment at different levels and how it will influence the design and construction of a facility

5. TECHNICAL REQUIREMENTS

This chapter will identify the technical requirements of a facility and the needs of different equipment and construction components, as well as education and training components.

6. GOVERNANCE MODELS

This chapter will evaluate the specific pathways and considerations for different governance models.

7. PARTNERSHIPS AND OUTREACH

This chapter will assess the different partnerships, stakeholders and components necessary to ensuring project success and outreach methodologies needed to ensure representation from different community groups.

8. CONNECTING THE REGION

This chapter will assess how to begin building linkages with the rural communities around London, with special consideration for mobile units.

9. FINANCIAL FEASIBILITY, FUNDING REQUIREMENTS AND SOURCES OF FUNDS

This chapter will assess the financial feasibility of this project, evaluating size, scope and service offering. It will identify the funding requirements and potential sources of funding for capital and operations.

By working together as a community, and bringing together the right stakeholders and partners, we hope to be able to develop a sustainable model for this project, with benefits both to the community as a community resource and as an economic driver. This can contribute to the success of this region for years to come.



Overview of Project Participation

PROJECT STAFF & CONSULTANTS

- Carmen Reis
- Kathryn McLeod
- Sheila Simpson
- Nickolaas van der Velde

PEOPLE CONTACTED INDIVIDUALLY THROUGH THE PROJECT

- John Anagnostou, Small Business Centre
- Michael Wolfson, City of Toronto
- Lindsay Engel, Fanshawe College
- Cher Merriweater, Provision Collaboration
- Reg Ash, Western Fair District
- Michael Courey, London Poverty Research Centre
- Steve Pellarin, Small Business Centre
- Tamara Kaateri, Literacy Link South Central
- Annette Markvoort, Fanshawe College, Innovation Centre
- Rob Simpson, Founding member with Conestoga Meats
- Colin Yates, Fanshawe College
- Brian Simpson, Founding member with Conestoga Meats
- Deb Mountenay, Workforce Development Board
- Peter Cameron, Ontario Co-operative Association
- Kapil Lakhotia, London Economic Development Corporation
- Ricardo Cavaco, Local food entrepreneur
- Ashley Conyngham, London Economic Development Corporation
- Kiran Bains, Innovation Lab
- Kristel Manes, Guelph Small Business Centre
- Sima Gandhi, Food Ventures
- Barbara Maly, Downtown London
- Steve Peters, former Minister of Agriculture and Speaker of the House
- Luis Garcia, Conestoga College
- Paul Faris, Mitchell Soup Co.
- Marzena Rachwal, City of Kitchener
- Andrea Neill, OMAFRA
- Derek Vella, University of Guelph
- Krista Holmes, George Brown College
- Chris Farrell, Waterloo Small Business Centre
- Lyndon Ashton, Niagara College
- Kevin Jackson, Elgin Business Resource Centre
- Norman Ragetlie, Rural Ontario Institute



- Donna Pollack ,Chatham Kent CFDC
- Corey Tung, London Middlesex Health Unit, Inspector
- Ben Small, Small producer
- Tim McRoberts, Holland College – Canada’s Smartest Kitchen
- Trissia Mellor, Northumberland, Ontario Agri Food Venture Centre
- Andrew Peters, Forked River Brewing Company
- Margaret Coons, Nuts For Cheese
- Joy Shinn, PEI BioFood Tech
- Tito Guglielmi, Mallot Creek Consulting
- John Fleming, former Chief Planner for City of London, now with Western University
- Joan Brady, Community Futures Huron
- Kristine Carey, Venture Norfolk
- Thorsten Arnold, Food System Distribution Consultant
- Skylar Franke, London Environmental Network
- Steve, Twilight Acre Farm
- Karla Peterson, Olds College
- Sean Thompson, Olds College
- Malvin Wright, Ya Ya’s Kitchen
- Joe G, Hutton House
- Keith Muller, Conestoga College
- Nicole Haney, previously owned Bo Bo Bars
- Shahzad Barghi, Western University Department of Engineering
- Laretta Federking, Brescia University
- Christine Lomdon, small processor
- Kathryn Gorzo, Agricultural Entrepreneur
- Judy Chang, Yspace at York University
- David Kwok, Yspace at York University
- Roxanne Girdlestone, Our Kitchen Brantford
- Donna Lunn, Food Activist, Elgin County
- Guy Williams, Fanshawe College Indigenous Program
- Nancy Needham, South London Community Centre

PROJECT FUNDING



This Project is funded in part by the Government of Canada and the Government of Ontario





CHAPTER 1:

Overview of the Food Processing Sector

1: Food processing industry snapshot

There are few things that people are as passionate about as food. Apart from its role in sustaining us, food and the experience of consuming food, are often associated with special events, and cultural moments. A smell, a taste or even a photograph can transport us to another moment in time. Despite a deep passion for food, a growing body of social media, marketing and imagery of food, very few people know where their food comes from, and even less about how it is produced. In developing a plan for a prospective incubator, it is beneficial to understand the industry itself, its scope within the Canadian economy and impact to job markets.

The food and beverage processing industry is the second largest manufacturing sector in Canada with a total value of over \$117 billion dollars (2019)¹ and high growth rates forecast into the next decade. By 2025, the industry will be worth over \$140 billion². The industry is composed of over 6900 businesses, varying in size from micro to very large, and employs over 270,000³ Canadians. Currently, the food processing industry in Canada produces over 70%⁴ of the total food consumed in the country.

End Notes

¹ <https://www.agr.gc.ca/eng/food-products/processed-food-and-beverages/overview-of-the-food-and-beverage-processing-industry/?id=1174563085690>

² [https://www.ic.gc.ca/eic/site/098.nsf/vwapj/ISED_C_Agri-Food_E.pdf/\\$file/ISED_C_Agri-Food_E.pdf](https://www.ic.gc.ca/eic/site/098.nsf/vwapj/ISED_C_Agri-Food_E.pdf/$file/ISED_C_Agri-Food_E.pdf)

³ www.foodprocessorsofcanada.ca

⁴ <https://www.agr.gc.ca/eng/food-products/processed-food-and-beverages/overview-of-the-food-and-beverage-processing-industry/?id=1174563085690aa>

Food Processing companies in Canada are broken down based on the type of food produced.

There are nine (9) general categories that represent the sector. These include:

- Bakeries and tortilla manufacturing,
- Meat product manufacturing
- Seafood product manufacturing
- Grain and oil
- Animal food processing,
- Grain and oil-seed milling
- Sugar and confectionery products have the fewest number of employees.
- Tobacco
- Beverages

Ontario is the largest food producer in the country, with production valued at over \$33 billion⁵, representing over 2000⁶ individual companies⁶, employing 110,000 employees (over 36% of Canada's food processing workforce)⁷ and worth an estimated 3% of Canadian GDP⁵. The majority of firms in Ontario (89.8%) are Micro (1- 4 employees) or small (under 99 employees) and Ontario has the highest proportion of all micro and small firms across Canada as is evident in Figure 1 below.

Figure 1: Food processing firms by number of employees in provinces

Employer establishments by employment size category and province/territory (2019)				
Province/territory ⁽¹⁾	Employment size category (number of employees)			
	Micro (1-4) ⁽²⁾	Small (5-99) ⁽³⁾	Medium (100-499) ⁽⁴⁾	Large (500+) ⁽⁵⁾
Ontario	574	1,360	201	16
Quebec	366	1,047	147	17
British Columbia	297	627	70	2
Alberta	144	357	34	7
Nova Scotia	72	136	25	1
Manitoba	45	146	13	5
Saskatchewan	37	105	14	0
New Brunswick	36	85	37	1
Newfoundland and Labrador	21	53	22	4
Prince Edward Island	16	42	10	0
Yukon	3	3	0	0
Northwest Territories	0	4	0	0
Nunavut	0	5	0	0
Canada	1,611	3,970	573	55
Percent distribution %	26.0	63.9	9.2	0.9

Source: Statistics Canada, special tabulation, unpublished data, unclassified excluded, 2019.



End Notes

⁵ <https://www.foodandfarmingcanada.com/2010/10/14/measuring-agricultures-economic-footprint-in-ontario/>

⁶ https://www.ic.gc.ca/app/scr/app/cis/businesses-entreprises/311;jsessionid=00015X9XBmHCKbc4w4irjhS7_Ye:-2523J

⁷ <https://fpac-ctac.com/skilled-workforce-strategies/>

⁸ <https://www.ontario.ca/page/agriculture-and-agri-food-sector-meeting-report>

Labour Profile

In Ontario, over 110,000 people are employed in the food processing sector⁹. A strong proportion of individuals working in the sector are immigrants (over 30%) and most have little or no post-secondary training, while a fifth of all workers are close to retirement¹⁰. This has created a significant skills shortage in the sector. The Canadian Food Processing Council forecasts that by 2025 there will be an estimated need for an additional 65,000 workers nationally to fill jobs in the sector¹¹. To meet some of this demand, the Canadian Food Processing Skills Council through its industry relations, has developed a national accreditation program that aims to develop partnerships and specializations that can be customized to needs at the local level. These programs, to be delivered in partnership with industry will begin to fill some of the existing labour market needs in the sector.

Figure 2: Top labour challenges facing the food processing sector in Canada



While the term food processing may bring imagery of meat processing plants and boxed food, this is no longer what food processing means. The sector itself is undergoing significant changes and becoming far more automated and technical. Upgraded technology in food processing facilities, including nanotechnology¹² and full plant automation are trends that began following the last recession, and will continue to intensify¹². The food processing worker today is far from a low skilled employee. They are part technician, diagnostician and quality assurance expert. The training required to meet industry needs is no longer just about food handling, but also safety, traceability and quality. More than ever, our food workers must be educated, extensively trained and skilled.

End Notes

⁹ <https://fp-sc-ctac.com/skilled-workforce-strategies/>

¹⁰ <https://fp-sc-ctac.com/skilled-workforce-strategies/>

¹¹ ibid

¹² nanotechnology-building things at the scale of atoms and molecules (https://www.jobbank.gc.ca/content_pieces-eng.do?cid=1452)





Workers in the Food Processing sector require high degrees of digital literacy and continued ongoing sector specific training. Firms in the sector need to attract newcomers to fill existing vacant positions and develop succession plans to transition given their ageing staff. Firms need to develop unique recruitment strategies and develop strong ties with education and training institutes that can develop programming to fill their specific needs.

Figure 3: Food Processing Sector Needs



Figure 3 summarizes the labour needs of the food processing sector.

Labour Profile in London and Area

Southwestern Ontario is home to a significant segment of these companies, employing over 7000 individuals in the Food Manufacturing sector in the London region alone. Some of our largest employers include Cargill, Sofina Foods (Cuddy), Nestle, McCormick, Dr. Oetker and Original Cakerie¹³. In recent years some layoffs and closures have occurred, but it is forecast that over 2000 new jobs will be added over the next 3 years in the Oxford-Middlesex and Elgin regions in the food processing space¹⁴.

Food processing is an important industry worthy of investment. A study out of the United States found that for every \$1 of food and agricultural manufacturing, up to \$4.00 was generated for the local economy through economic multipliers, and for every job created in food manufacturing, 5 additional jobs were generated for the local community¹⁵. However, this number may be higher, as the lines between traditional food retail, agriculture (production) and processing have begun to blur¹⁵. Innovative partnerships with local Economic Development agencies, educational institutes and food focused entrepreneurship programming have all been essential components in the development of a food focused economic growth strategy. As the region moves forward, food will undoubtedly continue to play a central role.

The Southwestern Ontario region continues to attract new and innovative businesses. The technologically advanced new Maple Leaf meat processing plant and the new cricket processing facility represent innovative opportunities for the city to attract new investment in the food processing sector. The challenge of ensuring that these companies can attract and keep the key talent they need to operate is essential to their success.

End Notes

¹³ <https://www.ledc.com/business-directory/sector/agri-food>

¹⁴ <https://lfpres.com/news/local-news/open-for-business-new-1500-job-london-plant-greeted-with-elation>; <https://www.ledc.com/agri-food>

¹⁵ https://www.ced.org/pdf/Economic_Contribution_of_the_Food_and_Beverage_Industry.pdf

¹⁶ Ontario Ministry of Agriculture, Food and Rural Affairs. Ontario's Local Food Report: 2014-15 Edition



COMMUNITY DEVELOPMENT SPOTLIGHT

Looking at these labour needs from a community development lens, we can identify that opportunities that create training, facilitate employment connections between prospective employers and employees and create programs that are locally targeted to fill existing vacant positions are beneficial.

Also, creating opportunities for large companies to give feedback into training needs, as well as partnering and collaborating with smaller firms the sector is needed. Investment from larger firms can be used to create specialised training and employment programs to meet industry requirements.

Our Agricultural Heartland: Respecting the Roots of Food Processing

Southwestern Ontario is located on some of the richest agricultural land in Canada, and agriculture still represents an important cornerstone to the regional economy. Agricultural products are still a significant component of our regional economy, and food processors play an important role in supporting the region. Of all the food grown in Southwestern Ontario, two-thirds of it is still purchased by regional food processing companies¹⁷. The region continues to be heavily reliant on agriculture and its associated industries.

Despite this reliance, the geographical profile of our agricultural sector has changed significantly in the past few years. Even though fruits and vegetables are one of the top crops grown in this region, when examining Ontario as a whole, there is a trade imbalance between what is consumed and what is produced in particular categories. Apples, broccoli, cucumbers, green peas, strawberries and sweet corn all suffer from growth deficits whereby Ontario has to import these products to meet the demand of the region.

During the course of the interviews, it was identified several times that the departure and centralization of key processing facilities may be contributing to the decline of farms in these categories. More research beyond the scope of this project is warranted to confirm this, but the trend of departing processing facilities for certain products and the correlative decline of farms in that segment is a trend that the authors and several of the stakeholders interviewed identified.



Ontario



Figure 4: Southern Ontario Crops Grown and Consumed, taken from OMAFRA and adapted

Southern Ontario at a Glance		Population		2,961,934		Delton		Average		Area Required to Feed the Population		Crops Grown in 2015 from All Cereals		Fresh Produce Required for A 3 Month Summer		Growth Surplus or Deficit	
Produce	Annual Consumption per Capita ¹		Consumption for Population		Delton Average Production ²	Area Required to Feed the Population		Total (acres)	Total (acres)	Total (acres)	Consumption (kg)	Area (acres)	Total (acres)	Consumption (kg)	Area (acres)	Growth Surplus or Deficit	
	Fresh (kg/cap)	Total (kg/cap)	Fresh (kg)	Total (kg)		Fresh (acres)	Total (acres)										
Apples	13.18	17.49	25,000,000	43,042,332	70,470	2,347	4,032	1,629	9,245,151	507	2,428						
Asparagus	0.04	1.01	1,028,001	2,991,351	2,043	754	1,442	17,003	341,655	159	15,151						
Beans (Green & Wax)	0.01	2.75	2,444,001	5,000,179	2,070	170	1,010	1,000,070	245,150	102	1,007,000						
Beets	0.02	1.19	2,447,000	2,935,100	40,700	56	276	530,484	40	40	40						
Broccoli	2.70	3.79	8,000,000	9,349,339	3,370	1,000	2,000	800	1,004,000	470	2,010						
Cabbage	4.20	4.20	10,000,000	10,000,000	11,390	900	600	278,000	2,800,000	230	277,000						
Carrots	7.00	9.00	10,000,000	23,000,000	20,000	900	1,000	1,000	4,000,000	220	4,000						
Cauliflower	2.00	3.00	2,000,000	7,000,000	7,000	1,000	1,000	37,000	1,700,000	201	20,000						
Corn	0.05	3.05	2,000,000	7,000,000	20,000	321	321	100,000	1,000,000	80	100,000						
Cucumbers	2.00	2.00	2,000,000	2,000,000	3,000	900	900	1,000	1,000,000	100	1,000						
Eggplant	0.01	0.01	1,000,000	1,000,000	10,000	1,000	1,000	1,000	1,000,000	340	1,000						
Fruit	1.12	1.00	2,700,000	4,000,000	2,000	011	1,112	2,000,000	400,000	204	2,000,000						
Peas	1.00	0.10	4,000,000	5,000,000	2,000	1,000	1,000	1,000,000	1,000,000	400	4,000						
Green Peas	0.10	1.00	4,000,000	4,000,000	1,000	222	1,000	500	1,000,000	50	1,000						
Peppers	4.00	4.00	10,000,000	10,000,000	10,000	900	900	310	2,000,000	230	2,000						
Potatoes	20.71	50.00	10,000,000	10,000,000	10,000	6,000	10,000	200,000,000	1,000,000	1,000	1,000,000						
Pumpkins	3.00	3.00	8,000,000	8,000,000	7,000	1,000	1,000	17,000	2,000,000	204	2,000,000						
Radishes	0.00	0.00	1,000,000	1,000,000	5,000	000	000	1,000	1,000,000	00	1,000						
Malabar & Tomato	1.00	1.00	2,000,000	2,000,000	70,000	200	200	10,000,000	200,000	04	20,000,000						
Spinach	0.00	1.00	2,000,000	2,000,000	2,000	017	1,014	8,700	573,000	004	8,700						
Squash	2.00	3.00	2,000,000	2,000,000	2,000	2,000	2,000	0	1,000,000	017	2,000						
Sweet Corn	0.00	0.00	2,000,000	2,000,000	2,000	000	000	0	1,000,000	000	2,000,000						
Tomatoes	0.00	0.00	2,000,000	2,000,000	2,000	000	000	0	1,000,000	000	2,000,000						
Total	0.00	0.00	2,000,000	2,000,000	2,000	000	000	0	1,000,000	000	2,000,000						

Scaling down to Southwestern Ontario which includes the counties of Middlesex, Huron, Oxford, Brant, Wellington, Elgin and Perth, greenhouse vegetables are among the top crops produced. While many farmers have moved to cash crops such as soybeans and corn, field vegetables still represent a significant component of the products produced in this area. Despite a growing focus on vegetarianism and alternative proteins (to be discussed later in this chapter) meat products, when combined, still represent the largest agricultural product produced in the region at well over \$1 billion. Figure 5 summarizes the cash receipts from each market category.

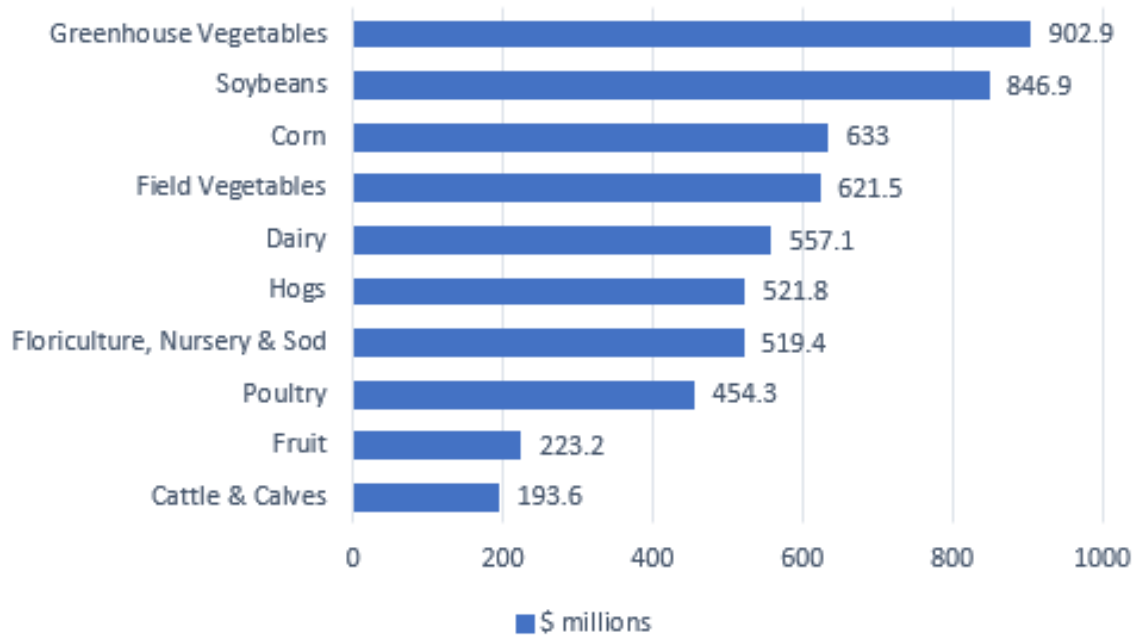
End Notes

¹⁷ ibid

Figure 3: Food Processing Sector Needs

The number of farms that exist in Southwestern Ontario continues to decline. Based on the 2016 Census of Agriculture, several key categories of farms have experienced significant declines. These include sheep, goat, fruit, nut and greenhouse farms as types of farms that have seen large scale decreases in the number of farms in the region. The table below summarizes the number of farms in the 2016 Census of Agriculture in Southwestern Ontario, the percentage of farms in that category that the region represents, and the percentage change from the previous census year.

**Farm Cash Receipts for Main Commodities,
Southern Ontario, 2018 (Total = \$6,094.18 million)**



Farms in Southern Ontario by Industry Group, 2016 Census	# farms	% change since last census
Beef cattle ranching and farming	839	12
Dairy cattle and milk production	690	-11
Hog and pig farming	452	-3
Poultry and egg production	705	9
Sheep and goat farming	231	-26
Other animal production	1341	-15
Oilseed and grain farming	8961	4
Vegetable and melon farming	787	9
Fruit and tree nut farming	854	-14
Greenhouse, nursery and floriculture	912	-12
Other crop farming	1231	4

Major Field Crops, 2016 Census	# acres	% change since last census
Winter wheat	495,041	-8.09
Oats for grain	10,206	32.41
Barley for grain	3,790	-12.73
Mixed grains	5,400	-1.53
Corn for grain	978,639	7.03
Corn for silage	71,088	14.61
Hay	214,377	-8.54
Soybeans	1,338,629	6.83
Potatoes	11,202	-12.82

Major Fruit Crops, 2016 Census	# acres	% change since last census
Total fruit crops	37,862	-5.21
Apples	7,892	1.02
Sour Cherries	2,081	-10.19
Peaches	5,157	-19.77
Grapes	17,370	0.21
Strawberries	1,162	-12.04
Raspberries	165	-35.29

Poultry Inventories, 2016 Census	# acres	% change since last census
Total hens and chickens	19,007,825	5.51
Total turkeys	1,875,366	-10

Major Vegetable Crops, 2016 Census	# acres	% change since last census
Total vegetables	97,560	3.18
Sweet corn	16,511	-12.41
Tomatoes	15,015	-3.87
Green peas	14,919	5.41
Green or wax beans	8,332	9.06

Livestock Inventories, 2016 Census	# acres	% change since last census
Total cattle and calves	297,778	2.47
Steers	40,594	27.99
Beef cows	27,876	-16.12
Dairy cows	78,014	4.77
Total pigs	1,589,675	14.94
Total sheep and lambs	50,299	-17.08

One of the most challenging areas we have identified is a gap in helping primary producers to add value to their products through value added production. This concept will be addressed later in this chapter.

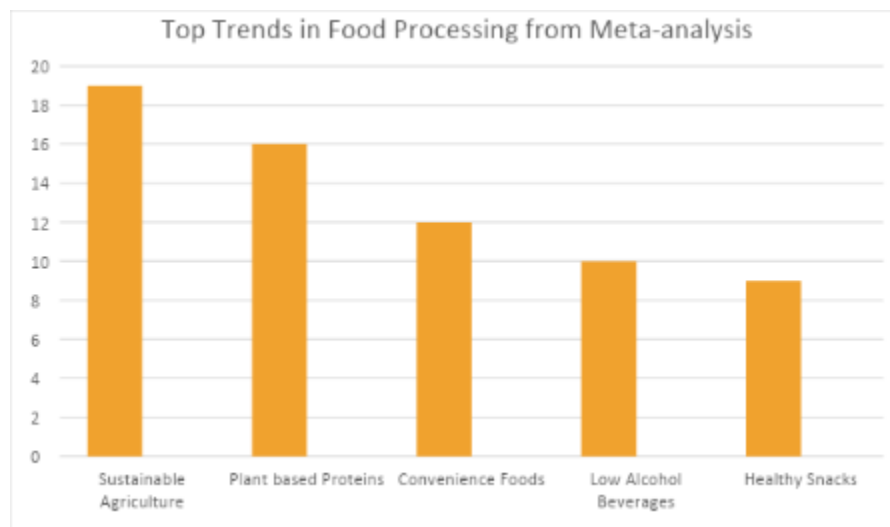


A key point to consider is how any development in the city will impact the rural regions that surround us. We need to find opportunities to build partnerships and take advantage of the products, knowledge and resources in our own backyard.

The Food Processing Industry in 2020 & Beyond

In March of 2020, a meta analysis study of trend forecasting websites in the food processing sector identified sustainable agriculture as one of the top food trends to watch out for in 2020 and beyond¹⁸. Following with a close second and third were plant based proteins, followed by convenience foods. Finally, low alcohol beverages and healthy snacks round out the bottom two positions on the list. Figure 4 below summarizes the findings of the study.

Figure 6: Meta Analysis of Top Trends in Food Processing



A blurring of lines between what traditionally was considered retail, wholesale and manufacturing in this space is occurring. In order to generate higher margins, smaller producers often have a front facing retail presence. This has led to both an increase in small scale production, as well as the development of niche/speciality foods.

Changing legislation has introduced Cannabis and edibles into our food processing nomenclature. While the success with Cannabis has its peaks and troughs, this is a completely new area that will continue to grow in years to come. It will create entirely new combinations of food, beverages and snacks.

As baby-boomers age, the maturing of Millennials and Gen Z, have brought together greater awareness and sustainability to food discussions. Food and in particular, healthy foods, from fermented to probiotics will continue to grow across several food verticals, from beverages to snack foods. Finally, the mainstreaming of healthier lifestyles has demonstrated a growth in vegetarian and vegan food options and increased the market for alternative proteins.



Identifying Opportunities & Challenges in the Food Processing Sector

The food processing sector is one that is destined to undergo large scale changes in the coming years. Driven by changing political, economic, social, technical, legal and environmental landscapes, the food sector will look very different in a few years time. Most notably the greatest opportunities for the sector include the ability to adapt to changing technology, encouraging the growth of small firms which have the highest growth rates and can innovate quicker than large firms and meeting increased demand for local food.

Political

One of the top challenges that continues to arise, is our trading relationship with the United States. The close proximity of the countries makes them strong political allies, but instability in the political and social system, challenges the ability of producers to have consistent food supply and markets. The threat of tariffs is also another consideration that may challenge the protectionism that many of our industries currently have.

Economic

The inability to pivot and respond to consumer needs is leading larger firms to lose market share steadily to smaller firms. In the US, larger companies have been losing market share to smaller firms since 2012. On average large food companies have been growing at rates of 1.5%, and smaller firms have experienced growth rates of 12-15%¹⁹. Smaller firms are better able to understand market needs, niches and respond quicker and more effectively to changing consumer tastes. This creates new opportunities they can enter but presents challenges for existing firms that fail to pivot. Not surprisingly, this has led to buyouts and acquisitions within the sector. Larger firms are buying up small firms that offer new, innovative products. This convergence is cited to continue in the years to come²⁰.

End Notes

¹⁸ <https://www.kalsec.com/food-trends-2020/>

¹⁹ https://www.jobbank.gc.ca/content_pieces-eng.do?cid=14521 https://www.brandonu.ca/rdi/files/2015/08/FoodBeverage-Processing_Industry_Report_2014_Growth_Pathways_to_2020.pdf

²⁰ <https://www.newfoodmagazine.com/article/104327/the-global-convergence-of-food-supply-patterns/>

Social

Consumer tastes and preferences continue to evolve. Trends like an ageing society drive individuals to make healthier food choices. Higher levels of immigration drive the growth of ethnic foods and greater ethical/sustainable awareness increases demand for alternative proteins. The growth of social media and marketing increases consumer awareness and connectedness to the food they eat. These create new opportunities for emerging firms making innovative products to enter the market, for primary producers to sell directly to consumers and for the creation of entirely new food categories—such as probiotics. Challenges arise for firms not able to adapt, gain social media followers or connect with consumers to better understand their shifting preferences.

Technical

Changing technology is creating new opportunities and challenges for firms in the sector. Opportunities are created through the development of flexible production lines and self-cleaning equipment. These allow for smaller batch production and faster changeovers, which can result in lower production costs. Automation is continuing as a trend in the sector and many traditional manual tasks are becoming partially or fully automated. Challenges arise in trying to retrofit old plants with new technology and finding staff with the digital literacy to operate new equipment. This may lead to the closing of less efficient plants and continued consolidation among more innovative firms.

Legal/Regulatory

Changing regulations such as the legalization of cannabis create new opportunities for firms creating new products, particularly those that cross several market segments. The downside is that the new regulatory environment can be complex to navigate which creates barriers and high costs for firms new to the space. It can also be a volatile economic environment, filled with takeovers and unpredictable stock movements.

Environmental

Sustainability will continue to be important as a trend as consumers have greater social awareness of where their food comes from. Millennials and Gen Z, tend to be more socially aware and committed to making ethical food choices which are healthy for them to consume while reducing their footprint environmentally. Processors who are willing to create more environmentally friendly products have a unique opportunity. Consumers want to know more about their food and companies that can demonstrate their Corporate social responsibility and sustainability will benefit. Challenges may arise as greater scrutiny and regulations develop for primary producers and processors that increases red tape, costs and regulations around food traceability and safety considerations.

Figure 7: PESTLE Analysis of the Food Processing Sector

Political:

Increasing border issues and political and social instability

- Opportunity: Grow trade beyond USA and Ontario. Opportunity to enter the global market through new trade agreements such as the TPP
- Challenge: Difficult to know legislation and difficult for companies to pivot

Economic: Larger firms losing market share to smaller firms

- Opportunity: Smaller firms can pivot and take advantage of faster lead times to market and better respond to consumer needs
- Challenge: Many people dependent on the larger firms for employment

Social: Changing Consumer preferences to healthier food, alternative protein and ethnic foods; Consumers are more connected through marketing and social media

- Opportunity: New market spaces to enter into and opportunity to connect directly with producers, processors and end consumer
- Challenge: Existing firms need to pivot or may begin to contract; companies that do not have a profile on social media may alienate consumers

Technical: Changing industry technology

- Opportunity: flexible lines and self-cleaning equipment allow for more small batch production and faster changeovers
- Challenge: automation & higher technology needs require staff with high levels of digital literacy

Legal/Regulatory: Cannabis opening as new legal market

- Opportunity: New opportunities to enter cannabis market and develop products across several product lines
- Challenge: Significant risk as cannabis is still unproven and highly volatile market

Environmental: Sustainable agriculture and the trend to "Green"

- Opportunity: Sustainability will continue to be important as well as role of sustainable agriculture. Consumers want to know more about their food
- Challenge: Greater scrutiny and regulation may result for food producers to prevent outbreaks and contamination





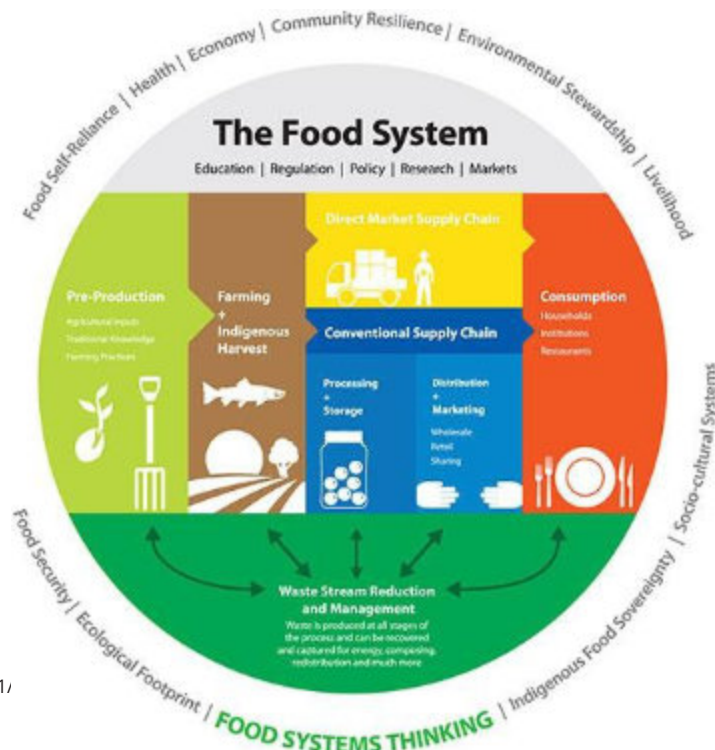
Food PROCESSING at the local level: AN INTEGRATED FOOD SYSTEM

Southwestern Ontario is one of Canada's largest producers of food, particularly in the production of fruits and vegetables. The past few decades have seen a greater convergence of producers, processors and retailers. Producers in particular have been able to take advantage of value-added agriculture, which removes distributors, increases their profits and connects them directly to the consumer.

Ensuring a consistent supply of food, through the creation of localized food hubs, improving distribution channels and transportation has been the focus of other Labour Market Partnerships and other projects in this region. Based on our interviews several regions have already begun to act on developing food hubs, namely Huron County and Norfolk. While these food hubs are a great start, an increased focus needs to be placed on continuing to create opportunities for producers to leverage value added agriculture and to develop more partnerships with processors, large and small.

Increasingly, we need to consider that food is not grown in isolation, but rather as part of an integrated food system. A food system is defined as a process that encompasses the entire range of actors and their interlinked value-adding activities. The system includes the production, aggregation, processing, distribution, consumption and disposal of food products that originate from agriculture, forestry or fisheries, and parts of the broader economic, societal and natural environments in which they are embedded²¹. We have elected to follow the Regional food systems approach, which focuses on the region as a system²². Any future projects or recommendations arising out of this project will need to fulfill this criterion.

Figure 9: Food Systems Components, taken from KPU Food Systems Online Hub.



End Notes

²¹ <http://www.fao.org/3/ca2079en/CA2079EN.pdf>

²² https://ontariofarmlandtrust.ca/wp-content/uploads/2014/01/Planning_Regional_Food_Systems_FinalJanuary25.pdf



In many ways, the regional food systems approach is a building block to the next evolution in food systems-the circular food system. A circular food system is focused on a transition to renewable energy sources while building economic, natural and social capital. It has three underlying principles:

- Design out waste and pollution
- Keep products and materials in use
- Regenerate natural systems

Focusing on building a system that is circular will allow us to create sustainability for our region and community. Building a place for food processors that is sustainable, focuses on efficiency, re-use rather than waste and effective use of local where possible, is good business. Circular food systems are here to stay, and their importance has been intensified since the development of COVID-19.

Figure 10: Circular Economy Systems Overview, Taken from the Porto Protocol Publications



Food Processing at the Local Level:

THE IMPACTS OF COVID-19

All of the trends discussed have only been amplified by the development of COVID-19. This pandemic has challenged food processing, delivery and retail to develop new ways of doing things. It is difficult to discuss the Canadian food system without noting the impact of COVID-19 on the food production system. COVID was an unexpected challenge, but in many ways a boost to the development of local food projects such as the incubator we are proposing as more and more individuals are demanding local food. COVID identified the weaknesses and frailties within our existing food system with daily news stories highlighting shortcomings and risks facing our food processing facilities and distribution approaches. Canadians have become more aware of how our food processing system relies on outside sources and centralized processing models to feed Canadians.



Throughout the course of this pandemic, many food processing companies have had to shut down because of outbreaks of COVID-19 within their facilities. As an example, the National Farmers Union stated that 95 percent of Canada's beef production comes from three processing plants and two of those plants had coronavirus outbreaks which halted production. When a meat processing plant is forced to close, it creates a backup for farmers who do not have the ability to quickly pivot. This causes them to euthanize animals or feed them for longer which inevitably creates higher prices for consumers.

COVID has also impacted processors because the "form" our food comes in has changed. There has been more of a shift towards eating at home, and fewer restaurant and commercial meals. Food producers are having to redesign production processes and packaging to meet new consumer demand. COVID has led to more local foods being consumed and experts are stating that COVID will create a shift towards more locally grown and produced foods. We are still in the middle of this pandemic and only time will tell whether the changes it brings to our food system are permanent or simply short term reactions to the situation.

CHAPTER 2:

Food Facility Models in Canada



CHAPTER TAKEAWAY

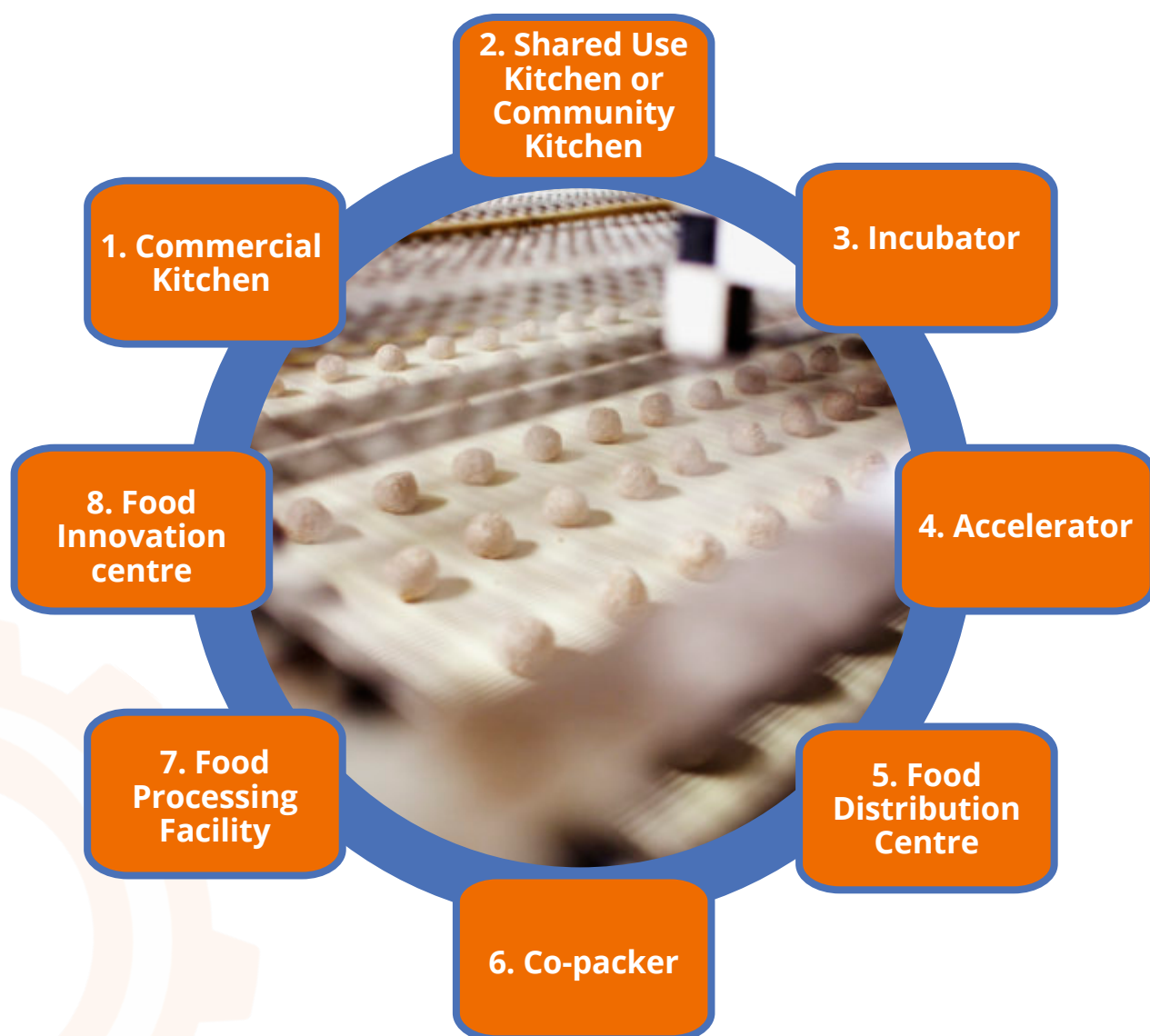
- **Sustainability can be influenced by organizational structure**
- **Most incubators are under 12,000 square feet in size**
- **Incubators differ from other types of support programs through service delivery and content Business Incubator**
- **Several revenue streams are required to ensure organizational viability**

The business incubator concept emerged after World War II as a new use for abandoned factories and served as a revitalization tool for declining manufacturing centres (Aernoudt 2004). The first business incubators emerged in New York State in the 1950's and 60's, but interest in the concept grew as governments looked for new instruments to stimulate economic development and job creation. Today, hundreds of incubators exist across North America, most focusing on specific sectors and subsectors.

Food Incubators

The most prolific food incubators took off in the early 2000's. These first food incubators tended to start with providing low-cost kitchen space and evolved to include a full suite of business support services. There is a continuum of incubator sizes and scope that cater to the different needs and programming requirements of different types of food entrepreneurs. At one end, there are commercial kitchens with shared space for early stage entrepreneurs, and at the other, complex food innovation centres that provide R&D support, recipe formulation and more. We have a wide range of these facilities in Canada and some of the definitions we use throughout the remainder of this report are identified below.

Different types of Food Processing Spaces and Services





Different types of Food Processing Spaces & Services Explained

1. COMMERCIAL KITCHEN

A fully inspected, stocked and certified kitchen in which it is legal to prepare food for public consumption. No outside support services. Examples include churches, YMCA's, community centres.

2. SHARED USE KITCHEN OR COMMUNITY KITCHEN

A certified commercial kitchen in which individuals or businesses prepare value-added food products and meals, usually paying an hourly or daily rate to lease a shared-space^{1*} shared-use kitchen provides little to no supportive resources, training, or capacity building for entrepreneurs, but entrepreneurs may learn from each other and network^{2*}. In our region examples include Ya-ya's Kitchen, Our Kitchen in Brantford and others.

3. INCUBATOR

A food incubator is a large space that contains several kitchens and build outs. Users pay a rental rate according to the amount of space, time and type of equipment they need. Rental agreements can range from an afternoon or evening pop-up, to as long as a year or more, depending upon the model the incubator uses. An incubator can be further differentiated from an accelerator by its focus on new and very early-stage businesses. Examples include District Ventures in Toronto, the Former Food Starter in Toronto^{3*}.

4. ACCELERATOR

food accelerator can be defined as a program or organization that takes high-growth and high-potential ventures to scale through multiple distribution channels and develops new lines of products as their venture scales. Unlike the incubators, their clients are already somewhat established. Here the goal is to build a regional or national brand strategy. Examples include the new Y-Space at York University. Some have kitchen facilities and others do not. York for example, operates totally as a hub focused on services and NOT on facilities. This hub provides referrals to other commercially available spaces when clients need that^{4*}.

5. FOOD DISTRIBUTION CENTRE

A food distribution centre is a "business or organization that actively manages the aggregation, distribution, and marketing of course-identified food products primarily from local and regional producers to strengthen their ability to satisfy wholesale, retail, and institutional demand." Examples in Ontario include the Toronto Food Terminal at a large scale and the Elmira Produce Auction at a more local scale.

6. CO-PACKER

A co-packer, or a contract packer, is a company that manufactures and packages a certain product for a client. Small businesses utilize a co-packer to outsource manufacturing – this allows for scaling up and meeting growing demand, without having to invest in their own industrial setting. There are a variety of commercial/private companies that are co packers. In Canada, Charlottetown and Guelph both offer co packing capabilities

7. FOOD PROCESSING FACILITY

A food processing facility is a place where food industry entrepreneurs can try out big ideas on a small scale. Entrepreneurs just starting out, can rent out a food processing facility at a daily per diem rate rather than having to build their own facility. In Canada, examples include the Ontario Agri-Food Venture Centre in Colborne and the Saint Hyacinthe food processing centre. Entrepreneurs, along with staff, are responsible for their own production, but at least in the OAFVC staff handle sanitation.

8. FOOD INNOVATION CENTRE

In Canada, we have developed a network of Food Innovation Centres. The aim of these is to "kickstart innovation within Canada's food and beverage processing sector by connecting stakeholders through digital resources and collaborative activities, such as advanced technology platforms, industry advisors, and events focused on sector growth and market access"^{5*}. The Network will also improve the competitiveness and sustainability of the agri-food sector by making existing innovations and best practices available to a wider range of stakeholders in the agri-food system through the creation of a digital hub. Examples of this include St. Hyacinth, PEI, Leduc University, amongst others.

End Notes

^{1*} newventureadvisors.net/good-food-glossary-shared-use-kitchen/

^{2*} econsultsolutions.com/wp-content/uploads/2013/08/ESI-SharedKitchenReport_2013.pdf

^{3*} <http://cinilittle.com/2016/05/05/what-the-heck-are-food-incubators/>

^{4*} <http://tiny.cc/htwtz>

^{5*} www.ic.gc.ca/eic/site/125.nsf/eng/00031.html

Differentiating between shared kitchen space and an incubator and an accelerator

What makes a food incubator different from a shared-use kitchen is the wrap-around support services incubators provide. Incubators help small food businesses with production, marketing, packaging and gaining distribution and more. They offer connections to service providers and may or may not include kitchen space. Programs in an incubator can run from 1-3 years or more.

Food accelerators tend to focus on more established businesses with scaling capacity. The accelerator may or may not offer space rental. Accelerator programs tend to be shorter lasting anywhere from 3-6 months in duration. There are significant wrap-around services that help the company to develop the marketing, branding and manufacturing capacity to scale quickly. Some accelerators may offer capital investment and take an equity stake in the businesses while others do not. Accelerators can have kitchen facilities, or not and they really are meant for companies that have been in operation for at least 1-2 years and are beginning to achieve profitability.

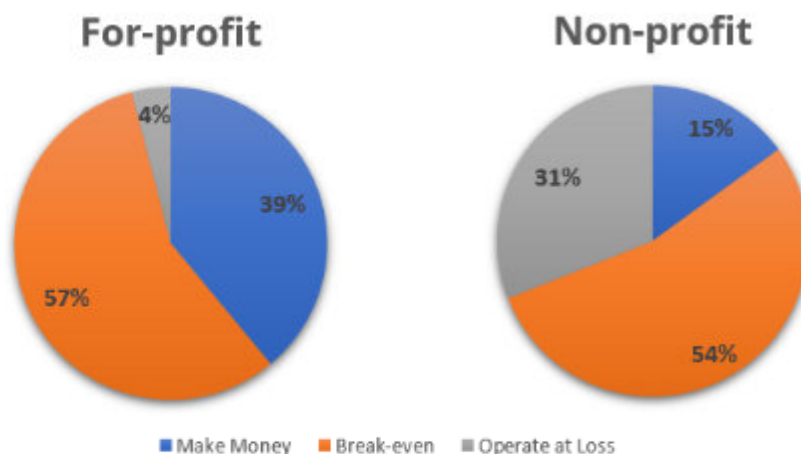


A Profile of US Food Incubators in 2013

A 2013 study of 140 US based food incubator projects concluded that most are trying to generate profits from a variety of sources, whether it be space storage, space rentals, catering programs and retail facilities to sell the products from the incubator. Despite this, the majority are not profitable. Very few of them exist that are 100% sustainable, particularly those that are structured as non profits. **The same study identified that only 39 percent of for-profit incubators report making a profit, while 57 percent just break even. Non-profit incubators have an even more difficult time being self-sustaining, with just 15 percent making money and a full 31 percent operating at a loss.**



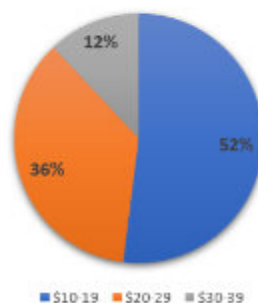
A Profile of For-profit vs. Non-profit



Hourly Kitchen Rates

The most successful incubators have diversified revenue streams, multiple product lines and service a greater number of entrepreneurs compared to less profitable ones. At the time, the majority of incubators were charging less than \$19 USD per hour for their services and space.

Hourly Kitchen Rental Rate (\$/hr)*
of 25 respondents



Space

- The majority of facilities were between 1,000 and 2,999 square feet (51% of respondents).
- Most facilities include rental kitchens, dry storage, refrigerated storage, and freezer storage, as well as a variety of other facilities.
- On average, rental kitchen areas are 1,673 square feet, dry storage is 1,450 square feet, cold storage is 472 square feet, and freezer storage is 164 square feet.
- To assist with loading and receiving, 27% of incubators have a loading area, and 18% provide access to a pallet jack or forklift.
- Only a very small percentage (2%) rent individual pieces of equipment.

Average Space for Each Area

Incubator Room	Average Space Size (in sq. ft)
Kitchen Rentals	1,673
Dry Storage	1,450
Office	787
Classroom Space	764
Loading Areas	600
Cold Storage	472
Freezer Storage	164
Other	1,745



Hours & Employees

- The large majority (77%) of facilities have fewer than three full-time staff members to run the facility's operations and programming.
- Most incubators (77%) are not federally licensed.
- An overwhelming number (86%) are open for business 24/7 (however, only 18% are always staffed when open). These tend to be mainly commercial kitchens and less facilities that offer co packing

Flexibility & Customization

- No one size fits all model; dependent upon needs of local geography and companies as each incubator different

Automating Operations

- Automating some functions like scheduling and screening helps to reduce staff requirements

Marketing & Co Packing Distribution

- Provide linkages to co packers or co packing facilities which may make sense for some entrepreneurs. Others want their own facilities

Partnerships with Regulatory Agencies

- Develop good partnerships with regulatory industries to help facilitate entrepreneur journey and making connections to help entrepreneurs as required

Business Assistance and Micro-lending

- Invest in services such as business technical assistance, help with recipe scaling, cost-saving through bulk purchasing of ingredients, assistance with distribution, and assistance with obtaining sales venues.
- Establish relationships with third party funding organizations like small business development centres and banking institutions, particularly those with micro-lending capacity

The Social Benefit versus Cost of Operation

- While the majority of food incubators have challenges with financial performance, the majority create opportunities for visible minorities, those who suffer from multiple barriers, including those from economically disadvantaged regions.
- The high operating costs of food incubators can outweigh their economic impact. A 2007 case study of a non-profit food incubator (Nuestra Culinary Ventures) incubator in Boston found "a majority of the businesses created unstable, part-time jobs and hardly generated enough sales to sustain a part-time employee, let alone a full-time worker,". In this case, the companies coming through the programs of Nuestra Culinary Ventures were not creating meaningful employment. Coincidentally, The Nuestra Culinary Ventures incubator did not survive past 2008.



Differences among the US and Canadian Contexts

The 2013 study represents one of the few pieces of quantitative literature that focuses specifically on food processing incubators. However, the study is nearly a decade old and is focused on the US market. There are several differences we see in the Canadian market when compared to the US market. Incubators that are nonprofits in the United States tend to be sponsored by economic development agencies, local churches or as extensions of non profit organizations. If there is any government sponsorship it exists only at the municipal and perhaps state level.

In Canada incubators and other related food projects take a different form. The majority of food incubators and larger entities are federally funded, and tend to be institutionally associated, i.e. they tend to be supported or exist as an arm's length entity to a University or College. They tend to have more staffing, larger infrastructures and are overall less "lean" than their US counterparts. Similarly to the US models, Canadian incubators tend to have some focus on social outcomes, but their primary focus, particularly for those that are tied to institutions, is teaching, with a secondary focus on food sector innovation and process improvement as opposed to food consulting and scale up support.

In 2015 a research team attempted to summarize the state of Incubators in Ontario. Their findings shed light on both the need, as well as the differences between the US and Canadian contexts. The following is a brief summary of some of the major findings.

Industries Served

Figure 2 identifies the main industry sectors that are served by different incubators across Canada. Apparent from the onset is the lack of Protein Primary (meat) facilities. While many kitchen spaces will allow meat products, to process meat in any large quantities requires a federally licensed facility. Currently, the food processing kitchens at the University of Guelph are the only processing facilities that are federally licensed.

	Ontario							Western Canada		
	CFWI	CRISP	Food Starter	FIRST	NSF-GFTC	OAFVC	U of G	FDC (MB)	AFBI/TPDC (AB)	Food Centre (SK)
Type of Facility	institute	institute	standalone	institute	standalone	standalone	institute	standalone	standalone	standalone
Sectors										
Animal Food		0	0	✓			✓		✓	
Bakery & Snack Food	✓	0	✓	✓		✓	✓	✓	✓	✓
Beverage	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sugar & Confectionery		✓	✓	✓		✓	✓	✓	✓	✓
Dairy			*	*	✓	*	✓	✓	✓	✓
Fruits & Vegetables	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Grain & Oilseed Milling				**		0	✓	✓	✓	✓
Packaging	0	✓	0	0	0	0	✓	✓	✓	✓
Protein (primary)							✓	✓	✓	✓
Protein (secondary)	0		✓		✓	0	✓	✓	✓	✓
Spices & Powders			✓			0	✓	✓	✓	✓
Value Added Products	✓		✓	✓	✓	✓	✓	✓	✓	✓
NOTES:										
0 = capable, but no clients			*Dairy capabilities in limited Production Spaces, no bulk dairy receiving	*Dairy products, no bulk dairy receiving **General		*Dairy capabilities in limited Production Spaces, no bulk dairy receiving				
✓ = completed projects										

Gaps in Equipment

This study identified the following as equipment gaps that the industry should try to overcome:

- Continuous line baking and frying
- Automated bottling (available at CRIFPT, but not for commercialized product)
- Bulk dairy (available at U of G in the former NSF-GFTC area; with proposed renovations in store)
- Most entrepreneurs expected to provide their own equipment and the facility just provides the space. Looking for funding to offset some of these costs was recommended

Geographic Location

This report did a thorough population analysis and recommended that populations around London and Kingston tended to be underserved and that depending upon the sector they operated in, a large proportion of entrepreneurs in the province could be far from a centre that focused on their industry.



Food Related GDP and Square Feet of Innovation Space

This report did a thorough population analysis and recommended that populations around London and Kingston tended to be underserved and that depending upon the sector they operated in, a large proportion of entrepreneurs in the province could be far from a centre that focused on their industry.

The Report Summarizes:



“There is a gap between leased production space and the population of Ontario with its relative GDP in food. This gap exists not only for start-up companies, but also for small business owners who need an area for experimentation or to run new product lines to meet a new demand in order to overcome a growth hurdle”.

Final Report Recommendations

The report concludes with several key recommendations. These include to:

1. Develop a central body of knowledge for the sector
2. Develop more federally registered/licensed operations to allow for national product development and meat production
3. Build more leased production space
4. Screen entrepreneurs for a business plan that is complete and scalable
5. Have a full-time innovation and business development individual on staff at each incubator
6. Create collaboration amongst centres

It is the belief of the researchers that most or all of these recommendations continue to be a need today. Few, if any have been addressed in the last five years. These issues were and continue to be a challenge for the food processing sector.



THE RESULTS

From our Analysis

As part of the research for this current project, the research team surveyed several of these institutions across Canada. The sample is much smaller than the US survey, but quite similar in scope to the Ontario study. In all 6 organizations responded to our survey. Rather than present averages, since a wide variety of facilities responded, we will provide ranges as these facilities represent a variety of models, from shared kitchen facilities to a food research innovation centre.

Physical Facilities

- Facilities ranged from 8,000 square feet (sqft) to well-over 100,000 square feet. The average was around 8,000-12,000 sqft
- 5/6 offer food prep and cooking facilities, with the majority being under 2,000 sqft
- All 6 have food processing facilities, with the majority being under 2,000 sqft
- All 6 offer dry storage with the majority (4/6) being under 2,000 sqft
- All 6 offer refrigerated storage with the majority(5/6) being under 2,000 sqft
- All 6 offer frozen storage with total space being under 2,000 sqft
- 4/6 offer office space, with 5/5 offering meeting room space



Employees

- The facilities employ anywhere from 3-25 employees.
- The majority of employees tend to be full time, particularly with those that have institutionalities
- Most have 4 employees and under in management roles
- 3/6 have under 5 employees in program delivery, with one having over 10 employees in program delivery
- 3/5 have 1 employee in Sanitation/Cleaning roles, with one having 9 employees
- Others have employees in roles such as Finance, R&D and retail food sales associated with the incubator



Affiliations

- The majority of incubators in Canada tend to be institutionally linked.
- 5/6 are affiliated to an educational institute
- 1/6 is affiliated to a municipality



Sectors Served

- The majority of those surveyed serve dairy, bakery, fruit and vegetable light processing with 3 offering meat processing, 3 offering beverage bottling lines, and the other category includes: catering and fresh to go meals, fermented foods, research and development and agricultural development services

Services



- The majority of facilities surveyed offer more than just kitchen space
- 2/6 offer general business education
- 4/6 offer sector specific training in food processing
- 3/6 are able to match entrepreneurs to funding opportunities
- 4/6 respectively offer space and equipment rentals
- Dry storage, refrigeration and freezer storage each have 2/6 respondents offering this service
- 3/6 offer assistance with logistics and 3/6 also offer guidance with registrations and permits
- 6/6 offer sector specific consulting
- 5/6 offer food science specific services
- 5/6 also offer recipe formulation
- 3/6 offer market and business development
- 2/6 offer safe food handling and other sector specific training



Most of the organizations surveyed offer several services to help grow or establish the businesses that use the incubator. They are invested in the long-term success of the entrepreneurs and offer a variety of services that can both enrich new companies and also help to diversify incubator income.

Cost of Services

The majority of services are offered to companies and are paid for through a variety/combination of sources rather than one single pay model. In addition, our respondents identified each service priced in the following way:



- Seminars: Two organizations responded and both priced seminars at under \$50 per hour
- Business Consulting: ranged from under \$25 per hour for smaller organizations to \$150-200 per hour for larger organizations
- Business Development assistance tended to be under \$100 per hour
- Recipe formulation tended to be over \$50-200+ per hour
- Label consulting was, over \$50 per hour
- Scaling assistance was between \$50-100 per hour
- Equipment rentals had from under \$50 per hour to over \$200 per hour
- Space rental also ranged from under \$25 per hour with two facilities renting at \$50-\$100 per hour
- One organization offered business support services at \$50-100 per hour



The majority of services are offered at the \$50 per hour or higher rate. While this may be cost prohibitive to newer stage companies, this price range is necessary to ensure the success of the incubator itself. Different programs can be developed and/or sponsored to increase accessibility, but if the incubator cannot ensure its viability, it will be unable to continue operation.



Hours Open to the Public

- 2/6 are open to the public 10 hours a week or less
- 1/6 is open 31-40 hours per week to the public
- 2/6 are open 40+ hours per week to the public
- 1/6 does not open to the public for rent

How They Market Services

- The majority of the facilities surveyed use word of mouth and referrals (100%) to market their services. Half have formal marketing through print media or digital media, and a couple offer cold calling. One offers presentations to industry groups and associations.



Capacity

- 4/6 are running at 80-100% capacity and 2/6 are at overcapacity
- This indicates a fair amount of demand in the sector, particularly for larger services and facilities



Survey Summary

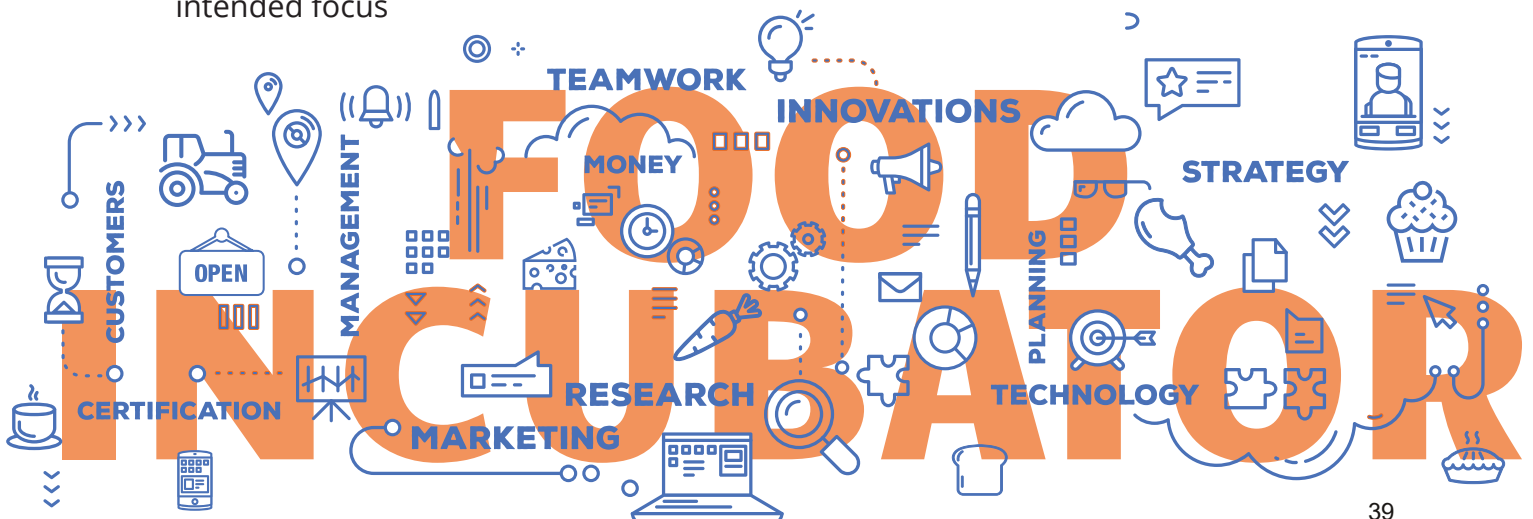
The food processing incubators in our study, while not uniform tend to have similar challenges, service similar sectors and employ individuals in a similar capacity. Some centres which are larger and offer more services, have more employees, particularly professionals such as scientists and food processing engineers. Others, which tend to focus more on kitchen space, have a few auxiliary services. Most offer consulting services to their end users. Together this begins to create a picture of what a prospective food incubator might look like, what services it might offer and the price range for those services.



Portrait of an Incubator

The need for a food incubator in the London area has been identified as early as 2015. Following the major trends within the sector, an incubator in the London region might look something like this:

- **Space:** between 8000-12000 square feet, has significant amounts of storage space-- including refrigerated and frozen
- **Services:** Offering auxiliary services to entrepreneurs, from food consulting to label development, food science, nutritional analysis
- Has some kitchen space available for rent, but this is not the primary focus of the incubator (3-4 kitchen bays not exceeding 4000 sq feet in size)
- Provides education, links to industry support
- Offers workplace training for people interested in working in the food processing industry
- Has institutional partners, not necessarily as its owners but involved as a way to link innovation and innovation research
- Is open to the public a minimum of 30 hours per week for different types of programming, apart from just those who are tenants
- Has some automated screening and automated services
- Is operated by a minimum of 3 employees --1 in management, 1 in business development and 1 in innovation science. Some of these might be on secondment from the college or university. Perhaps they are internships from different programs
- Offers production space that can be leased or rented on a monthly or short term basis. Perhaps different floors or rooms can have different models to appeal to a wider variety of tenants
- There needs to be several revenue streams to help the business be profitable. The facility should not just rely on space rental as its main revenue driver.
- The institutional model that is representative of incubators in Canada builds centres that are staff heavy and largely reliant on grants/supports/subsidies. A private sector model gives the centre a higher likelihood of being profitable and operating on a "lean" business model. Even if the organization is governed as a non profit, it is recommended that at minimum a social enterprise model that is sustainable be the intended focus





CHAPTER 3:

Connecting the Region: Building a Food Processing Cluster



CHAPTER TAKEAWAY

- **Any incubator needs to be a hub for regional economic development, but also needs to play a role in training the next generation of workers**
- **A hub can create cost savings opportunities**
- **A hub can be a place where networking and business development happens**
- **The hub spoke model is one older analogy that can be used to envision how a food processing cluster might work**
- **One way to connect the regions may be through mobile processing units that can create new value added opportunities at farm gate**

The concept of regional connectivity in the food sector is not new. Several years ago the London Training Centre hosted a Labour Market Partnerships (LMP) focused on developing distributive capacity between rural regions and the urban centre. Following the completion of that project, several attempts were made to secure funding to continue developing the project, but at the time, no funding could be secured that matched the goals of the project. Over the last year, this has changed significantly.

Differences among the US and Canadian Contexts

COVID-19 accelerated the desire for local food and drew attention to the need for local processing expertise and capacity. During this past year of research, we as the researchers have seen a resurgence of interest in local food, food processing and in initiatives to keep local food, local. Many regions have begun to develop creative solutions that reflect their own local needs when it comes to food.



In Elgin and Essex counties, increased processing and gleaning of field crops is being done by several charitable groups. In Bruce county local abattoirs are being developed that are smaller and focus on enhancing the meat processing capacity of the region. Many other micro solutions are emerging that are designed to support local needs by local actors.

The Southwestern and South Central Ontario region is a food powerhouse. Between these regions, they grow the most field crops in Ontario by volume and acreage and have the most farmland dedicated to crops. This food tends to end up at the Food Terminal and then is redistributed back into communities through grocery stores. This system works well for imported foods, but is inefficient for local food distribution. More localized delivery networks are needed to distribute food locally, and beyond this, finding ways to enhance value for primary producers would greatly benefit the region.

Food processing was traditionally tied to the geographical location of food agriculture. Much akin to industrial clusters, food processing tends to follow a similar evolutionary trajectory. As industry organizations emerge, specialized knowledge congregates and production capacity is developed. Traditionally, as transportation systems grew more efficient, so too increased the geography our food travelled. The processing of food was no longer necessarily tied to its location.

In academic literature that discusses economic cluster theory, the concept of innovation systems and how information, goods, technology and actors flow and interact in community represents the dominant thought ideology. Food production functions in much the same way. By building greater food processing capacity regionally, the community benefits from a system that sees increased knowledge, skills, technology and an increased concentration of sector organizations collaborating to increase the efficiency and effectiveness of the overall system.

The role of a food processing incubator is not just to bring more food processing companies to London and area but to begin to coordinate the collective knowledge, economy and infrastructure that is needed to support food in the area, enhance sectoral knowledge information transfer and identity around food and food processing.

Role of the Food Incubator/ Accelerator

- Be a hub of food processing expertise
- Be an appropriate space for food production, testing and packing
- Offer advanced classes in food processing, business and organizational management
- Prepare & Train the workforce for fast growing companies
- Create official and unofficial networks for entrepreneurs
- Effective systems navigation- from distribution, to co-packing and others
- Be a leader in connecting people-entrepreneurs, staffing etc
- Link to sources of funding to help them scale
- Mix community, industry and prospective customers-lots of events
- Create retail opportunities for tenants through prospective retail shop, market and online offerings
- Create pathways for dispersion of innovation and access college/university research
- Provide a hub for service delivery and connecting education to community with regard to food processing industry
- Create services for different types of food entrepreneurs
- Expose people of different cultures to different types of food including newcomer and indigenous

The Incubator as the Hub for Economic Development and Training of a Food Processing Industry

The vision for this incubator is to become the engine that drives forward innovation in the Food Processing Industry in Southwestern Ontario. This means being a source of training and workforce development, education, industry knowledge, connections and networking which all play important roles in the development of a food processing incubator. Information, resources and connections can flow outward from the incubator but also inward from the regions.

One of the dominant ways to consider what the role of an incubator ought to be, is to look to economic cluster literature. Cluster theory has many different models that can be used to understand how organizations interact in space. One of the most enduring designs is



the concept of a hub and spoke system developed by geographer and planner Anne Markusen. Markusen identified that a majority of industrial regions in the 1970's onward across the United States could be classified into a hub and spoke model, where smaller firms tended to cluster around larger externally focused firms. Since then, a variety of other more popular systems have emerged, from Porter's cluster theory to systems innovation literature. Despite these, Markusen's model has

been finding new life in a variety of fields, from economic development, to transportation and healthcare delivery, where it has been adapted from its original industrial geography form.

As we look for a model on which to build a food processing incubator, the hub and spoke model offers one concept to consider. Simplicity is the true strength behind Markusen's model. A central "hub" exists and is connected to and supports regional spokes. Information flows two ways between spoke to spoke, and spokes to hub. In many ways the spokes are as important, if not more important than the hub. They support and are the connections to a larger, more regional system.

It is this type of model and connectivity that our economic development initiatives lack. Regions are often pitted against each other, competing for dollars and projects. From the onset of this project, we felt a regional approach should not only be encouraged, but was necessary for the overall success of the food system.

Rather than have all of the answers, the spoke and hub model allows for building up the capacity of regions and supporting them through a central system that help to diffuse knowledge and skills through regional partners, while empowering the regions to continue developing localized solutions to their own food issues by providing them with connections to the broader food ecosystem.

Hub as a Centre

The hub can function as a collector and distributor of knowledge of opportunities. In the course of this contract, we had several entrepreneurs come to us asking about opportunities in the food space. Some of these entrepreneurs were just starting their businesses, others already had significant food processing businesses and were looking to scale.

We were even able to match one local food processor to a local source of freeze dried vegetables , which created an opportunity for a local producer to sell several thousand pounds of vegetables. Creating these kinds of connections can reduce greenhouse emissions from working with more local producers, strengthens the ecosystem and connections in the sector. These are the types of opportunities that a food network, coordinated through a central hub can yield.

The Hub as a Business Development Engine

There is a need to develop and source opportunities which can help to enhance the regional ecosystem and economy. How would such a system work? It could be a combination of an online portal, complemented by an economic development food concierge. This concierge department/individual would exist to help build connections, encourage localized economic development opportunities focused on food. While this concept could be developed for other industries, this document relates to the food production and processing sectors specifically.

The Online portal, supported by an individual or team of individuals, would be responsible for sourcing products for local companies, developing RFP opportunities to help find vendors for specific products, it could connect different suppliers together, and it might find innovative products and support them in taking them to market. The list is limitless.

Another idea that came out of a committee meeting is the idea of a cause box where customers can purchase curated boxes that contain products from the different vendors or producers.

How to Build Connections Between the Regions

A. Education

- Providing access to food processing specific education
- Access to on-demand specialist courses
- Product specific knowledge sharing
- Pairing people in similar industries for co-learning and communities of practice

B. Business Development & Cost Savings Opportunities

- Posting localized contracts
- Volume discounts or sales
- Compiling Request For Proposals (“RFPs”)
- Connecting opportunities across the region
- Developing an online portal for communication

C. Networking

- Events
- Workshops and Webinars
- Industry profiling
- Company and opportunity profiling
- Increasing community awareness and knowledge of food processing and importance to local economy

Enhancing Primary Producer Capacity

As previously mentioned, COVID has greatly increased the focus back to “local”. More and more, people want to know where their food is coming from, and know more about those producing it. Connecting customers to primary producers and finding new markets that add value for primary producers is an important consideration and one that this concept of a food processing knowledge hub can take a leadership role in. One suggestion that emerged out of our feedback sessions with economic development and small business groups, was the idea of curated food boxes for different regions or different producers. The incubator could even take a leading role in organizing the logistics of and curating regional food boxes. While this gap is identified in this report, we do recommend that this topic be examined in more detail in future regional agriculture projects.

Helping to Build Regional Capacity for Food Processing

One of the concepts that emerged early in our research, was the concept of building greater capacity in the regions around London for food processing. The majority of the food in Ontario is grown in Southwestern and South Central Ontario. Yet, the system as a whole is highly fragmented and inefficient. As was detailed in a past LMP (2012 Food Systems), the region possesses very little byway of processing and storage capacity. Since that LMP, some regions have begun to build cold storage facilities, but the biggest challenge still remains in getting products from the field and adding value closer to the beginning of the food chain.

For this reason, one concept that we investigated, was the idea of mobile food processing units that could travel to the fields and be shared amongst a community or several large producers. By adding value to their products by lightly processing them, whether through cut and wash, dehydration or packaging, a primary producer could add significant value to their product. For the remainder of this chapter, we shall focus on different types of mobile units, provide some case studies and create an overview of why this “old” concept can become new again.

Connecting the Region Through Mobile Units

Mobile Processing Units are processing equipment that often are loaded into Tractor trailers and semis. They can generally be moved from one location to another and perhaps even outfitted with different equipment depending upon the season. There are mobile processing units that have been developed for nearly every sector and these have existed for many years.





Common in Europe and the Southwestern USA, these units are not a new innovation. Mennonite aid groups in North America have operated mobile food processing trucks for decades. Over the years, different Mennonite groups have had mobile meat processing operations that can meat and redistribute for aid purposes. These portable canneries used to operate in the American Midwest from the 1940's onward. Mobile meat canners still travel across the USA and Canada, and annually engage over 30,000 volunteers, and prepare thousands of cans of meat to distribute globally.

Cost

The cost of mobile processing units tends to vary with the type of equipment contained. At the low end, one with simple equipment and design can be sourced for tens of thousands, while at the high end, these units can cost millions of dollars. It is all dependent upon the size of the truck, the equipment housed in the truck, its functionality and the scale of operation.

One feasibility plan for a mobile abattoir placed the total cost of the unit capital costs at around \$300,000 USD¹. Operational costs for such a unit, would vary with the product being produced. A meat processing unit would need to pay for operators, inspectors and assistants, all of these would increase the operating costs. The operating costs can also vary significantly.

Capacity

The capacity of a mobile unit is highly dependent on the equipment inside. A highly efficient bottling line may be able to do tens of thousands of units per day. The same with a vegetable processing unit that travels from farm to farm. It is not just the processing speed that is important but where the product must go right after it is processed. If the product is being taken to market, then it requires refrigeration or freezing, depending on the type of processing it receives.

Benefits of a Mobile Food Facility

Mobile Units have been found particularly effective when canning or dehydration is the primary processing method. Mobile units can be cost effective and convenient for primary producers as they do not cost as much as an industrial food processing plant. For aid based organizations, it can decrease the cost of making healthy food accessible while increasing convenience for donors. Smaller units with one or two processing methods are cited as being the most cost effective.

End Notes

¹ <https://www.ichemeatprocessing.org/cost-estimates-for-the-mobile-unit-stationary-fabrication-facility/>

Benefits of a Mobile Food Facility (continued)

Mobile units help primary producers to increase the value of their product. By processing the product, a primary producer can increase the value of their product. Currently, out of every dollar sold, a farmer or primary producer is only making \$0.16². In processing and adding a retail component, farmers are able to increase their profits by up to 250%³ as one large farm was able to accomplish (close to \$0.50 cents). While selling direct to customers will significantly enhance products, by offering light processing, profits can be increased even further.

A mobile unit can also help to prevent spoilage. If planting and harvesting can be scheduled and timed correctly, a processing unit offers a low cost means of helping more farmers to keep more of the profit and decrease the amount of spoilage from their crops. A cooperative model may offer one way to purchase such a unit as a group, particularly if the same type of processing is being done for all crops. Evaluating the feasibility of a processing unit is beyond the scope of this current project, but the following case studies may provide some further insight into their utility and different uses.

Case Study 1:

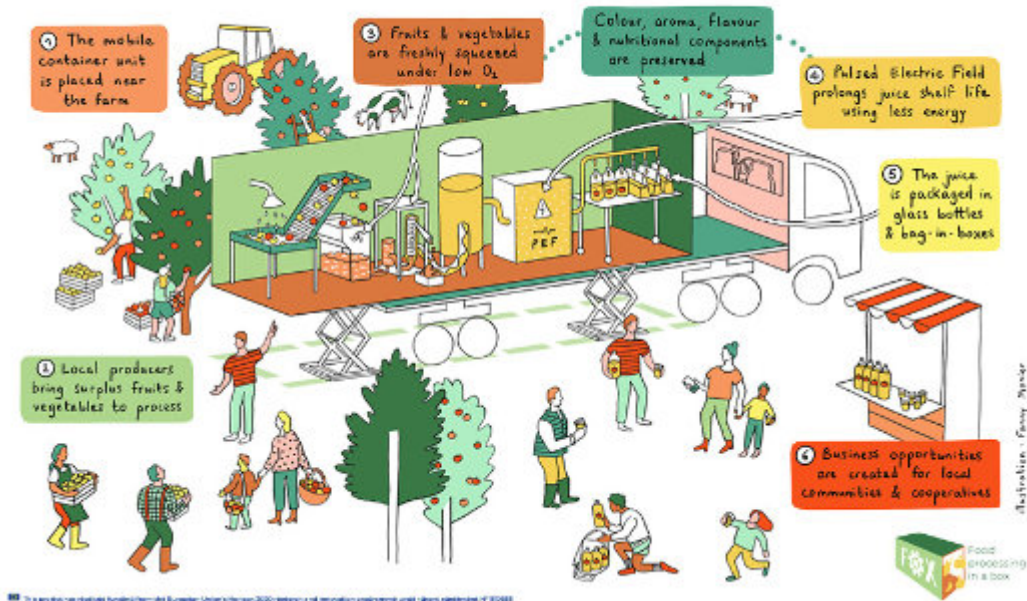
Food in a Box Europe (FOX)

This company is aiming to reduce the environmental and sustainability footprint of food processing operations, and change them from regional large structures to smaller neighbourhood operations. The FOX project aims to:

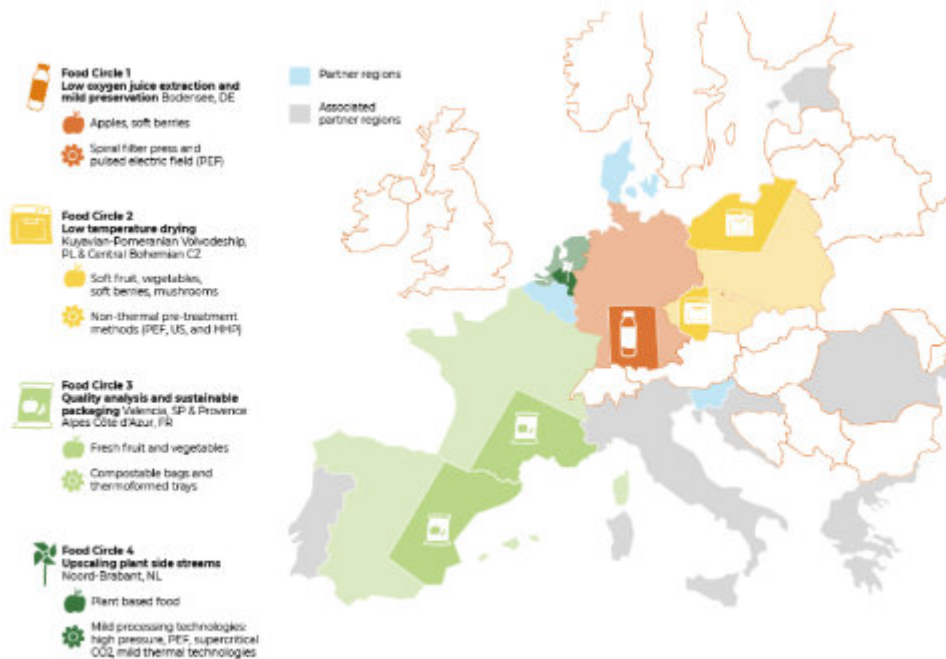
- Achieve optimal physical and nutritional quality of the fruit and vegetable products through mild processing technologies
- Downscale innovative technologies for juice extraction, low temperature drying and mild preservation
- Minimise the use of resources through developing sustainable packaging materials.
- Actively involve local consumers to regain trust in the food chain⁴

The project will be deployed in six regions across Europe, each with a different specialization. The overall goals will be to estimate environmental, social, business and health impacts and increase debate and make policy recommendations for such future initiatives⁵. The model is to engage the direct consumer, right on site and turn the processing operation into a retail venture.

Fresh, local and healthy juice in a mobile container



100 To a production-based funding from the European Union for the period 2020-2024 under a risk reduction programme under 'Agri-Entrepreneurship' (F100000)



End Notes

¹ <https://www.ichemeatprocessi.org/cost-estimates-for-the-mobile-unit-stationary-fabrication-facility/>

¹ <https://www.ichemeatprocessi.org/cost-estimates-for-the-mobile-unit-stationary-fabrication-facility/>

² https://www.canr.msu.edu/news/increase_profitability_by_adding_value_to_farm_products

³ Financial Viability of an On-Farm Processing and Retail Enterprise: A Case Study of Value-Added Ag

⁴ <https://www.eufic.org/en/collaboration/article/fox-food-processing-in-a-box-innovative-local-fruit-and-vegetable-processing-for-a-sustainable-future>

⁵ ibid

Case Study 2:

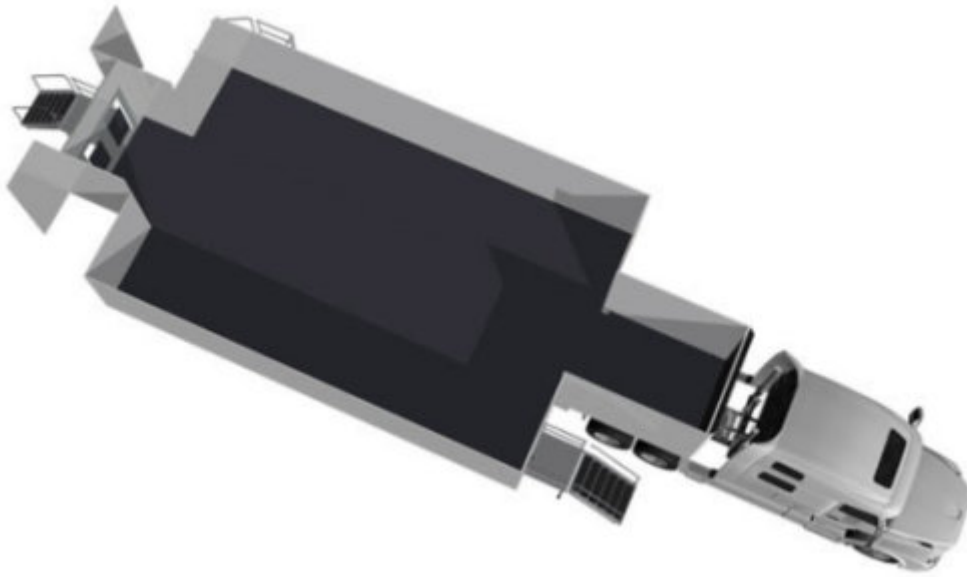
Mobile Units for Department of Agriculture-The Case of the American Midwest

The Department of Agriculture in North Dakota purchased a mobile commercial kitchen on wheels that it leases out to farmers to provide a space for mobile food processing, producing commercial products, teaching food safety and food processing classes or simply testing new recipes and products. The unit has a gas generator, and can also be plugged into a standard 110V or 220V circuit. It has air conditioning and is a fully licensed commercial kitchen. The cost of the truck is around \$125 per day and it can be leased by several individuals at once.



Case Study 3:

MRA is a company out of Madison Wisconsin, USA, with offices in Toronto, Canada as well, that build expandable trucks. Traditionally these trucks were used for mobile events, and recently have found life as mobile COVID testing and vaccination sites. However, another use for these trucks is as mobile food processing units. The expandable nature of the truck permits it to house a variety of equipment and uses. A truck with such a large footprint may allow for several different types of processing. Each unit can be expanded to a footprint of over 1000 square feet. There is the cost of the truck as well as retrofitting the carriage for the expandable footprint.



A Connected Food Processing Economy

Making the decision to invest in a mobile unit is a significant one. However, the agriculture and food processing sector demands and requires new creativity to help increase its efficiency and competitiveness. Mobile units are one way that the expertise of a food processing hub can be extended to the regions. From mobile demonstrations to education and rentable kitchen facilities for remote markets, the possibilities are endless. Mobile processing units represent one way that we can connect rural regions to urban food production.

Assessing how to connect rural regions where food production actually happens to larger urban centres where food is consumed and where processing may occur will be an important role for this incubator and for maximizing job creation opportunities in this sector. The individual communities around the region have been developing their own expertise related to food and food processing and they can retain that local expertise and specialities while operating within a coordinated regional system for food production, processing, marketing and distribution. Such a system will help to encourage the development of a strong local food economy that reflects and is built upon, local needs. Mobile processing units are one example of how we can connect the region, bring greater value added to primary producers and build stronger connections between regions and urban centres.



CHAPTER 4:

Economic Impact of An Incubator

CHAPTER TAKEAWAY

- Several reports identify that existing facilities are over capacity and on a per capita basis, there is less food processing space that is government funded in Ontario than in any other province
- Our survey demonstrated that many of the existing incubators are at or over capacity
- While commercial kitchen space exists that can service the needs of newer companies, food processing space in the city is limited
- 4-5 new food processing entrepreneurs should emerge per year naturally in the ecosystem
- Additional entrepreneurs, from different communities, such as newcomers, those facing barriers or First Nations, may be developed from existing food retail business owners
- The right food space for new food businesses generally needs to include a component of retail to allow them to interact with their customers
- Based on our forecasts after 10 years, we would anticipate around 35-40 new companies to exist in the region and be connected to the incubator
- After 10 years, we would anticipate between 750-1000 jobs to be created

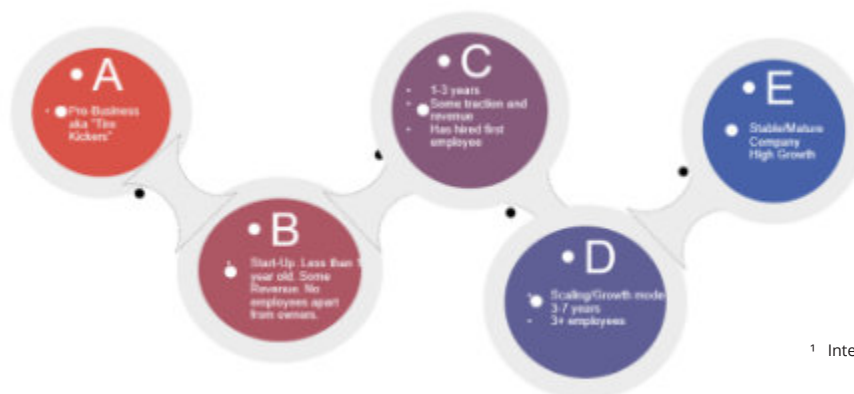
In this chapter we will discuss past and existing incubator models, identify the economic impact of an incubator and assess potential supply and demand for a food processing incubator in the region. We use London as a case study, but the same methodology could be applied to any region. We also differentiate between different types of kitchen space and identify the specific needs of early stage food processing companies.

Demand for An Incubator

As was previously discussed in Chapter 3, it was identified as early as 2003 that food production space in Ontario was limited when compared to other provinces. The construction of the Agrifood Venture Centre in Colborne which increased the manufacturing and food processing capacity of the region, as well as the development of the incubators associated with provincial colleges that have since developed, have increased the amount of space dedicated to food processing incubators in the province. However, the majority of these incubators are aimed at businesses that are already in growth mode, generally beyond their first year or two of business. They are aimed at helping companies to scale, not necessarily focused at working with early stage ventures.

One incubator that specifically targeted start-ups was Food Starter in Toronto. Food Starter emerged in 2016 as a City of Toronto initiative, supported by provincial funds, to create processing spaces for business start-ups, specifically targeting visible minorities, women and others. The Food Starter model involved creating space for start-ups, where they could rent affordable space to run food processing businesses. The idea was that as they grew, they would move on to other space in the community, making room for new businesses. The model ran for several years, but ran into cash issues by year 4. One of the challenges was that the companies were not moving on into other spaces within the community, but rather staying in the food incubator. To meet the needs of other emerging businesses, Food Starter continued to expand its operations. By 2018, the model was costing the City of Toronto over \$700,000 per year to maintain operations and the decision was made to close it down¹.

The departure of Food Starter left a dearth in the food processing space for early stage companies. In the last couple of years, the Food Starter space was taken over by District Ventures, the venture capital firm backed by Dragon's Den Arlene Dickinson. As a venture capital company, its focus is very much on acceleration, and less on supporting start-ups.



End Notes

¹ Interview with Michael Wolfson

The majority of the existing food processing incubators in the province are focused very much on later stage companies, particularly those that are in scaling mode, and for good reason. Servicing these companies is more cost effective, they can afford to pay higher fees, and the services they need correlate much better to food research, formulation and analysis; all services that would appeal to faculty and students. This is because the majority of food processing incubators in Ontario are associated with Community Colleges or Universities. The primary focus in many of these cases is not so much the food entrepreneur, but learning and teaching. Processing operations tend to be a secondary function to consultation services and a means of cost recovery, rather than the primary focus.

The Ontario Agri-Food Venture Centre ("OAFVC") is unique in that it's primary focus is on food production and processing. They offer a "pay to play" model with production and storage space, and offer processing capacity to entrepreneurs who are not yet ready to move into their own production facility. In speaking with the team that runs the operation, the start-up phase of the OAFVC was very difficult, particularly business development, and how only now, five years later are they reaching sufficient capacity to nearly break even. It is a large operation, with state of the art equipment and knowledge staff that care immensely about ensuring the success of the project. It is interesting to note that this operation is part of the Economic Development department of a county.

In nearly all of our conversations with food processing centre staff and teams, we heard over and over again the need for specialization. There is a Canadian network of food processing incubators. All of the individuals we spoke with are members of this network. Many tend to specialize in different products. From potatoes in PEI, to Wine in Niagara and dairy in Guelph and meat in LeDuc Alberta; each of these regions are conducting leading edge research, consulting work and innovating in these sectors. In our conversations, the recommendation that a new incubator in Ontario should be focused on meat and alternative proteins was heard more than once.

In our stakeholder feedback sessions with existing incubator managers, it was implied that there were already enough incubators in the region and that a new incubator really ought to think about what it's focus should be. And yet, the feedback from entrepreneurs that were interviewed stated that the consulting work they needed in starting operations, was not always overly received with enthusiasm from the College and University Centres. One entrepreneur opening a large scale processing operation, felt somewhat rejected by one of the incubators, and felt far more appreciated by a smaller niche educational program. The work this individual needed was assistance in setting up his operations, evaluating equipment and researching recipe changes. The entrepreneur felt the smaller program was more supportive and between the entrepreneur's existing network of colleagues in the same field, and the students that co-oped in his business, they were able to get the operation up and running.

While several incubators cautioned us on properly evaluating the need for another incubator, when surveyed, all of the incubators who responded, felt that they were operating at 80% or more capacity.

Several replied they were operating above capacity. Entrepreneurs sometimes have to wait months for consulting projects. In today's fast paced economy, months can mean the difference between losing out on a contract to a competitor, not bidding on a sector specific RFP, or losing your competitive edge with regard to technical innovation. It is a sign that more of these services are needed; not fewer.

Forecasting Demand

Several different means can be used to analyze both existing supply and potential demand. One way we have chosen to examine the question is to look at the supply of raw materials. Through our conversations, many regions claimed they were the most intensive farming regions in Ontario. We have chosen farming, because this was one of the main focuses in this project; the ability to empower primary producers to earn more and do more with their crops.

In using data from OMAFRA, we can examine the number of acres dedicated to farmland in different areas around the region. Breaking down the province into 5 regions, we can see that the region with the greatest percentage of farmland is Southwestern Ontario. Since the Central region includes the GTA, it will have more population and thereby a greater number of companies. The Southwestern Ontario region by comparison, has the greatest number of acres with crops as of 2016. When we add in population, close to 1/3 of the population is located in Southern Ontario (and Hamilton and London have grown significantly since the last census due to an increase in individuals moving out of the GTA and into smaller secondary communities). Central Ontario has 38% of the population, 26% in Western Ontario, 12% in Eastern Ontario and 5% in the North.

Locations	% of crop land (2016)	Population (2016)	# of Incubators
Southern: Brant, Chatham Kent, Essex, Haldimand Norfolk, Hamilton, Lambton, Middlesex, Niagara, Oxford	32%	19%	1 (Vineland Ontario);
Central: Durham, Haliburton, Hastings, Kawartha Lakes, Muskoka, Northumberland, Parry Sound, Peterborough, Prince Edward County, Toronto, & York	13%	38%	4 (George Brown, York, OAFVC, District ventures)
Western: Bruce, Dufferin, Grey, Halton, Huron, Peel, Perth, Simcoe, Waterloo, Wellington	31%	26%	2- Guelph and GFI, ???
Eastern: Frontenac, Lanark, Leeds and Grenville, Lennox Addington, Ottawa, Prescott Russell, Renfrew, Stormont Dundas and Glengarry.	17%	12%	1 new under development
Northern: Algoma, Cochrane, Greater Sudbury, Kenora	7%	5%	None

While the population is higher in other regions, the number of crops is greatest in Southern Ontario, and it only has one incubator, Vineland, which specializes in working with fruit and vegetables and alcoholic products. Southern Ontario and the North, remain underserved when it comes to incubators, whether by virtue of population or number of farms in the region. In both Southern Ontario and the North, the endpoints of the region are located quite far apart, such that Vineland is nearly 4 hours to Essex county. It stands to reason that by virtue of population, number of farms, and size of geographic area, Southern Ontario can support another incubator. The north is also drastically underserved, but that is beyond the scope of this paper.

Quantifying Demand by Population Projection

As part of our research we spoke with the London Small Business Centre, several of the regional CFDC's and Business Enterprise Centres about the number of food production businesses that they might see in a year. Answers were non conclusive and non committal, but most identified that in a given year, several businesses might grow to the scale that might be able to access the incubator.

A government report on the health of SMEs identified that on average, in the goods producing sector, the new business start up rate is approximately 8.1% of the total number of firms in the ecosystem. This implies that each year, we might see between 8-9 new firms in food processing in the London region. The London area has between 90-100 food processing companies. For the ease of calculation, and because London does have some reputation as a food processing centre, we will average these numbers to 10 new businesses each year, notwithstanding the impacts of COVID. We will assume that the incubator can capture 4-5 new businesses each.

Number of Food Manufacturing Businesses in Ontario	3,000
Ontario Population	14,570,000
Rate per capita	4,856.67
London Population and region population	500,000
Anticipated # of Companies in London and area	102.95
Business renewal rate for Food Processing	0.08
# New businesses in the region per year	8.54

Finding more Entrepreneurs

Throughout our interviews and entrepreneur consultations, one concept that came out, was the idea of the accidental food processing entrepreneur, one that perhaps was running a food retail business but began to produce food either as an additional revenue stream or because of changes to their environment, such as due to COVID. These individuals certainly are entrepreneurial, but may not have thought of food production as their full time business. Many of these entrepreneurs may be visible minorities, newcomers, First Nations, or individuals with barriers. These entrepreneurs may well have innovative products and ideas that could be transformed into food businesses, but they either see food production as a part time project or a weekend hobby to supplement their main income. It may be possible to turn these individuals into food processing entrepreneurs simply by helping them to shift their perspective on their company.

One way to get them into the incubator, will be to offer them food preparation space and support services. By bringing them into the incubator, they may begin to see the potential of their product(s) and see food processing as an opportunity to grow their business. It will also serve to diversify the individuals using the space and growing their businesses across the community.

Supply: The Right Kind of Space

One of the comments we heard routinely was about the lack of space for food based businesses, regardless of whether these businesses were caterers, food restaurants or others. Even in the course of the project, several businesses approached us inquiring about potential space for their food business. The challenge seems to be twofold. One, that pre-pandemic there was not a significant supply of ready move-in ready commercial real estate space, particularly with retail frontage and two, that there is a very small window of what entrepreneurs are willing to pay and the availability of current space at those rates. This unfortunately appears to be one of the challenges of being a food entrepreneur. Many entrepreneurs will go to different lengths, from space sharing to using trailers as ways of coping with expensive space. Adapting is one of the hallmarks of being an entrepreneur and it is not within the scope of this incubator to solve that particular dilemma, apart from the fact that the incubator can be a hub for connecting entrepreneurs and providing lists of space availability around the city.

With the advent of the pandemic and subsequent lock-downs, it is estimated that 1 in 6 small businesses will not survive the pandemic² and a large proportion of these are food based businesses in the hospitality sector. This has already created a noticeable increase in available commercial space in the market, and more may be coming as government aides and abatements end. This should help to increase existing commercial space at more affordable prices.

Different Types of Space at Different Stages

It is useful to differentiate at this time, between the different types of space entrepreneurs need. Few entrepreneurs need a full food manufacturing facility on the first day they open their business. Rather, as their business concept emerges and matures, space needs will differ. Based on our interviews and observations, we would identify the following type of commercial space needs:

Stage	Space Need	Budget	Best space match
Year 1 Experimenting	Commercial kitchen; or with new change may be able to work from home, depending upon type of food	Little or non existent	Farmer's market or rent space from another food business
Years 1-2	Commercial kitchen; depends upon what product is being produced or larger processing space	Small budget; may look at own space, or shared space with other food businesses	Small space or shared space
Years 3-5+	Own processing space	Has dedicated customer base	Own processing space

End Notes

² <https://globalnews.ca/news/7590374/small-businesses-closure-canada-covid-19/>

Different Types of Space at Different Stages (Continued)

For businesses just starting out, finding adequate space at a booth such as the Western Fair, may provide individuals with the space to experiment with their food business and produce concepts, test the market and identify if there is sufficient business to scale their operations.

Smaller commercial kitchen space is available in different locations around the city. Prior to COVID, places like Ya-Ya's kitchen, Youth for Christ, The YMCA in Komoka and other places around the city provided access to certified and inspected kitchen space. The challenge with many of these spaces is that it has to be scheduled in advance. For many food businesses, their production is not pre-planned but rather reactive to orders. As such, many entrepreneurs found it easier to have a dedicated space rather than attempting to access commercial kitchens.

Where there is a dearth or lack of space, is not for an individual looking for a commercial kitchen, but rather for those scaling and looking at the next level of operations in food manufacturing. Those individuals likely already have a growing business and are looking at taking it to the next level. This growth requires access to processing equipment and a larger space, dry, refrigerated and frozen storage and more. These companies may not be at the point yet where they can build out their own 5,000+ square foot facility but are at the stage where a dedicated space, with the right equipment can significantly help them to scale their business and improve output. There are currently no facilities in the London region that meet this need, without some type of heavy renovation work or custom build; both of which are expensive options for small companies just starting their operations. For this reason, an incubator may well be the best option for companies that have some maturity and have demonstrated a desire to grow beyond the needs of a small commercial kitchen facility.



What kind of Incubator does the Region Need?

Studies demonstrate that in general, companies that go through an incubator program tend to have 10-15% higher survival rates after 5 years than businesses that do not and³ have higher rates of acquisition than comparable companies. It is noted that these companies receive key assistance at the right times to help their businesses, make key connections and build their networks, avoiding many of the pitfalls that challenge traditional entrepreneurs in this space, saving them both time and money. This implies that these companies do better in the long run than companies not participating in an incubator program. However, incubators have a tough time surviving economically as discussed in the previous chapter. So, while incubators may offer participating companies high levels of return, they also are expensive to run. One of the main reasons Food Starter closed, was due to the high operating and capital costs associated with upkeep and running such a project.

We also heard from entrepreneurs and service providers that education and systems guidance are the services that food entrepreneurs need most. If anything, COVID 19 has demonstrated that many of these services can be run online as many organizations have continued their programs using Zoom and other similar technologies.

Providing online education, once the initial costs of program development are out of the way, can be more cost effective than traditional learning. Taking programs and coaching online, is more cost effective for servicing a high number of students and can assist the incubator in servicing more students, over a wider area in a more cost effective manner. Online education and coaching can save between 5-50% in program delivery costs. While some groups may be more difficult to service (such as newcomers with language barriers), online translation services and speech to text translation are all emerging fields that can extend the service offering.

Additionally, business coaches can be hired that speak several languages enhancing program delivery options⁴.

The other role of the incubator needs to be in being a hub for industry activity. An incubator needs to play a role in making connections, facilitating entrepreneurs through different food processing challenges, helping individuals with logistics, distribution, scaling and more. The other need of food processing companies is around research and development, labelling and testing. In the majority of food processing incubators, these functions are run out of their related educational institutions. In the case of the incubator for the London region some of these functions might be best offset through partnerships with Fanshawe College and Western University, specifically Brescia College. To be successful, this incubator ultimately needs to be a connector of people, companies, and ideas and a place where these interactions can happen.

End Notes

³ <http://ftp.iza.org/dp11856.pdf>

⁴ <https://www.edsurge.com/news/2018-04-12-do-online-courses-really-save-money-a-new-study-explores-roi-for-colleges-and-students#:~:text=%E2%80%9CWhen%20we%20compared%20the%20overall,costs%2C%E2%80%9D%20the%20report%20says>



Job Creation & Economic Impact of an Incubator

An incubator represents a large investment by the government and its partners. As will be identified in Chapter 9, an incubator can cost upward of 5 Million dollars and can have high ongoing operational costs. Despite this, over the last few decades, governments have continued to invest in incubators. Studies demonstrate that firms that participate in incubators are more likely to be successful, scale faster and create more jobs.

When we look at industry data, companies of average size in the food industry, on average have an annual failure rate of 8.1%. This means that of all the firms in a region, on average, 8.1% of all companies in a given year will fail. This annual failure rate decreases over time as new companies mature and stabilize. By calculating the weighted average failure rate, we can estimate that if 10 companies start per year in this sector, after 10 years, about 37 of them will still be in existence as previously identified.

# New Businesses after 10 Years	37.2	
# Jobs Created	Low	High
# Employees Range Assumption	20	50
# Jobs Created	744	1860

We ran the scenario with an average number of employees as 20 and 50. Small firms can have 1-5 employees, while a large firm can employ more than 1500. If after 10 years we will have about 37 companies, we can assume that this would be the natural growth rate for new companies in the region. In 10 years we would see 740+ jobs in the region at the low end, with over 1800 at the high end.

If regional companies were to go through an incubator and decrease their failure rate while increasing the size of the respective firms, the number of jobs would correspondingly increase.



By increasing the survival rate by 15%, our total number of companies overall would increase to over 42, thereby increasing the number of jobs to over 850 at the low end to over 2100 at the high end.

We believe that based upon our research that the presence of an incubator will likely lead to a clustering of firms related to food processing and production in the region. These firms will need more than just an incubator to assist them. They will need help accessing financing in order to keep growing. They will need space and/or development ready land as they outgrow the incubator, and they will need a trained workforce. As will be explored in the Partnership and Outreach section of this report, all of these are achievable, but will be more effective through partnerships and joint programming.

When we look to other economic clusters, we see not just the presence of firms and the institutions that support them, but also private sector partnerships, training programs, financiers and banks, and clear firm leaders that set the stage for the continued growth of the industry and sector. In many cases it is these third groups, that are neither firms nor non profits that act as connectors within the sector. They work with many different agents and bridge information gaps, creating a system of innovation where the growth of firms jointly within the cluster is greater than the growth of firms in the same sector, located elsewhere.

An incubator can provide many benefits to a community. It brings together the collective sectoral knowledge and can be an asset in knowledge transfer and development. An incubator will bring entrepreneurs together in different ways, and provide a place for maturing and scaling companies. This environment creates opportunities for the sector to develop as a whole. As these firms grow in the local ecosystem, they will certainly have an impact through economic multiplier effects, job creation and increasing the likelihood of success for firms in this sector.

A decade from now, the impact of the incubator will be far-reaching. There will be an increased concentration of firms in this region and the development of specialized knowledge and services to connect and coordinate firms to the broader economy. There will be an impact with regard to jobs, secondary and tertiary support services, as well as the recognition of the region as a food processing cluster. An investment such as this will have broad and far reaching economic impacts.



CHAPTER 5:

Regulatory Considerations for Food Processing in Canada

CHAPTER TAKEAWAY

- **Different types of activities have higher levels of risk and correspondingly more regulation**
- **We recommend a phased approach, with higher risk activities implemented later. We recommend general kitchen facilities, followed by meat at a later date.**
- **It is highly recommended that experts in HACCP and other certifications be hired to assist with implementation.**

In this chapter, we aim to identify the main regulations that a food processing incubator would have to address as well as identify the levels of risk associated with each sector. We have approached the regulatory environment from a geographic perspective; commencing at the municipal level and moving upward in scale to federal regulations. Regulatory considerations related to development, such as Zoning, or Corporate structure of the proposed organization, are identified in the related appendices.

Local Regulations

At the municipal level, municipalities take responsibility for enforcing public health regarding food safety and water quality. The provincial Health Protection and Promotion Act gives the 36 local health agencies across Ontario the power to carry out duties and inspections in restaurants, food processing, manufacturing and other food establishments.

Municipalities also develop by-laws, zoning and building codes. While the Ontario Building Code is the basis for building codes across the province, it can be interpreted in different ways. This leads to different municipalities having different regulations for the same type of business set up.

Businesses that prepare food for public consumption must be inspected by the health department. Public health officials use a risk-based approach when promoting food safety and educating food handlers. They use the definitions of high-risk or potentially hazardous and low-risk or non-hazardous foods to identify the inherent risk of the products and the food safety practices required for each. For example, bread would be considered low risk or non-hazardous, while chicken and milk are considered high risk or potentially hazardous.

Key compliance considerations: Building by-laws and fire code as each region may interpret differently, and inspections.

Provincial Regulations

A food facility that is developed, will have to be aware of and follow the following regulations:

Ontario Building Code: Governs the buildings standards for all types of buildings in the province of Ontario. Enforced and interpreted at the local level.

Ontario Food Safety and Quality Act 2001

Regulates food production generally, with specific focus on:

A. Produce Honey and Maple Products

Key considerations here are regarding the pasteurization of honey and labelling requirements. This is generally a lower risk area.

B. Eggs and Egg Processing

Eggs have to be graded and purchased from a grading facility. Key considerations will be if caterers and/or food processors are using farm gate eggs which are ungraded. Eggs have their own regulations and are higher risk than some categories (such as fruits and vegetables). The unique regulations around eggs are detailed in Appendix A.

C. Fruits and Vegetables

Fruits and vegetables, particularly those undergoing light processing, tend to have fairly low levels of regulations and restrictions due to their low risk. One of the main concerns with fruits and vegetables is traceability. Ensuring that a head of lettuce is traceable to a certain farm or field is important, particularly in light of outbreaks. Restrictions around processing tend to be fairly straightforward, with no construction or design restrictions. From a risk perspective these products tend to be lower risk. Some greens such as romaine lettuce are prone to outbreaks, but fruit and vegetable processing has fewer risks and correspondingly, fewer regulations than other sectors.

D. Milk and Dairy

Dairy is one of the most restrictive categories. Facilities that process dairy, whether processing milk making cheese or ice cream, are subject to a gamut of regulations that govern everything from facility design to construction. The risks associated with milk production are higher than in other sectors.



Livestock and Poultry Carcasses

This will not be a consideration, as we do not foresee entire carcasses being brought into the facility. This category has its own requirements that can be found on OMAFRA's website.

Meat & Meat Processing

Meat is one of the more stringently regulated industries due to its higher risk profile. Depending upon the volume and percentage of meat in a facility, it impacts facility design, classification and required ongoing inspections.

As per OMAFRA's website "Any meat or meat product sold or distributed in Ontario must come from inspected sources. These sources include a provincially licensed meat plant (abattoir or free standing meat plant), a federally registered facility or other approved imported sources. The sale or distribution of uninspected meat is illegal, regardless of geographical area, distribution or retail channel." There are no farm gate provisions for meat farmers. These industries have higher regulatory standards in an effort to minimize the inherent risks that exist in the sector.

Recommendations

Meat processing facilities are subject to different construction standards than regular plants. There are specific materials required for floors and walls, specific standards for drainage and grease traps, along with waste disposal. If meat processing is an area that is under consideration for the incubator, it is imperative to note that it should be identified early in the planning stages in order to account for the construction requirements. Or alternatively construct in a different way. In Appendix A, the general regulations around meat and how it might impact a food processing centre are noted and included for your review.

Understanding Different Industries, the Regulations and Key Risks

Below, we have identified four different food categories, the key provincial legislation that governs that sector, as well as the key risks that a food processing facility might have to address.

Area	Fruit and Vegetables	Eggs and Egg processing	Meat	Dairy
Legislation	<ul style="list-style-type: none"> • Regulation 119/11 of the Food Safety and Quality Act; • Vendors need to conform to Under the Food Safety Monitoring (FSM) Program; 	<ul style="list-style-type: none"> • Regulation 171/10 - Eggs and Processed Egg under the Food Safety and Quality Act, 2001 regulates the sale, distribution, offering for sale, shipping, transportation and advertising of eggs and processed egg in Ontario 	<ul style="list-style-type: none"> • Food Safety and Quality Act, 2001 • Meat: Ontario Regulation 31/05 • General: Ontario Regulation 222/05 • Fees: Ontario Regulation 223/05 • Disposal of Deadstock: Ontario Regulation 105/09 • Livestock and Poultry Carcasses - Grades and Sales: Ontario Regulation 226/09 • Divided into category 1,2,3. If any of category 2 or 3 need to have a provincial meat license and subject to inspection by OMAFRA. 	<ul style="list-style-type: none"> • Milk Act, R.S.O. 1990, c. M.12
Key Risks	<ul style="list-style-type: none"> • Producers need to have products tested in national laboratories for microbes; Microbial non-compliance. Please refer to Appendix F for a list of different best practices and sample evaluation tools. 	<ul style="list-style-type: none"> • Ungraded eggs cannot be sold, distributed or offered for sale processed egg unless the egg is processed, packed, marked and labelled in accordance with the Federal Processed Egg Regulation. 	<ul style="list-style-type: none"> • Products like pepperoni pizza with 25% or less of its content being meat do not qualify as Category 2 or 3, but curing meat does. It will have to be made clear to participants what activities are allowed and which are not allowed • There are regulations around facility design, plumbing, layout and construction standards that will have to be adhered to • If the incubator has meat processing, if more than 20,000 kg processed, the facility will be subject to health unit inspection, regardless if they are a primary producer 	<ul style="list-style-type: none"> • Regulation of Milk processing, plant construction and pasteurization (Points 72 onward in the Act- Appendix B). • The act is very extensive and mentions how dairy is handled and processed.
Areas to consider	<ul style="list-style-type: none"> • Employing Good Manufacturing Practices (GMP's); • Control Programs, Environmental Controls, Operational and Training Policies- See Appendix 	<ul style="list-style-type: none"> • The sourcing of materials that are used in the processing plant, need to be compliant with different regulations that pertain to that food sector. 	<ul style="list-style-type: none"> • Extent of meat facilities and what will be allowed where. Will impact facility design and operation? For example areas where caterers might rent would have to be separate from processing facilities. The volume of meat impacts the regulations 	<ul style="list-style-type: none"> • If individuals are using dairy in the facility, have to comply with the regulations for dairy, regardless of amount.

Livestock and Poultry Carcasses

This will not be a consideration, as we do not foresee entire carcasses being brought into the facility. This category has its own requirements that can be found on OMAFRA's website.

Meat & Meat Processing

Meat is one of the more stringently regulated industries due to its higher risk profile. Depending upon the volume and percentage of meat in a facility, it impacts facility design, classification and required ongoing inspections.

As per OMAFRA's website "Any meat or meat product sold or distributed in Ontario must come from inspected sources. These sources include a provincially licensed meat plant (abattoir or free standing meat plant), a federally registered facility or other approved imported sources. The sale or distribution of uninspected meat is illegal, regardless of geographical area, distribution or retail channel." There are no farm gate provisions for meat farmers. These industries have higher regulatory standards in an effort to minimize the inherent risks that exist in the sector.

Special Focus on Meat

One of the key considerations in working with meat, is that certain types of inspections are required depending upon both the volume of meat produced as well as the final destination for the product. Meat, particularly facilities that slaughter, have a wide range of additional requirements such as dealing with the transportation and welfare of animals prior to, and post kill.

While it is not envisioned that this project will include a slaughter facility at this time, much of meat processing still falls subject to the same regulations. Based on our understanding of the type of products that would be utilized in a food processing operation and assuming that the products would be consumed within the province of Ontario, we assume that the incubator would fall under a Category 2 of the provincial regulations. This implies that the operator of the centre would need to qualify for a provincial license to process meat, and would be subject to regular OMAFRA inspections. The classification would make the incubator a Free Standing Meat Plant (FSMP). The meat has to be inspected before it can be processed or sold. As per the chart below it identifies the different restrictions for each category.

Provincially inspected	Federally inspected	No license required; just public health
<ul style="list-style-type: none">•Can only be sold within Ontario borders•Must be provincially licensed abattoir or free standing meat plant (fsmf)•smaller and focus on specialty markets•FSMF do not slaughter. Focus is on boning, aging, cutting slicing, cutting, fermenting, depends on type of meat products produced•License comes from OMAFRA	<ul style="list-style-type: none">•Larger and more stringent regulations•Higher volumes and have to meet international and interprovincial trade requirements	<ul style="list-style-type: none">•Caterers/preparing for food service•sandwiches, pizza buillon or fat (25% or less meat ingredients)•Less than 25% of total business are meat sales or;•less than 20,000 kg per year

In addition, figure 3.1 below, a flow-chart, provides a visualization of the decision making process needed to understand the type of license required.

Special Focus on Meat

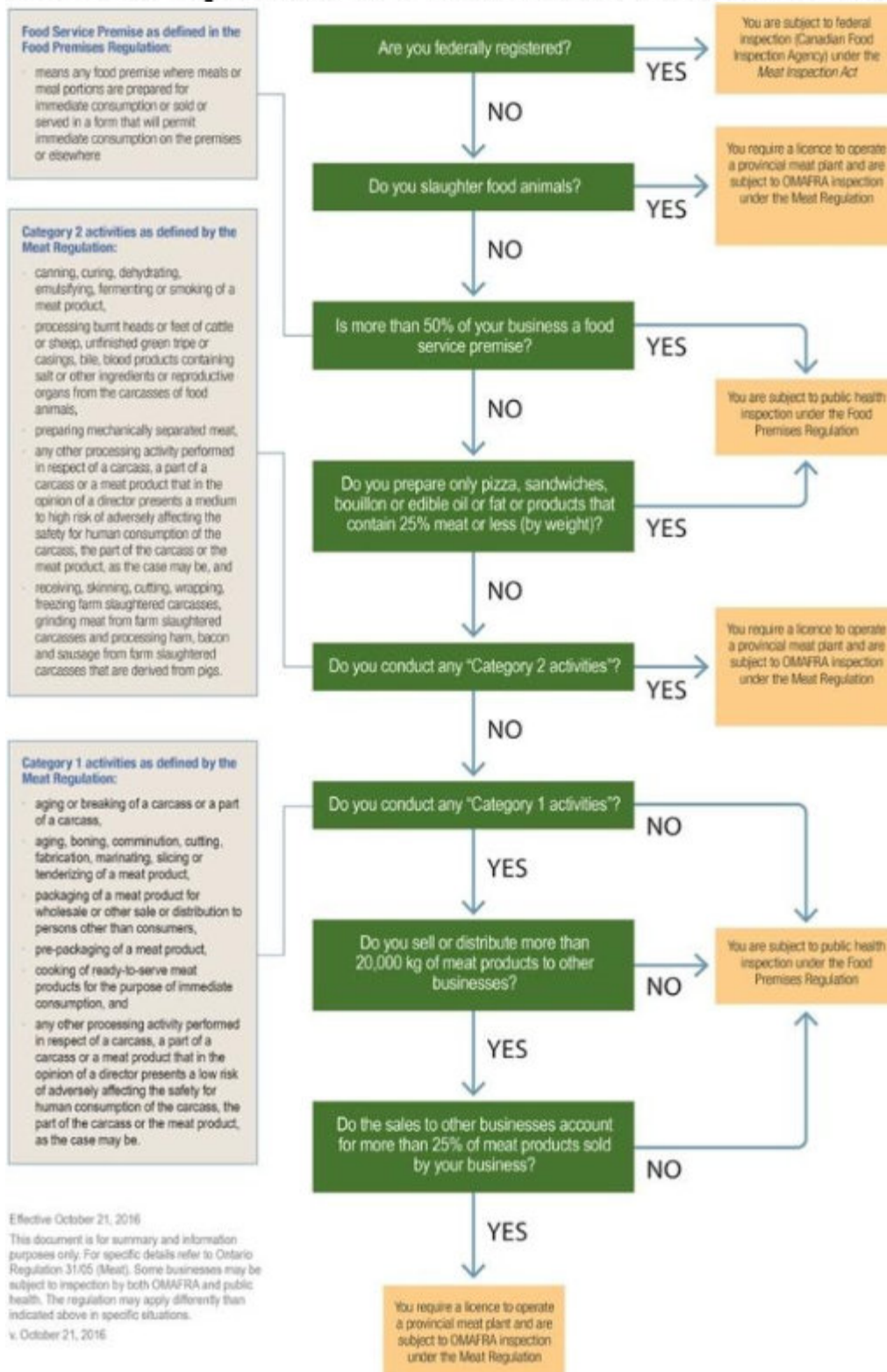
The regulations surrounding meat also include accepted best practices that need to be adhered to. These can be quite extensive and cover each of the following areas:

- | | |
|--|----------------------------|
| 1. Personal and product handling for workers | 5. Soil Amendments |
| 2. Cleaning and sanitation | 6. Recall and Traceability |
| 3. Water and wastewater | 7. HACCP |
| 4. Pest Control, Building Maintenance and Access | 8. Validation |

Recommendation:

If meat is chosen as one of the investment areas, it is recommended that a specialist in this area be hired to work with the prospective Operator to ensure that the facility is designed to meet all of the stringent requirements. At this time, we do not recommend using Meat as a Phase I.

Do You Operate a Provincial Meat Plant?



Hunted Game

Based on the Ontario regulations, a licensed meat plant may receive hunted game. Hunted game is for consumption by individuals and not for sale and has to be labeled “Consumer owned, not for sale”. This implies that if we are working with indigenous or other populations, hunted meat cannot be resold. In addition, a facility that processes only hunted meat, even if it includes a category 2 activity such as smoking or fermenting, does not require a license and only will be subject to local health unit inspection.



Bakeries

Baking facilities that are producing for local consumption tend to fall under municipal inspection jurisdiction. Unless the bakery is using an extensive amount of meat and/or shipping across provincial/national boundaries, they simply have to adhere to local municipal by-laws. Of particular interest are requirements for grease traps and piping.

Recommendations

At this time it is not recommended that baking be one of the key focus areas for the incubator. There are many facilities that can be converted into baking facilities and traditionally, each type of baking may use specific equipment that may not lend itself to use by another group.

Beverage Facilities

Beverage facilities do not have any specific regulations at national or provincial level, but depending upon the municipality may have special municipal requirements, particularly focused on wastewater disposal. Wastewater may have to be treated depending on the type of beverage being prepared, the water acidity and other metrics may come into play. Traditionally beverage processing would require health unit inspector approval, along with consultation from waste water officials and municipal by-law officers.

Recommendations

It is recommended that if beverage processing is to be an industry that the incubator is utilizing, that it consult with local health and municipal inspectors early on in the process. At this time, we are recommending that any beverage lines be added in a Phase II in the second year of operation.

Farm Gate & Farmer's Markets

Of special consideration, are the requirements surrounding Farmer's Markets and Farm Gate Sales. Generally, if a market consists of greater than 50% of vendors who are farmers' market food vendors, then all vendors are exempt from inspection. However, food vendors are still responsible for providing safe food, including ensuring all food is from an approved source³.

Food vendors at all other markets must meet the requirements in [Ontario Food Premises Regulation](#) (O. Reg. 493/17). In addition, each food vendor must fill out a profile form and food that is for public consumption must be prepared in inspected kitchens.

Federal Regulations

Products that cross provincial or national boundaries are subject to Canadian Food Inspection Agency (CFIA) requirements, and are also subject to regulations in the country of end destination—so for example, a product being shipped to the United States is subject to their regulations. Examples of situations that fall under CFIA regulations:

- Meat Inspection Act-Federally inspected meat facilities- such as kill facilities or facilities where the end product is being shipped out of province.
- Labelling-All labels must be approved by CFIA. Only individual servings or fresh fruits and vegetables in Canada do not require labels.

Outside of this, there are very stringent regulations around meat, covered in the document Meat Hygiene Directive 2011-40.

Recommendations

At this time, it is not recommended that a facility that falls subject to federal regulations be established as the cost and investment requirements are significantly higher than for other industries.

Labels

Labelling practices are regulated and dictated by CFIA. The legislation and requirements are very specific and can vary company to company. It will be important to develop good working relations with individuals at CFIA early on and to develop classes and tutorials about labelling requirements. This being said, dependent upon the industry, the end consumer location and the size of the packaging are all things that can impact how labelling must be done. Please refer to Appendix E for a list of different labelling standards.

Developing a Matrix to Score Risk

Since the goal of this project is to assess the feasibility of a food processing incubator, it is important to note that some means of assessing risk is needed that will enable the host organization and its partners to compare sectors to one another. In such a model project timeline, industry knowledge and experience all play an equally important part in scorecard creation.

Of specific importance in the development of such a matrix is measuring the systemic and inherent risk each sector brings. Based on our review, we have scored each industry on a scale of Low Medium and High, with low meaning that few or no risk exist, medium indicating a certain level of risk and high indicating many different risks to be considered.

Sector	Inherent Risk	Contamination Risk	Experience/ Knowledge Required	Specific Construction / Design Requirements	Disposal/ Wastewater
Eggs	Medium	Medium	Low/Medium	Low/Medium	Low
Meat	High	High	High	High	High
Dairy	Medium	High	High	High	High
Bakery	Low (depends on what materials used)	Low (depends on what materials used)	Low/Medium	Low/Medium	Med
Beverage	Low (depends on what materials used)	Low (depends on what materials used)	Low/Medium	Low/Medium	Low/High
Fruits and Vegetables	Low (depends on what vegetables)	Low (depends on what vegetables)	Low (depends on what vegetables)	Low (depends on what vegetables)	Low (depends on what vegetables)

Risk Assessment for Each Sector



Eggs - Eggs tend to be an area where there is inherent risk with the product and contamination but low to medium with regard to experience, knowledge and construction requirements. Apart from storage temperature regulation and risks of salmonella and cross-contamination, which are a part of the food industry, there tend to be few risks associated with eggs.



Meat - Meat tends to be amongst the most regulated, requires the most sector specific knowledge and carries the highest risk of all the food groups. There is both inherent risk, as well as contamination risk associated with meat. There are specific construction requirements for facilities that handle meat. There is also specific waste water and disposal processes that must be followed for sanitizing a meat preparation area.



Dairy - Much like meat, dairy also is a highly regulated industry. Milk production and processing tend for the most part to be separate in Ontario, with the exception of a few cases. Transporting milk and working with it to create milk-byproducts poses significant risk and is highly regulated. The construction of milk processing facilities, the equipment and infrastructure are all controlled. Sector knowledge is very specialized and specific regulations around disposal and wastewater practices.



Bakery - Bakeries, depending upon the materials being used (such as dairy or meat) tend to be lower risk activities and less regulated. Most bakeries just require a municipal health inspection and may or may not have special infrastructure requirements (again, dependent upon the materials they tend to work with). Sector knowledge while important, has lower barriers to entry and far fewer requirements than other sectors. Overall, both contamination and inherent risk are lower than in other sectors.



Beverage - Beverages, tend to have lower inherent risks, but much of this depends on the source ingredients being used to create the product. Bottling and canning have their own risks, but with proper procedures risks are decreased. Industry/sector knowledge plays an important role in proper procedure development, as does traceability in this sector, but overall the risks are lower than with meat or dairy. Depending upon the municipality, proper wastewater disposal may be an issue to keep in consideration.



Fruits and Vegetables - Fruits and vegetable processing have among the lowest inherent risks associated with food production. The traceability of the product tends to decrease risks but handling and processing risks are overall fairly low. Industry and sector knowledge while important, are not as much of a barrier as they are in dairy or meat which tend to have more specialized processes. Wastewater disposal is not much of an issue. Some vegetables like leafy greens which tend to have more cases of contamination, require more specialized handling, but overall vegetables tend to have lower risk than other food categories. As in any of the areas, food science is needed to ensure that processing is conducted in an appropriate way..

Recommendation

If the organization wishes to adopt meat as a focus area, much of the construction costs can be avoided by building stand-alone units, such as the picture below and having pippin external rather than in ground. This will reduce some of the costs associated with the construction of a meat processing facility. At this time, we would recommend that Meat Processing be adopted as a Phase III activity in Year 4 or later.



Developing Risk Management Practices

Food regulation is a complex topic and particularly when it comes to the structural requirements of a facility. While this overview has been framed as concise, in reality it is very complex. It is highly recommended that when the time comes, that an expert in facility design be hired to ensure the facility is compliant with all regulations from a design perspective.

In addition, it is recommended that the operator of this facility develop risk management practices. One such standard is HACCP. HACCP stands for Hazard Analysis Critical Control Point. Generally, HACCP has 7 stages which are detailed below:

- Conduct a Hazard Analysis
- Identify Critical Control Points (CCP)
- Establish Critical Limits.
- Monitor Critical Control Points
- Establish Corrective Actions
- Establish Record Keeping Procedures
- Establish Verification Procedures.

HACCP is an international standard and is used extensively in food systems. Developing a HACCP plan for the facility and all its prospective tenants provides the organization with an accepted risk management plan that meets national and international standards. Other standards such as ISO are also used in various facilities. Please refer to Appendix D for a list of different certifications to consider.

Figure 2: Steps in Developing a Risk Assessment Protocol Using HACCP

Below, we have identified four different food categories, the key provincial legislation that governs that sector, as well as the key risks that a food processing facility might have to address.



Conclusion

Key to this chapter, is to understand that certain food categories, such as dairy or meat will bring additional regulations that will have to be adhered to and are subject to additional risks. At this time, we are recommending a phased approach to incubator development with the development of Kitchens as a Phase I, a Mobile line as a Phase II and Meat and Alternative Proteins as a Phase III. While regulations facing the food sector can be daunting, there is a litany of skilled and knowledgeable specialists that can help navigate the system and ensure the facility and its prospective tenants are compliant. The role of the operator will be key to ensuring compliance at all levels, but mainly at the municipal and provincial levels of government. Developing a plan to mitigate risk is equally as important, and the incubator will have to become knowledgeable about these risks and how to address them, not only for itself, but for its prospective tenants. By learning to successfully navigate the regulatory system, the incubator will be setting itself and its tenants on the road to compliance and risk mitigation success.

Appendix A - Regulations Around Eggs in Ontario

Please refer to OMAFRA online: <https://www.ontario.ca/laws/regulation/100171>

Appendix B - Dairy Regulations

Please refer to OMAFRA online: <https://www.ontario.ca/laws/statute/90m12>

Appendix C - Meat Regulations

Meat Facility General Requirements from OMAFRA's website.

From OMAFRA

Category 1: activities as defined by the Meat Regulation are aging or breaking of a carcass or a part of a carcass, aging, boning, comminution, cutting, fabrication, marinating, slicing or tenderizing of a meat product, packaging of a meat product for wholesale or other sale or distribution to persons other than consumers, pre-packaging of a meat product, cooking of ready-to-serve meat products for the purpose of immediate consumption, and any other processing activity performed in respect of a carcass, a part of a carcass or a meat product that in the opinion of a director presents a low risk of adversely affecting the safety for human consumption of the carcass, the part of the carcass or the meat product, as the case may be. If you do not sell or distribute more than 20,000 kg of meat products to other businesses, you are subject to public health inspection under the Food Premises Regulation.

Category 2: Category 2 activities as defined by the Meat Regulation are canning, curing, dehydrating, emulsifying, fermenting or smoking of a meat product, processing burnt heads or feet of cattle or sheep, unfinished green tripe or casings, bile, blood products containing salt or other ingredients or reproductive organs from the carcasses of food animals, preparing mechanically separated meat, any other processing activity performed in respect of a carcass, a part of a carcass or a meat product that in the opinion of a director presents a medium to high risk of adversely affecting the safety for human consumption of the carcass, the part of the carcass or the meat product, as the case may be, and receiving, skinning, cutting, wrapping, freezing farm slaughtered carcasses, grinding meat from farm slaughtered carcasses and processing ham, bacon and sausage from farm slaughtered carcasses that are derived from pigs.

Food Service or Weight of Product. If more than 50 per cent of your business is a food service premise, you are subject to public health inspection under the Food Premises Regulation.

- If more than 50 per cent of your business is not a food service premise, do you prepare only pizza, sandwiches, bouillon or edible oil or fat or products that contain 25 per cent meat or less (by weight)
- If you prepare only pizza, sandwiches, bouillon or edible oil or fat or products that contain 25 per cent meat or less (by weight), you are subject to public health inspection under the Food Premises
- If the sales to other businesses do not account for more than 25 per cent of meat products sold by your business, you are subject to public health inspection under the Food Premises Regulation



- If the sales to other businesses account for more than 25 per cent of meat products sold by your business, then you require a license to operate a provincial meat plant and are subject to OMAFRA inspection under the Meat Regulation
- If you do conduct any Category 1 activities, do you sell or distribute more than 20,000 kg of meat products

The following are some of the things the ministry requires for a plant to become licensed:

Federal Regulations

Plant and Equipment Design and Construction

- The plant layout is designed so that incompatible activities are separated to control cross-contamination, e.g., processing of raw meat products are kept separate from processing of ready-to-eat meat products
- Washrooms in a plant are separate and do not lead directly into rooms where carcass parts or meat products are prepared, packaged, labelled, refrigerated, stored or handled
- Surfaces that come in contact with food are non-absorbent, corrosion resistant and free of crevices to prevent accumulation of food debris and microbial growth
- The rooms, equipment and utensils must be constructed of materials that can be effectively cleaned and sanitized
- Meat products and ingredients are handled and stored in a manner that controls the growth of harmful microorganisms, prevents chemical contamination and protects them from physical damage

Meat Plant Operations

- The plant is free of pests
- Food handling areas are operated in a manner to prevent cross-contamination from non-compatible activities, ensure the hygienic processing of meat products, and allow inspection staff to conduct their duties effectively
- There is a system to supply the plant with potable hot and cold running water and ice that is protected against contamination

Handling and Processing of Meat Products

- Meat products are derived from inspected sources, are not contaminated, and are produced, processed, packaged, labelled, handled and stored in accordance with Ontario Regulation 31/05 - Meat.
- Only meat products inspected under the Food Safety and Quality Act, 2001 (Ontario), the Meat Inspection Act (Canada), or imported into Canada in accordance with the Meat Inspection Act (Canada), are received or are present at a meat plant.
- The internal product temperature of meat products that require refrigeration is maintained at 4°C or lower.
- Meat products and ingredients are stored in a way that prevents contamination.
- Low-acid meat products are packaged in cans or jars that are processed so they are shelf-stable and sterile

Training and Certification

- There is at least one supervisor in attendance at the plant at all times when food animals are slaughtered or any other processing activities are being conducted. The supervisor has received training in hygienic food handling in a formal course or program

Inspection

The provincial Meat Inspection Program comprises approximately 160 front-line meat inspection positions. Meat inspectors are supported in their work by full-time technical and policy staff, and a team of area and regional managers.

In abattoirs, inspectors are assigned to each plant. Inspectors conduct inspections and are on site anytime slaughter activities are conducted. They:

Handling and Processing of Meat Products

- Verify pre-operational conditions of the facility every day slaughter occurs, and
- In FSMPs, inspectors conduct an inspection at least once every six weeks (the frequency of inspection is determined by risk and could be weekly in high-risk facilities).
- Inspect each animal before slaughter and each carcass after slaughter (ante mortem and post mortem inspections).
- Monitor employee hygiene practices, operational standards and potential hazards and take actions to minimize food safety risks in these areas (chemical, biological, physical, etc.),
- Review and verify adherence to written programs (maintenance, sanitation, pest control, recall, etc.), plant process controls and records at each plant,
- Collect water samples for microbial testing, carcass samples for drug or microbial testing (in abattoirs) and meat product samples for microbial testing (in FSMPs),
- Follow up on corrective actions required as a result of observed deficiencies during an inspection or audit.
- Compliance with health and safety standards of employees
- Compliance verification audits, as per OMAFRA's website are conducted by:
- OMAFRA regional veterinarians in abattoirs
- A contracted third-party audit provider (currently SAI Global) in FSMPs and the higher risk portion of abattoirs' processing operations
- Audits result in a rating of pass, conditional pass or fail, similar to the audit rating system used by public health units for a food premises. When a meat plant passes an audit, their name is listed on OMAFRA's website.

Provincial

- Audits are conducted at least once per year
- Provide regular, routine, risk-based inspections and audits
- Performed by OMAFRA regional veterinarians or third party service provider

Appendix D: General Best Practices in Food Processing

At some point, the organization may wish to implement quality standards. The following represent some of the different quality standards used in the industry.

- **Hazard Analysis Critical Control Point (HACCP):** This internationally recognized system monitors the points of entry of hazardous materials and infections.
 - Available at:
 - <https://www.inspection.gc.ca/food-safety-for-industry/archived-food-guidance/safe-food-production-systems/food-safety-enhancement-program/eng/1299855874288/1299859914238>
- **ISO 9000:** This intensive quality assurance program has been adopted by most international food processing companies.
 - Available at:
 - <https://www.iso.org/home.html>
- **SQF 1000 and 2000:** These standards combine the principles of HACCP and ISO 9000 to provide a quality management program from farm to plate. Link to the company completing the audits
 - Available at:
 - <https://www.sqfi.com/>

Appendix E: List of Food Labelling Regulations

Food Labelling Regulations

The following links provide information on food labelling regulations and any proposed changes to these regulations in Canada and the United States.

Canadian Regulations:

Guide to Food Labelling and Advertising (Canadian Food Inspection Agency)

provides information for the food industry on policies and regulations for the labelling and advertising of foods in Canada.

- Available at:
 - <https://www.inspection.gc.ca/food-label-requirements/labelling/industry/eng/1383607266489/1383607344939>

U.S. Regulations:

U.S. Food and Drug Administration provides Food Labelling Guide for foods under the Federal Food Drug and Cosmetic Act and its amendments.

- Available at:
 - <https://www.fda.gov/regulatory-information/search-fda-guidance-documents/guidance-industry-food-labeling-guide>

Appendix F: Best practices for Fruit and Vegetable Processing: Preparatory Assessment

Prior to any launch, an organization should run through this provincial assessment. It calculates a rating of prospective compliance, particularly for fruits and vegetables along five metrics:

- E1 Establishment Location and Construction
- E2 Establishment Design
- E3 Establishment Interior
- E4 Equipment
- E5 Water Safety

A link to the full assessment tool is available at:

http://www.omafra.gov.on.ca/english/food/inspection/fruitveg/min_process/mp-07a.htm



CHAPTER 6: Partnerships & Outreach



In examining the ecosystem of organizations that exist in London and the region, it is clear that an incubator cannot exist without partnerships and a strong outreach strategy. Partnerships play a role in expanding the scope of the prospective organization as well as extending its breadth and geographic influence. Developing a strong outreach strategy will help the incubator to both develop partnerships and to reach more diverse populations. In this chapter we will examine the key relationships, their roles and the partners we recommend in the development of an incubator as well as outreach considerations for specific groups.

Type of Partnerships

For this project, we identify different types of partnerships; Founding Partners, Referral Partners, Project Partners and Service Providers and Professional Resources. As always it is recommended that professional advice be sought and/or prospective partners evaluated before establishing any partnership. The following are how we will define partnerships for the purpose of this project:

Founding Partners

Founding partners in the context of this project are those that have a stake in the development of this project and have so called “skin in the game”. Their stake can be formal, through an ownership stake, established memorandum of understanding (MOU) or other formal agreement. Often there are cash or in-kind contributions provided at start-up.

Founding Partners (continued...)_

Founding partners are in a project for the long-term and may have a seat at the table when it comes to managing operations or decision making. It is highly recommended that all founding partners have a formal agreement with the operator of the incubator detailing their contributions to the partnership. A founding partner may be a training or education partner or one providing investment dollars.



Referral Partners

Referral partners in the context of this project are meant to refer to individuals who will be either receiving referrals from the incubator or will be referring business to the incubator. The relationship may be formalized or informal, but the consulting team recommends to have MOUs in place that create clarity and drive accountability for both partners. There needs to be protocol development which would include a clear definition of the referral process, any financial arrangements and perceived benefits to each partner. An example of a referral partner would be Pillar Non Profit who may be sending food processing clients to the incubator.

Project Partners

Project partners are those who are involved in particular projects. Projects can be long or short in duration but generally have a defined scope. The most common type of project partner may be one delivering programming for a defined period of time. There may be a formal document such as a memorandum of understanding or project charter document, which will lay out the contributions and expectations of each partner, the decision making process, any financial implications, and a conflict resolution process.



The partnership may go beyond its initially defined scope, but at a minimum the deliverables defined in the project charter or memorandum stand as the outcomes of the partnership project. Project partners can be used to scale a concept, utilize a shared resource, or apply for funding for a particular project component. An example of a project partner might be Fanshawe College.

Service Providers and Professional Resources

When the incubator is operating, different service providers will be needed for the delivery of training, professional services or resources. Their engagement can be somewhat formalized but there is a beginning and end date, some kind of service contract and terms, including an hourly or job rate. Service providers can be long term with contract terms that last for years or one-time engagements as the need arises. An example of a service provider might be a consultant teaching a packaging course.

Recommended Partnerships by Category or Job Function

Labelling practices are regulated and dictated by CFIA. The legislation and requirements are very specific and can vary company to company. It will be important to develop good working relations with individuals at CFIA early on and to develop classes and tutorials about labelling requirements. This being said, dependent upon the industry, the end consumer location and the size of the packaging are all things that can impact how labelling must be done. Please refer to Appendix E for a list of different labelling standards.

Management and Core Operations

There has been an increasing trend to non profits being managed and operated by third party management companies, but in the case of the incubator, given its large value and importance to the community, we recommend that either a founding partner or a collaborative team of founding partners needs to manage the organization.

While staffing and management will be detailed in Chapter 8, the one note we will identify are that certain functions such as scheduling might be more efficiently managed through technology and in several cases sanitation might be outsourced to a service provider, but given the importance of sanitation, and particularly during COVID, we would recommend that this be managed in house, at least for the first few years.

Referrals-Inbound: Business Development

One of the most important categories of partnerships will be what we term “Inflow Referrals”. This relates to partnerships that cover categories such as business development. The most important of these is new business development. The incubator will require a constant flow of new businesses coming through and utilizing its services, particularly early on in its development.

End Notes

³ https://www.healthunit.com/food-safety-at-markets#reference_3

Referrals-Inbound: Business Development (continued...)

When examining the ecosystem of the region we would see the following as core referral sources for new entrepreneurs:

- Western University-Propel
- Western University Engineering departments
- Brescia College-Food Science Program
- Fanshawe College Food Science Program
- Fanshawe College- Butcher Training Program
- Fanshawe College-Chef Training Program
- Fanshawe College Innovation Village
- Pillar Non Profit: Innovation Works, Verge or Consulting arm
- London Small Business Centre
- Western Fair Farmers' Market
- Regional Small Business Centres
- Regional CFDC's
- Business Development Bank of Canada-BDC
- Farm Credit Canada
- Smaller Commercial Kitchens
- Digital Recruitment strategy- Facebook, Instagram or LinkedIn
- Professionals such as accountants or lawyers
- Food industry associations
- Technical Access Centres- TAC Network Partners
- Regional food incubators
- London Training Centre and other Employment Service Providers?
- Economic Development Departments of Surrounding Municipalities (Perth, Huron, Middlesex, Oxford County);
- Municipal Staff at local municipalities (not necessarily regional)
- Libro Credit Union (and other credit unions)
- Association(s) related to farming, food production
- Ontario Centres of Excellence (OCE)
- London Economic Development Corporation
- Regional First Nations Communities (discussed in detail later in this Chapter)
- Regional Settlement agencies and groups working with newcomers (also addressed later in this chapter)



Outbound Referrals

There will also be times when the centre will have to refer businesses to other resources in the community. For some of these partnerships, particularly those such as professional resources, formal referral processes could be established, and with them the potential of referral fees. Most of the professional services have standard referral rates--ranging anywhere from 5-20%. It may be a worthwhile exercise to formalize some of these partnerships and develop formal referral fees. Any such formal partnerships should be evaluated and fully vetted, but certain of these partnerships may lend themselves to referral fees.



Examples of outbound partnerships include:

- **Realtors** - As companies outgrow their space they may look to the community for space to grow. Having 2-3 real estate agents who are familiar with the sector, and who have been vetted, may be a good service to offer.
- **Financing Partners** - Such as CFDC's, Verge, BDC, Libro or other financing partners-as companies are looking to scale, having formal partnerships to guide them to the place best suited to their own personal needs or best suited to their industry, is a recommended option.
- **Investors** - Including private equity, SWO Angel Investor Network and others.- It is important to create connections to these investor classes to help entrepreneurs looking for funding to scale their operations. Investors provide not only access to money but also to expertise and connections that can help to expand the network of young companies.
- **Professional Services** - Services such as Lawyers, Accountants, Book-Keepers are vital to the success of small businesses. Having a list of professionals familiar with different industries is vital to helping businesses scale. As an example during the course of our interview, one entrepreneur discussed the difficulties in finding a book-keeper and accountant familiar with agricultural based industries as there are many industry specific tax laws and accounting practices. Providing new companies with recommended professionals, particularly those who are specialists in certain fields, is a valuable tool that will provide them with scalable professional services as they need them.
- **Community commercial kitchens** - There will be times that the needs of a company do not match the incubator's. They may require less expensive facilities, or facilities that have less of a commitment. As such it may be of value to keep lists of available community commercial kitchens from across the region that can be shared with new entrepreneurs. This is the approach taken by York University's Y-Space.
- **Consultants** - From labelling to construction or risk management, there are a variety of sector based consultants that have years of industry experience and can guide entrepreneurs through regulations, certifications and installation. It will be a worthwhile exercise for the manager(s) of the incubator to vet a variety of service providers and identify those who have both the track record as well as the professional networks that will benefit entrepreneurs within the incubator. Having these on a preferred vendor list is of immense value to new entrepreneurs.
- **Food Scientists** - Food scientists play a crucial role in the sector and assist companies with tasks from recipe formulation to nutritional labelling and testing. Food scientists can come from academic institutions such as Brescia College and Fanshawe or from private sector industry. Several companies such as SGS labs or NSF Canada can provide food analysis or label consulting and companies tend to specialize by sector. Some companies focus only on breweries, while others on meat products. An important function of the incubator will be to track all of these different specialists and provide comprehensive lists to participant companies.

Outbound Referrals (continued...)

- **Distributors, Co-packers and Existing companies in the ecosystem** - Each sector, from meat to sauces, will have their own sector specific distributors, co packers and professional services. Much like consultants, having lists of sector specific services will be a strong contribution to helping new entrepreneurs get started or scale in specific fields. This might include existing companies in the sector who can be utilized as a resource for different industry components. As new companies coming into the incubator grow, they may look to existing players for mergers or acquisitions. Holding sub-industry specific networking events, whether virtual or in real life, may offer significant opportunities for emerging companies to build networks in their specific sectors that will serve them well as they scale and grow.

Education/Training Partners

Depending upon the sectors that are selected, there are many different education and training partnerships that can be developed that might benefit the incubator. Below, we identify several partnerships that we believe will add value to the incubator.

1. London Small Business Centre/regional business enterprise centres

Small business centres will play a vital role in developing any incubator. The London Small Business Centre (SBC) already offers several successful courses on starting a food business and has several other more in-depth courses in the works. Each of these small business centres has advisors, many of whom are experts in particular fields. During the research process, we discovered that many of these advisors are industry experts themselves due to the significant concentration of businesses in particular industries in their geographic areas. For example, in Bruce County, there are significant linkages to the meat sector and as such, many of the CFDC's and small business centres have specializations and sector specific knowledge about meat, meat processing and key players in the industry. It would be of significant value to develop lists around each of the regional specialties, such that when a business comes to the incubator, there would be immense value in tapping the professional networks of these regional partners and perhaps connecting them to advisors who specialize in their specific industry. Regardless, SBC should play the lead role in coordinating the business specific education requirements for the incubator.

2. London Training Centre

London Training Centre (LTC) delivers Safe Food Handling training and certification in partnership with The Middlesex-London Health Unit, and other regional health units. In addition, LTC currently has a contract with Food Processing Skills Canada (FPSC), to deliver their Succeeding at Work program which provides skills and certifications for people seeking work or considering a career in the food and beverage manufacturing sector. As a member of FPSC they are also able to deliver specific training from a wide menu of skills development modules. These may be of significant interest to entrepreneurs who are starting out in a sector and need more food industry specific training, to those that are scaling and need to hire certified employees and/or to large corporate partners who need to re-educate staff.

LTC is a Canadian Red Cross Training Partner and Instructor Development Centre providing a wide range of Red Cross programs, and also several skills development courses such as Basic Accounting, Microsoft Office and Customer Service, that may be useful to individuals and businesses within the sector¹.

¹ As a caveat, the London Training Centre is the host of this LMP, and the researchers have been contracted by the same organization to conduct this research. We have tried to keep this analysis and recommendation objective.

3. Fanshawe and Western

Fanshawe College and Brescia University College (Western) may be useful educational partners for those entrepreneurs who are looking to scale their food business or gain industry specific education. Fanshawe in particular, with some of its technical programs and specialties may be able to develop courses specific to the incubator's needs and run training programs or short term projects. Fanshawe's Food Innovation lab would be a strong strategic partner. Brescia College would be a good strategic partner for its nutrition program and new emerging collaboration with Western's Engineering department that offers students internships and working co-ops.

4. RH (Roundhouse) Accelerator

For companies of a specific profile and size, there may be opportunities to apply to RHA accelerator to become one of their accelerator clients. Clients of RHA can access the expertise of the Accelerator founders, programming as well as the professional networks of the partner companies.

5. Pillar Non Profit

Many companies today want to incorporate a "social responsibility" component to the work they do. Other times, charities and non profits may want to enter into certain food production industries. It may be of benefit to offer classes on social entrepreneurship, giving, community partnerships and how to build and leverage these. These could be developed and offered at cost, or sponsored by an agency, but regardless could have a cost component and serve as an income builder for both the incubator and Pillar itself.

6. Private consultants

Private consultants who are specialists in particular components, such as labelling, production or process improvement may be contracted to hold specific webinars or educational talks. These individuals tend to be specialists in a particular domain and can be contracted as required.

7. Health Unit

The health unit can be a source of immense knowledge, in particular when it comes to inspection requirements and what is necessary to meet health code regulations. The health unit often participates in small business workshops offered by the SBC and has several "hands-on" inspectors who will work with businesses to educate them officially and unofficially, on what is required to meet and pass health regulations.



Industry Partnerships and Professional Networks

One area where partnerships will play a major role, will be in developing industry partnerships and professional networks. It will be an important consideration for whomever is chosen as the project manager/leader of the incubator to have strong professional networks they can leverage, or develop these networks in a quick capacity to utilize these to help the incubator's entrepreneurs. All of the different food producing and processing groups have industry associations. The incubator should have formal and informal linkages to these different groups.

In addition, there will be professional networks that this individual brings as a result of their professional experience. These networks will be essential to the 'hub' model that we are recommending that this incubator develop.

Even during the research portion of this project, the emerging entrepreneurs themselves see the value in networking. In our two focus groups of entrepreneurs and through our Facebook group, it is very evident that entrepreneurs are hungry to share with others experiencing similar things like availability of commercial kitchen space, understanding of regulations, etc.

These professional networks will be both useful for inbound referrals but also for connecting entrepreneurs to different service providers in the sector.

Scaling the reach of the Incubator Through Partnerships

During its start-up phase, the incubator will have limited resources and staffing. It will be imperative to its success to develop strong partnerships, such as those identified in this chapter, and beyond, to help grow the scope of the services the incubator is able to deliver, as well as its breadth.

In different chapters, we have discussed this incubator as a regional project that can service all of Southwestern Ontario. Through all of our conversations with the outlying counties and regions, there were many different local food projects of varying scales identified that can be conduits and components in a regional food system. They will require coordination, but also a knowledge centre where companies looking to scale production can go for assistance. The incubator will play a unique role in connecting many of these different groups, but also in being a flow through for sector specific services and connecting them to resources that will help to grow the impact of food in our region.

Outreach

While all outreach is important, we want to highlight two specific groups that we believe require special outreach strategies. These include Newcomers and First Nations. Ensuring representation from diverse groups is essential to creating an effective incubator. Several studies have identified that it is visible minorities and in some cases, women, who benefit the most from incubator programs. Largely, this may be due to a lack of access to different networks, but regardless these groups were found to receive the most benefit from incubator program participation. One of the challenges that program designers have, is accessing these groups. In this section, we will address some strategies that the operators of the incubator can employ to reach different newcomer and ethnic communities, as well as indigenous groups.

Newcomers and Ethnic Communities

In our research, several entrepreneurs and individuals who were visible minorities identified the challenges that newcomers and visible minorities have in accessing traditional programming. Sometimes this lack of access can stem from a lack of knowledge about what services are available to them, whereas in others they may not identify the need for a particular service.

One example that came to light several times through the course of the research were entrepreneurs who were running food businesses out of home based kitchens. While many of these individuals understand that food needs to be prepared in an inspected kitchen, they may believe that the rules do not apply to the small volume of food they are producing. For others, the phrase, they “don’t know what they don’t know” was suggested might be applicable. While these cases represent users who are likely too small for the incubator, it is representative of a larger issue with newcomers, getting the right information to them, and then providing them with the right resources (or direction to the right resources) at the right time in their business.

Through our outreach to different newcomer service providers, newcomer entrepreneurs and other visible minorities, we have developed some best practices and recommendations for reaching these groups, and how to work with them.





Working with Newcomer Communities

1. FAMILY

To many newcomer communities, family is their backbone. Many cultures do not separate work and family and the entire family often gets involved in a family business. Creating opportunities for exposure through family based events that link food community and social interaction are key to connecting and succeeding with newcomers.

2. KEY COMMUNITY LEADERS

To many newcomers, their community leaders are both sources of leadership but also of information. Using community leaders as dispersers of information that is both accurate and timely as related to food production, regulatory controls and compliance is a good strategy. Key leaders can be religious leaders, successful business leaders from that ethnic community or politicians

3. GO TO WHERE THEY ARE

It is important to go to where these communities congregate and where they go for information. Be it in community centres, religious establishments or in ethnic media. Other places such as libraries, settlement agencies and schools can also be strong places to connect with ethnic communities.

4. ASK THEM WHAT THEY NEED

It is important to ask them what they need and when. While top-down programming approaches are easier, more success will be achieved through employing a grass roots strategy.

5. WHAT SUPPORTS DO NEWCOMERS NEED

- Newcomer needs to ensure can continue supporting their family (has revenue coming in)
- Language may be a barrier
- Have to be able to dispel “myths” about starting a business
- Many newcomers already risk averse and “hustle”, but may need assistance directing their “hustle” in ways that work within our systems

6. IDEAS FOR NEWCOMER BASED FOOD PROCESSING BUSINESSES

- Traditional Foods from their culture
- Fusion Foods
- Sauces
- Canning or Bottling
- Alternative Proteins
- Beverages
- Desserts/Baking
- Building a replicable model and/or Franchising a restaurant

Working with First Nations Communities



1. OUTREACH

Outreach to First Nations is about relationship building. There is a history of broken agreements and irreparable harm done to these communities as the result of trusting and working with government and other organizations. This damage, completed over hundreds of years cannot be undone with one outreach event. Rather use opportunities to begin to demonstrate a willingness to listen, learn from and work with groups in the region. Understand that not all groups get along, nor are they a homogenous people; each community is a nation unto itself.

Ask their opinion on what they need and how you can help. Know the history of groups you are inviting and their governance structures, the role their elders play and be authentic in your representation. Invite community leaders, ask for their consideration and input and use these opportunities to start genuine conversations about how to work with their community

2. ELDERS AND COMMUNITY LEADERS

- Elders and community leaders are highly regarded in most communities
- Bringing elders and community leaders, networkers as key advisors to this project is essential
- Allow time for traditional ceremonies and activities as a way of building bonds
- Include the sharing of food as part of every event

3. COMMUNITY CENTRIC PROGRAMMING

- Bring their community leaders onboard as strategic partners and consultants
- Need to build greater linkages between the communities and the region
- Empower them to engage with food entrepreneurs in their communities
- Create opportunities for traditional activities in shared space such as shared lessons on food preparation, preserving and business building
- Bring activities to the community, through in-person and/virtual events

4. IDEAS FOR FIRST NATIONS BASED FOOD PROCESSING BUSINESSES

- Traditional Farming & processing of First Nations food
- Food preparation, tastings and festivals
- Commercializing traditional recipes
- Franchising a First Nations restaurant

5. KEY COMMUNITIES IN SOUTHWESTERN ONTARIO

- Oneida
- Chippewa of the Thames
- Munsee-Delaware First Nation
- Chipewas of Kettle Point & Stoney Creek
- Moravian of the Thames (Walpole)
- Six Nations
- Caldwell First Nation



CHAPTER 7:

Governance Models for a Food Processing Incubator

Summary of Recommendations

- **Adopt a social enterprise model**
- **Decide how sustainability, focus, risk tolerance, community accessibility and innovation will be managed**
- **Establish a Board of Directors or Management Board**
- **Carefully identify how the organization will fulfill its governance mandates and specifically objectives relating to Purpose, People, Processes and Performance**

In this chapter, we aim to identify the main regulations that a food processing incubator would have to address as well as identify the levels of risk associated with each sector. We have approached the regulatory environment from a geographic perspective; commencing at the municipal level and moving upward in scale to federal regulations. Regulatory considerations related to development, such as Zoning, or Corporate structure of the proposed organization, are identified in the related appendices.

Impact of Governance Models

The governance model of an incubator can have a significant impact on its operations and business outcomes. A North American study of food incubators did find that those incubators that operated as for profits had stronger financial outcomes than those operating as not for profits. Non profit food incubators tended to have higher levels of losses than those that were for profit oriented.

In addition, through our conversations with different incubators and accelerators across Canada, we did not find one that was 100% financially sustainable. While some of the organizations we spoke with were very close to profitability, most did not identify their primary focus as serving new entrepreneurs, rather their focus was generally tied to the nature of their governing body. Elaborating on this idea, those that were hosted by Academic institutions, tended to focus on teaching and student experience first, before

serving entrepreneurs in the community. It is our observation that mission and vision, and by extension the governance model, very much influences the priorities of and outcomes for an incubator. Through our work, we have identified the following variables as impacting and influencing governance for incubators.

Key Factors that Impact Governance Models

Food processing facilities and incubators across Canada have a variety of governance structures. In our examination of potential models for a food incubator, what struck our team was the variety of governance models and how these seem to impact not just outcomes for the facility but many of its defining characteristics. We identify the following as influencing factors to be considered in choosing a governance model:

Regulates food production generally, with specific focus on:

A. Focus and Industry

Through our interviews and surveys, we identified several examples where organizational focus and industry were impacted by the organizational model. One of the most clear examples lies with the Ontario Agrifood Venture Centre. The Venture Centre is owned and operated by the Northumberland County and early in its operations, through extensive research it determined its food processing model. It was identified as important to the municipality and taxpayers that the majority of users of the centre be from its trade area. Consequentially over 60% of its users are from its immediate trade area. The services it offers and even its focus, on providing a processing place for fruits and vegetables or lines was influenced by the crops that grow in its vicinity.

Other examples include at Conestoga College where we learnt that extensive facilities exist, but they are not maximized as the focus of the centre is teaching first, and food processing activities second. The organizational focus mandates that student focused activities are the primary goal of the centre with food consulting, science and other work as secondary.

The organizational model also impacts the industry that the food processing facility will focus on. Areas with higher degrees of risk will be less appealing to risk averse organizations or those whose primary business is not food processing. The relative complexity of federally registered food processing facilities is one of the core reasons we do not have one in Ontario outside of Guelph University (2016 Nagy & Vander Schaaf).

B. Organizational Sustainability

One of the biggest challenges witnessed during this research, is that we did not come across one facility in Canada that was completely financially sustainable. At first we questioned whether this was industry itself, but the more we investigated the more this did not seem to be the case. Yes, the sector is a challenging one, but south of the border several examples exist of both incubators and accelerators that are profitable, or at very least self reliant. While the business model is different--these tend to be more like accelerators, taking ownership stakes in the businesses participating in their services and focusing on scale.

One interesting case study is the Ontario Agrifood Venture Centre. While this centre is not sustainable yet, it was the most forthright in its approach to sustainability. In discussions with its management team we heard terms like “hustle” and “business development” that we did not hear with other groups. The fact that this centre is taxpayer supported may place more pressure on its management team to achieve sustainability as compared to other organizations which have more institutional support.

C. Risk Tolerance

One of the most important metrics we often use when discussing entrepreneurs is risk tolerance. Whether entrepreneurs are more risk tolerant than others, or whether simply being an entrepreneur creates a general comfort to risk, is often debated. One of the challenges is that supporting the activities of entrepreneurs, particularly food entrepreneurs, brings about an inherent level of risk. A large proportion of the companies you support will not make it. Add to this, that traditional models for food incubators are capital intensive. It is difficult to imagine how any organization could effectively succeed in this area.

In fact, Food Starter in Toronto, and later Venture Labs do focus on the start-up phase, albeit in different ways. The key difference is that Venture Labs chooses who they will work with, while the Food Starter Model was around encouraging accessibility to services by underserved groups. The social mission of the organization created more inherent risk than one would normally see. Other organizations we spoke with, demonstrated low risk adversity. They are highly governed by their regulations and larger academic/institutional bodies. And, with good reason. These governing bodies are risk averse and cannot exist in an environment with high risk. There is an idea that to be innovative, you have to have higher levels of risk tolerance. Perhaps this concept is not correct, and rather to become successful in a risky environment, you become better at managing the risk of a sector and develop strong mitigation strategies in order to become innovative.

D. Funding Access & Sustainability

Access to funding, particularly during the start-up phase is exceptionally important to a new business venture. Over 50% of new businesses fail within 5 years. Many nonprofits and charities struggle with finding permanent funding, developing income streams or aligning to a mission without suffering mission drift in an effort to raise operating income.

This consideration is first and foremost in importance, particularly since during the course of this research we have not found a food processing incubator in Canada that is sustainable without any government or institutional funding. Discounted or free rent, funding for core staff and other operating supports tend to be the most common assistance provided. . In the States, there are a number of incubators associated with large food companies, effectively operating as the Research and Development portion of the large food processing companies. These incubators are limited in the types of products that are being tested as the products need to fit with the larger company profile and direction. The mission in these is first and foremost a profit orientation as the end goal is to maximize

shareholder value for current and prospective investors. This differs from the current project in that our orientation is community development based and the end goal is not a profit orientation but rather one that focuses on job creation and community value.

Depending upon the type of organizational structure, certain types of funding may be available. A non profit organization by example, can access many different funding sources as compared to a for profit corporation. An educational body or associated entity, have access to yet other funding streams that a traditional non profit would not.

Social enterprise is another consideration. Creating revenue streams for a food incubator will help with profitability. As discussed in Chapter 2, the majority of other incubators in Canada have several revenue streams, each priced at a different market rate that aids in offsetting the cost of operating such a venture. It is important that whatever model we choose, the organization has access to as much supportive income from as many different streams as possible.

E. Purpose

The model we are recommending to build is one focused on community development. In our hearts and minds this needs to remain at the forefront of this project as one of the core guiding principles. It is very easy in this sector to focus solely on profitability, or scaling the next “unicorn”, particularly in light of some of the sustainability challenges that other incubators have identified. Profitability is exceptionally important, but purpose through mission and vision must equally be considered.

F. Multiple Partner Involvement

From the onset, particularly through the high levels of community support, it was evident that there were to be multiple partners involved in such a project. Rather than re-creating what currently exists in the community, it is important to utilize existing community resources and expertise in the best way possible. To this end, involving different partners in a multitude of roles from education, to mentoring and training, are all deemed important in developing the governance model.

G. Direction and Management

How an organization and facility are managed and directed can also impact the governance model chosen. Management must be flexible and versatile and be able to manage multiple stakeholder expectations. Management must also be able to coordinate different partners and ensure all stakeholders offer a valuable contribution.

H. Expertise

During the research process, one of the items that was reiterated to us again and again that it will be absolutely critical to ensure that the leadership team of this organization is one with significant amounts of industry knowledge while also bringing strong people skills and must be a “connector”. This factor has been one of the crucial items that determines the viability and success of the organization.



WHAT IS IMPORTANT TO CONSIDER IN **CHOOSING A GOVERNANCE MODEL:**

As recommended and approved by the steering committee for this project, we recommend the following as important in choosing a governance model.

A. Multi Partner involvement -

It is important that multiple stakeholders be able to be involved and take an active role in this project.

B. Independent agency for financial operations -

Opportunity to generate revenue, have several revenue streams, take on debt and generally act independently on a financial level, from a large institution- this represents the ability of the organization to be an independent agent, with the ability to focus on its own initiatives and needs. For example a good grant comes up, and the organization has to ensure the parent agency is not applying for the grant on its own. This can lead to tension between the organization and its parent agency.

C. Flexible and able to pivot to meet market demand -

These types of projects can take a significant amount of time and market conditions can change. The ability to pivot to meet market demand is important.

D. Accessible and approachable by all individuals, whether youth, seniors or newcomers and regardless of gender, race, sex or religion -

This project should appeal and be accessible to all regardless of gender, race, sex, religion or nationality.



Type	Multi stakeholder involvement	Independent Agency for financial decisions	Flexible and pivot-ready	Accessible	Restrictions on use of funds/accessing funds
Charity	Med-through BOD	Med-some restraints through government directive; also social mission not 100% clear	More difficult as large changes in direction have to be approved by BOD	High-Generally, yes but depending upon culture some groups may not feel welcome at Senior Management level	Yes
Non Profit	Med-Through BOD	Low-greater ability for flexibility	More difficult as large changes in direction have to be approved by BOD	High-Generally, yes but depending upon culture some groups may not feel welcome at Senior Management level	Yes
Social Enterprise	Med-Through BOD if a BOD or advisory board exists	Low-greater ability for flexibility	More difficult as large changes in direction have to be approved by BOD	Not always understood in all its forms	Yes
Holding Company	Depends upon arrangement	Med-tied to goals of parent companies	Lower has to be approved by parent company	Med-depends upon parent company	Med-yes tied to goals of parent company
For profit corporation	Low-advisory board but not enforceable	High	High but based on advisory board and Senior Management team	Med-depends upon visibility at the helm	Yes-may not be able to access not for profit funds
Cooperative	Yes	Yes	Move slower as depends upon more votes	Yes, but some may have some issues with term coop	Yes as defined by the BOD
Arms length corporation/ organization	Lower	Low	Low	Low	Low
Multi-stakeholder cooperative	Medium	Med	Med	Med	Med

Recommendations

- **Autonomous or Semi-Autonomous group**
- **Managed by Board or Steering Committee**
- **Educated but diverse management team**
- **Several funding and financial streams**
- **Adoption of social enterprise philosophies to allow organization to achieve dual mission**

Organizational Goal: Community & Economic Development

Early on in this project, we as the researchers declared that community and economic development lenses played equal roles on the type of project being developed. The economic performance of the incubator is exceptionally important. Without a sustainable business model the organization will not survive. However, the community development component is equally as important. Creating opportunities for individuals such as rural dwellers, women, visible minorities, newcomers, indigenous and other not traditionally represented groups is important as well. The diversity that these individuals bring will enrich this project and change the tapestry and trajectory of food processing in the London region.

Based on the evaluation above, and with these lenses, we would encourage the incubator, regardless of its legal structure to adopt social enterprise philosophies. A social enterprise mindset will not only address this dual lens, but will also take into account People, Planet and Profit, all equally important considerations. Keeping profit on the forefront of its goals, while minimizing its environmental footprint and putting people first should be the focus. This is not an easy set of goals to balance, but if the management team and governance board of the organization can achieve this, they will have truly succeeded.



THE 4P'S OF GOVERNANCE

There are hundreds of books describing how to create good governance structures. One of the simplest models is often referred to as the 4 P's of Corporate Governance. Regardless of the operating and governance structure of the organization, these 4 P's will play a role in defining how the organization will run.

A. Purpose

This is the driving force of the organization. This represents the Mission and Vision, as well as the guiding principles/goals.

B. People

Without a team, an organization has no way to accomplish its goals. How recruitment, evaluation, recognition, community and economic development happen are all key considerations. At the heart of People, is equitable the organization is how it recognizes its workforce and how it encourages and fosters the development of relationships with its people.

C. Process

How an organization runs is largely impacted by the processes it adopts. More than ever transparency and accountability are important considerations, supported by strong internal controls and regulatory compliance. By keeping the organization focused on innovation, processes that keep the organization nimble should be adopted. Processes are not isolated rules but need to be influenced by purpose and people. Many organizations are adopting social and impactful processes, such as social procurement principles to make greater organizational impact.

D. Performance & Impact

It is important for an organization to be able to tell its story. By carefully choosing and tracking impact metrics, the incubator can tell its story, calculate its impact on the broader community and ensure that it is fulfilling its purpose.



How to Structure the Organization Using the 4P's of Governance

Based on our review of this project, we would recommend the following as stepping stones for People, Purpose, Process and Performance:

1. PEOPLE

- Governed by board of directors or advisory board if multi-stakeholder governance model selected
- Managed by individual reporting to Board
- Manager needs to be focused exclusively on the incubator
- Individual should come from a food and economic impact background preferably
- Individual also needs to have strong people connecting skills

2. PURPOSE

- To become a force in local economic development in the food production and processing sector
- To increase employment in food
- To increase the availability of highly trained and skilled workers in the food sector
- To foster food processing companies and help
- To become a force in local economic development in the food production and processing sector
- To increase employment in food

3. PROCESSES

- Cyclical and green economy focused
- Adopt social benefits procurement processes and strategies
- Become a top 10 employer in the region
- Have a Governance focused Board of Directors or advisory Board
- Transparent screening processes
- Joint/bulk purchasing for incubator participants

4. PERFORMANCE AND IMPACT

- Key Metrics to track:
- # of companies supported
- # of companies in business for longer than 12 months, two years
- # of jobs created
- \$ given back to local community through social benefit contracts
- \$ generated by business sales
- Economic multiplier effects
- # people trained
- # training hours



CHAPTER 8:

Technical & Processes Considerations

In this chapter the technical and process feasibility of a proposed incubator is assessed and recommendations are provided for each of the relevant subject areas under consideration.

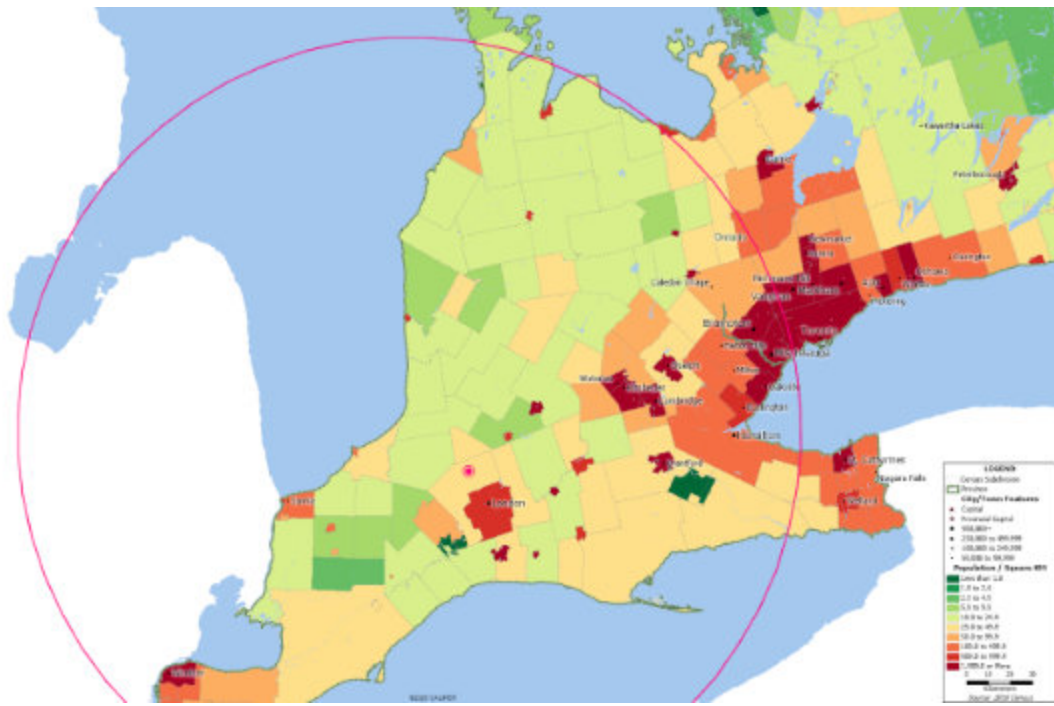
Location

At this time, looking at the population of the region in Southwestern Ontario under consideration, the most densely populated areas are London, Windsor and the Kitchener Waterloo area.

Using population as the dominant variable and employing a Geographic Information System (GIS), we plotted the population of each region within Southwestern Ontario and asked the software to choose a central location with population as the driving factor. The areas examined went North to Tobermory, and Southwest to Windsor and East to Guelph, Hamilton and Burlington. These were included because, as a limitation, the analysis can only be completed in concentric circles.

Based on the calculated population density for our target area, North of London (North Middlesex County) was deemed as the most central location based on a population basis.

As this is a largely rural region and given the lack of transportation infrastructure in the area, we are recommending that the facility be located in London as it is the most centrally located and has among the highest populated for all the areas examined.



Facility Size and Design

Used mapititude software by Caliper

Total Facility Size

Based on the results from our survey and our examination of other incubators, we are recommending that the total facility size not exceed 8-10,000 square feet. At present, we are recommending a conservative 8,000 square feet as a starting point.

Facility Construction and Specifications

Depending upon the uses, construction requirements may be dictated by legislation. As discussed in the regulatory chapter, facilities that process or produce foods with meat or dairy, require special construction considerations. It is best to consult with a facility design expert in this field.

Facility Layout

We are recommending a phased approach.

- **Phase I:** 4 workstations, focusing on a fruit and vegetable light processing station, a hot fill station (manual) and 2 general station
- **Phase II:** Mobile canning line for Breweries and other beverage makers
- **Phase III:** Meat and Alternative Proteins addition
- Shared facilities with other similar resources such as an accelerator

Dry storage

Of the 8,000 sq feet, 1000 sq ft of dry storage

Cold/Frozen Storage

Of the 8,000 sq feet, a minimum of 1000 sq ft of cold and frozen storage

Model

We recommend a model where incubator space can grow with companies and add additional space as required rather than moving them outward. We believe this fits well with the London Plan, London's planning strategy document that prefers infill development over new developments.

Room for Growth

Depending upon the uses, We recommend that another 10,000-20,000 square feet be available for new and growing companies that want to join the incubator in the next 10 years

Rural Connectivity & Accessibility

One of the considerations is that rural regions tend to have slower internet and connectivity. This should be a consideration in education planning and content development.

Equipment

- **Phase I:** 3 General rooms for use. One room that is rented out to the community. Include equipment such as that listed in Appendix A. Shared central facilities.
- **Phase II:** Add a beverage line. Cans are growing faster than bottles² and are seen as having a lower environmental impact⁴. It is therefore recommended that a canning line be added, either as a mobile line, or as a fixed line.
- **Phase III:** Phase III will involve the recommended entry into meat and meat protein processing. This will involve significant investment, but the facility will be the only one of its kind outside of Guelph in Ontario⁴.

Parking

Model

Given the accessibility of most of London by bus, if the facility is located in a central area, it is recommended that a parking ratio of 4 per 1000 square feet of space be made available. Should the facility be located off of a bus route, this should increase to 5-6 depending upon the location proposed to ensure sufficient parking for workers.





Transportation

Accessibility

It is highly recommended that a facility be centrally located and on a bus route for accessibility of both entrepreneurs as well as staff of the facility.

Staffing

Manager

It is recommended that a dedicated manager be hired for the incubator itself at a rate of \$90-100,000⁵ as a salary. This represents the going rate for an individual with the experience and educational background needed to staff the facility.

Support Staff

It is recommended that 1-2 part time staff members be hired with different specializations and backgrounds. The salary for the part time staff is estimated to be between \$35-\$40,000 per year for 20-25 hours per week.

Contract

It is recommended that all other staff be on a contract basis as needed e.g.. provision of specific professional development materials, legal, bookkeeping, business advisors, etc. Where possible, partnerships with other organizations already providing some of these services would be preferred.

Sanitation

It is recommended that professional sanitation staff be hired with experience in sanitizing food production. Training can be provided from an existing food production sanitation company.

Environmental Concerns

Wastewater

One of the significant issues facing industries that are high water users is ensuring that their wastewater does not alter the PH of the water. These companies located inside the incubator will have to be in contact with London's water treatment specialists to ensure that wastewater is treated and not contaminating the ecosystem.

End Notes

² <https://www.semcour.net/blog/canning-or-bottling-which-is-better-for-your-brewerys-bottom-line/>

³ <https://www.euronews.com/living/2019/07/17/glass-bottles-vs-aluminium-cans-which-are-better-for-the-environment>

⁴ There is discussion about a new meat processing facility in Eastern Ontario but as far as we can research, but currently unsure of its status.

⁵ https://www.ziprecruiter.com/Salaries/Incubator-Manager-Salary_USD

Lead pipes

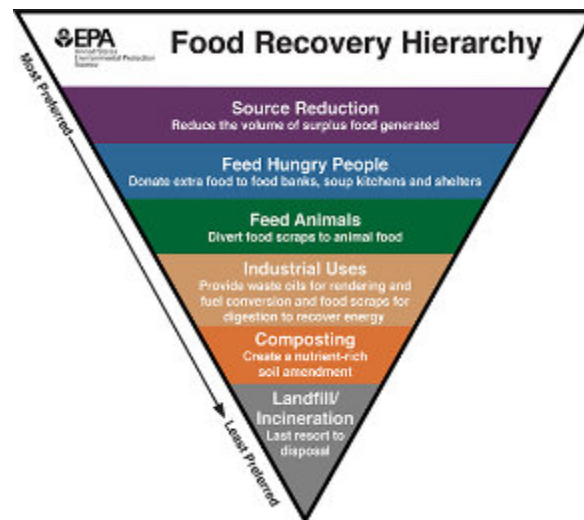
One of the challenges with locating in older/established parts of the city is ensuring that the water pipes in the area have been replaced to avoid lead. This will be particularly important in food production. Depending upon the location chosen, it may require coordinating with City Hall to ensure that pipes in this area have been replaced.

Treating Waste

Depending on the specific uses and products being processed, waste may need to be treated before going into a landfill. If the Ph is very high, or it is a highly processed item, sodium may be an issue. As such, it may be necessary to treat the waste. This can be done through methods such as composting or anaerobic digestion.

Recycling and Sustainability

As a philosophy, it is highly recommended that concepts such as sustainability, circularity and green food production practices be adopted as part of this incubator. The US Environmental Protection Agency has put out a best practices guide to dealing with food waste. At the top of the inverted pyramid, is source reduction, followed by feeding the hungry, then donating excess to farms for animal feed, followed by composting and finally, incinerating.



Regulatory Bodies

A facility of this size and complexity will require significant dealing with regulatory bodies. The following are a list of some of the regulatory bodies that such a facility will have to deal with.

Canadian Food Inspection Agency (CFIA)

- The decision to bring meat or meat proteins into the facility will require the facility to become CFIA certified. This will permit companies using the premises to sell beyond Ontario borders and within all major grocery stores. Creating a facility that is CFIA compliant will require the hiring of a specialist consultant in this area.

Ministry of Labour

- One of the big areas for concern, with both the advent of COVID as well as the growth in small food processors, is ensuring that the facility and its users are compliant with all Ministry of Labour and safety regulation requirements. Under the Ontario Health and Safety Act, as well as the updated legislation for COVID-19, it is essential to ensure that the act and the safety regulations are being followed.
- In discussions with a Ministry of Labour inspector, conveyors, safety apparel and signage are the areas where companies tend to be deficient.

Building, Health & Fire Code

- The Construction of such a facility will have to comply with the Ontario Building Code. This code is then interpreted locally by the City of London bylaw officers and inspection
- The Fire Department will have to do an inspection to ensure compliance to issue a business license
- One individual who works for the Middlesex London Health Unit evaluating facilities, Corey Tung, will often do a pre-inspection and provide great feedback for new businesses. It is recommended that he be called and consulted with.



CONCLUSION

We have reviewed the technical requirements and considerations for a food processing incubator. We are recommending a phased approach to building. A large proportion of these technical requirements will involve consultation and coordination with regulatory bodies and experts in the specific fields. Where possible it is highly recommended that expert consultants in this area be utilized and budgeted for.



End Notes

² <https://www.semcour.net/blog/canning-or-bottling-which-is-better-for-your-brewerys-bottom-line/>

³ <https://www.euronews.com/living/2019/07/17/glass-bottles-vs-aluminium-cans-which-are-better-for-the-environment>

⁴ There is discussion about a new meat processing facility in Eastern Ontario but as far as we can research, but currently unsure of its status.

⁵ https://www.ziprecruiter.com/Salaries/Incubator-Manager-Salary_USD

Appendix A -

Examples of General Equipment

***It is recommended that one per unit/workstation be purchased*

3-4 work units that can be rented at different times

worktables

hand sinks

eye wash station

triple sink

freezers, fridge and storage/shelving on castors

grease trap (shared if possible)

Washing area

large capacity dishwasher

shelves

racking

sanitization equipment

eye wash station

Examples of General Equipment

****It is recommended that these be general / signout / sign up and NOT per station*

Larger work tables for food processing

Food processors

Mixers/large hobart mixer

Sharpening stone

Microwave

Large Kettles/Tilt Kettles

Dish landing table/counter

Storage racks for any dishes/drying

Pot racks

Baking sheets

Digital scales

Food processors

Upright Mixers

Food Slicers



Storage

Shelving

Large capacity upright freezer on castors

Large capacity refrigerators on castors

Pallet storage

Vegetable wash, prep and package area

Large capacity mixers, choppers, shredders

Phase II implementation--ie save a portion of budget for years 2-3 once established and can see where demand might exist

Examples of Equipment in Phase II

Conveyer

Power washers

Salamander broiler

steam table

Manual fill stations(50-500ml)??

Pasta mill/maker

Deep-fryer

Bain Marie

Pizza ovens

30 Tilting skiddle/grill

Semi-automatic tray sealer,

Vacuum packaging

Flash freezers

Sausage filler

meat grinders

Servingware

Kitchen Display System

Point of sale system

Ice maker

Pulverizers

labelling equipment

Beverage bottling semi-automated line

Mobile canning line-this needs to be designed by a professional specializing in this area

Phase III

Construction of meat and alternative protein processing-this needs to be designed by a professional specializing in this area



CHAPTER 9:

Financial Assumptions, Project Feasibility, Funding Requirements & Sources of Funding

In This chapter:

We will provide an overview of the financial assumptions, assess the financial feasibility of the project, identify funding requirements, particularly those focused on capital and operations, and sources of project funding. Expenses and Capital expenditures will likely appear high. We have chosen to be conservative with our cost estimates.

Economic Impact Vs. Cost

In assessing the financial feasibility of such a venture as an incubator, it is important to consider and note the economic impacts of this project. A new incubator can be a force in the creation of jobs, growing new start-ups and creating economic prosperity. As stated previously, in our review of incubators in Canada, none are fully financially viable without external funding, such as grants or institutional support. This is largely due to the resources required to service new startups are more intensive and that the likelihood of success is lower as most of these companies will be startups and not established companies.

As described in the Economic Impact chapter, there are many benefits and multipliers effects to investment in an incubator. The challenge is to continuously remind the government and other invested parties that this type of project will require long-term investment and financial support.

Financial Policies

Social Procurement

From a values perspective, we recommend that the incubator adopt policies around social procurement. " Social procurement is leveraging a social value from your existing procurement. Social procurement adds a social value consideration to your current evaluation of price, quality, and environment of the goods and services you purchase¹."

End Notes

¹ link https://ccednet-rcdec.ca/sites/ccednet-rcdec.ca/files/buy_social_canada_social_procurement_guide.pdf

This means that proposals that bring higher social value get additional consideration and weighting during procurement processes. Traditional procurement criteria around price, quality, and timelines should be honoured in addition to social procurement criteria.

A good guide demonstrating how to begin with social procurement can be found at buysocialcanada.com/what-is-social-procurement

Sustainable Practices & Green Construction

It is important this incubator employs sustainability and green construction. Rooted in the concept of a circular economy referred to earlier in this paper, we would recommend that sustainable practices, green construction and re-using dismantled materials, in addition to other elements of a circular economy be adopted as part of the governance framework and policies for the centre. Further examples of this type of construction can be as simple as solar panels, to more complex stormwater harvesting systems. We recommend the host organization speak with a green construction specialist to decide what is feasible given the location and building considerations.

Financial Assumptions

Capital Costs- Construction & Building

Based on our research we recommend the construction of an 8000 square foot facility, with 4000 square feet being work rooms, with a total of 4 stations, and 1000 square feet dedicated to cold storage (500 frozen and 500 refrigerated) 1500 dedicated to dry storage, and 1500 dedicated to offices, packaging and meeting spaces.

We would forecast either retrofitting or building out a new facility. As such we will not account for demolition costs. Based on our review, we identify the construction costs related to such a project, can be broken down into soft and hard costs.

We would identify the soft costs as representing 40% of the project budget. While this is on the high side, we believe given the specialized nature of this industry, it could run this high. These would include the following breakdown:

Soft Project Costs	
Project Management	10%
Design & Engineering	13%
Permits	1.50%
Other soft costs	5%
Contingency	10%
Total costs as % of Project	40%

We have included a 10% contingency to allow for a variety of locations and different construction conditions.

We would identify the hard construction or retrofit costs as based on the number of square feet and encompassing the following costs:

Construction Costs				
Room Type	Size	Estimated cost psf	Total cost	% of Project
Freezer space	500	\$250.00	\$125,000	6.25%
Refrigerated space	500	\$200.00	\$100,000	6.25%
Dry storage	1500	\$150.00	\$225,000	18.75%
Meeting space/offices	1500	\$200.00	\$300,000	18.75%
Workspace	4000	\$150.00	\$600,000	50.00%
Contingency 10%			\$135,000	
Total Size	8000	Total Budget	\$1,485,000	100.00%
Average cost psf		\$168.75		

Capital Costs Equipment

Based on our research we would recommend a phased approach to development. We would see Phase I, as getting the incubator open and ready for users. It would include rooms for fruits and vegetable processing, and other foods. In Phase II, in Year 2-3 we would see the introduction of a canning line and Phase III in year 4-5 the introduction of meat processing.

Equipment					
Phase I		Phase II		Phase III	
Equipment	Cost	Equipment	Cost	Equipment	Cost
Phase I Equipment list	\$200,000	Canning Line	\$500,000	Meat Processing Equipment	\$650,000
Set Up & Install	\$50,000	Set up and install	\$50,000	Set up and install	\$150,000
Contingency-10%	\$25,000	Contingency-10%	\$55,000	Construction	\$250,000
				Contingency	\$105,000
Total Phase I	\$275,000	Total Phase II	\$605,000	Total Phase III	\$1,155,000

Based on our review, we have included setup costs of 25% and a contingency of 10% for each phase. The equipment costs for Phase I include all of the equipment included in Chapter 8 Appendix A, and the cost of setting up the workstations is forecasted to be approximately \$275,000

Operating Expenses

Based on our review, we would identify the following costs:

Staffing

Salaries		Notes
Centre Manager	\$100,000	
Coordinator	\$50,000	
Administration	\$40,000	
Janitorial	\$120,000	3 positions per year funded at \$40,000 per position
Mercs & Other Benefits	\$38,000	
Total cost per annum	\$348,000	

We would assume annual increases in the area of 2-5% depending upon the position.

Facility Costs

We identify the following prospective facility costs. Depending upon if the facility is being leased or purchased, the largest facility cost would be a lease rate or financing cost.

Property taxes or CAMS total	\$80,000.00	cost psf	\$10
Rent or Financing total	\$160,000.00	cost psf	\$20

Utilities

Utilities total	\$80,000.00	cost psf	\$10
communications	\$10,000.00	Cover phone service and staff cell phones	
Internet cost	\$10,000.00	Cost to provide high speed fiber optic to all areas of building and wifi	

Professional Services

A significant amount of financial and legal expertise is expected at the start of any new venture. For a project of this size it is recommended that a budget of \$50,000 be set aside for legal and financial/accounting services.

Program Costs

It is anticipated that programming costs will be approximately \$100,000. This will mainly be expenses related to programs held on site by 3rd party consultants or partners. It is not likely that the incubator will be running its own programming in Years 1-3.

Marketing

A significant marketing budget will be important for this facility, particularly in the early years. It is recommended that a dedicated marketing budget of \$45,000 be set aside and broken down as follows:

Marketing	
Advertising	\$25,000
Promo materials	\$5,000
Marketing consultant	\$15,000
Total marketing and advertising	\$45,000

Supplies and General Expenses

We have identified a budget of \$30,000 broken down as follows for supplies and general expenses.

Office supplies	\$5,000
General expenses	\$25,000

Contingency

A 10% contingency fee is encouraged to be included in the budget for future unforeseen events.

Amortization

Based on our equipment and other budget, we would just assign a 20% amortization rate per year to equipment (average) and a 5% to the building.

Revenue Generation

Rent

The most straightforward relationship with new tenants is to rent space to them. Based on the model we are recommending, there are several types of rent that can be charged based on different uses. Rent can also be differentiated within the incubator, with riskier and more intensive initiatives demanding higher rents. By riskier activities we imply products like dairy, meat or other. These would have higher sanitation costs associated with them as well, thereby justifying the higher rents. Rents can be net, a gross amount

Additionally, different classes of rent could be established, with permanent tenants having different rents than one-off, and less frequent users. We have recommended the development of 4 units. In this analysis, we would assume one unit is dedicated to community and smaller entrepreneurs, with the other 3 being dedicated to full-time tenants

Rent for Full-Time Tenants

If we are renting to full time tenants, we would identify the following constraints and assumptions.

Constraint	Totals
# kitchens	\$3
# hours available per day	\$16
Total Daily Kitchen hours	\$48
Total Monthly Kitchen Hours	\$1,440
Average charge per hour	\$40
Maximum monthly revenue	\$57,600
Max Annual revenue	\$691,200

We have completed our forecasts with the following assumptions for long-term rent:

Rents-Long-term Tenants	Year 1	Year 2	Year 3
# Tenants	5	8	12
Average monthly rent	\$2,000	\$2,100	\$2,200
Annual Average gross rent	\$24,000	\$25,200	\$26,400
Total Proceeds	\$120,000	\$201,600	\$316,800

Short Term Rent

- One way to fulfill the incubator's community development objectives is to have one of the four kitchens dedicated to community use.
- This does have higher sanitation and is overall riskier for the organization since more individuals are using the space, but it also helps the organization to have greater impact and reach into underrepresented groups and individuals in the community.
- his space can be imagined as one that can be rented for a minimum number of hours. For ease of operations, we would recommend four hour blocks, to a maximum of 4 per day.

We have identified the following constraints for Year 1:

Constraint	Hours	Revenue
# kitchens	1	
# hours available per day	16	
Hourly cost during day	60	\$480
Hourly Cost during off hours	40	\$320
Potential daily revenue		\$800
Maximum monthly revenue		\$24,000
Max Annual revenue		\$288,000

We have completed our forecasts using the following assumptions:

Catering and Short term rentals	Year 1	Year 2	Year 3
# Tenants	20	25	30
Average monthly rent	\$240	\$247	\$255
Annual Average gross rent	\$2,880	\$2,966	\$3,055
Total Proceeds	\$57,600	\$74,160	\$91,662

Dry Storage

- One of the most important aspects of the incubator was the ability to rent dry storage. We have recommended the development of 1500 square feet
- As such, we identify the following assumptions and constraints

Dry Storage	Year 1
Total Size	1500
Size per rental	100
Rent per month	\$300
Total # of spots	15
Total potential annual rent	\$54,000

Using these constraints as a guide, we have created our revenue forecast using the following scenarios:

Dry Storage	Year 1	Year 2	Year 3
# Tenants	8	12	15
Average monthly rent	\$300	\$310	\$325
Annual Average gross rent	\$3,600	\$3,720	\$3,900
Total Proceeds	\$28,800	\$44,640	\$58,500

Cold Storage

Renting cold storage space is exceptionally important to new entrepreneurs. We have recommended the development of at least 500 square feet of cold (refrigerated) storage and frozen storage. Based on our analysis, we identify the following constraints:

Cold Storage	
Total Size	1000
Size per rental	50
Rent per month	\$300
Total # of spots	20
Total potential annual rent	\$72,000

Using these constraints as a guide, we have created our revenue forecast using the following scenarios:

Cold/Frozen Storage	Year 1	Year 2	Year 3
# Tenants	10	15	20
Average monthly rent	\$300	\$325	\$350
Annual Average gross rent	\$3,600	\$3,900	\$4,200
Total Proceeds	\$36,000	\$58,500	\$84,000

Meeting Space

- It is estimated that 1-3 meeting rooms could be constructed.
- While the majority of these will be used by existing tenants, some meeting rental revenue could also be generated from renting these meeting rooms. In our analysis we estimated 10 hours per week of rental for outside users of the space. At a rate of \$100 per hour this could create the following revenue potential

Meeting Space	Capacity
Hours available per week	10
Cost per hour	\$100
Weeks per year	50
Total Rent Capacity	\$50,000

Using these constraints as a guide, we have created our revenue forecast using the following scenarios:

Assumption	Amount Generated
Year 1	\$25,000
Year 2	\$35,000
Year 3	\$42,000

Curated Basket of Goods

One service that the incubator could offer to its clients, might be to curate a box or basket of goods. This could be like a weekly “box” that is picked up or delivered to end customers. These could be offered on a subscription or weekly basis

This is a strategy that is being used by Venture Kitchens in Toronto, and could provide tenants with exposure for their product, as well as providing them with some initial sources of guaranteed income. We would assume that the incubator could take a 15% referral fee for providing this service of gross revenue. We think the capacity could even be higher but have chosen to remain conservative. The following represents our assumptions for this service.

Year	Cost / basket	Months	# Baskets/ Month	Gross Sales	% to Incubator	Revenue to incubator
1	\$50	12	250	\$150,000	15%	\$22,500
2	\$50	12	350	\$210,000	15%	\$31,500
3	\$55	12	500	\$330,000	15%	\$49,500

Online Sales

Similar to the curated basket of goods, would be to establish an online store to carry products from all of the different incubator members. The Incubator could manage the site, and take a 15% administrative fee from each order.

We have forecast our revenue using the following assumptions:

Online Store	Year 1	Year 2	Year 3
Sales per month	\$10,000	\$15,000	\$20,000
Total monthly proceeds to incubator	\$1,500	\$2,250	\$3,000
Total Annual proceeds	\$18,000	\$27,000	\$36,000

Events

Team Building Events

The Incubator will be a novel place in the City. A portion of the facilities could be dedicated to running corporate team building activities during downtimes. While COVID has sent many individuals to work from home, companies will more than ever need to build team spirit. This could be one way that the western fair could develop programming to cater to the broader community. A per team charge could be applied.

We have forecast our revenue using the following scenarios:

Team Building Events	Year 1	Year 2	Year 3
# Groups	5	15	25
Cost per group	\$2,500	\$2,500	\$2,500
Total Proceeds	\$12,500	\$37,500	\$62,500

Community Events

People love food, and in particular local food. Hosting more events at the Incubator, bringing the public in to get to know the tenants and turning these into community based events, both establishes outreach but also can create revenue generating opportunities for the Incubator. We have utilized the following assumptions in our revenue forecast:

Community Events	Year 1	Year 2	Year 3
Number of events	5	10	15
Tickets sold per event	250	500	750
Cost per ticket	\$10	\$10	\$12
Total Proceeds	\$12,500	\$50,000	\$135,000

Food Tourism

Much like guided wine or brewery tours, creating opportunities through the Incubator for guided tours, sampling and education is an idea that was brought to us by the community. In fact, the tours would not have to be limited to just Incubator tenants, but could be throughout London, celebrating the food grown and produced here. The Incubator could be the organizer & coordinator of these tours and charge a per person rate.

We have applied the following assumptions in our revenue forecast:

Food Tourism Events	Year 1	Year 2	Year 3
Number of events	0	5	15
Tickets sold per event	250	350	500
Cost per ticket	25	\$25	\$25
Total Proceeds	0	\$43,750	\$187,500

Referral Fees and % Revenue Generated through Partnerships

One of the main roles for the incubator will be to act as a hub for referring individuals to opportunities. Different strategic partners and services will be coordinated through the Incubator. People will be referred to consultants or community partners to help them advance their business. At different times, individuals will be using community resources. One model would be to charge a rental fee or a referral fee for using the Incubator or receiving a lead from the incubator.

At present, the incubator on its own would not have the capacity to offer recipe formulation, advisory services, label consulting or packaging expertise. As such it could either have experts come in for a one day event, or connect individuals to these services. Additionally, if this service is being offered by one of its strategic partners, some kind of fee sharing agreement could be generated. For example the model might operate similar to a retail mall where tenants pay a fixed rate but also a percentage of monthly sales.

Examples of the types of services the organization could charge a percentage of fees for:

- Consulting for food based consulting services, cost based testing or food science
- Advisory Services- for business consulting
- Programming-for partners running programs at the Incubator
- Financing--Finder fee for connecting individuals to financing
-

In our forecasts we simply applied a 15% referral fee to all business referred to incubator partners or external experts receiving leads and use the following assumptions to forecast revenue:

Item	Y1 Total Income	Y1 15% fee	Y2 Total Income	Y2 15% fee	Y3 Total Income	Y3 15% fee
Referred Services	\$100,000	\$15,000	\$125,000	\$18,750	\$150,000	\$22,500
Programming	\$100,000	\$15,000	\$125,000	\$18,750	\$150,000	\$22,500
Business Consulting	\$100,000	\$15,000	\$200,000	\$30,000	\$300,000	\$45,000
Food Science Consulting	\$100,000	\$15,000	\$200,000	\$30,000	\$400,000	\$60,000
Total Referral Revenue Sources	\$400,000	\$60,000	\$650,000	\$97,500	\$1,000,000	\$150,000



Market Stall

One service that would help early stage companies to scale would be for the incubator to take a market stall and offer this as a service to its tenants or renters. It could charge a percentage of sales, however since this will be mainly early stage companies, we did not identify this as a revenue generating component of the project.

Co-packer

One way to help companies scale, might be to offer co-packing services. While this is a more time intensive method to generate revenue, it was identified throughout our survey as an important need. However, given the complexity of co-packing, it is not recommended that the incubator enter into such a project until years 4-5 once it has established some financial stability and market traction.



Project Viability and Funding Needed

Based on our review and estimates, we have developed the following financial forecast for the organization:

Revenue	Year 1	Year 2	Year 3	
Rent-Main tenants	\$120,000	\$201,600	\$316,800	
Rent-Occasional Renters	\$57,600	\$74,160	\$91,662	
Rent Cold Storage	\$36,000	\$58,500	\$84,000	
Rent Dry Storage	\$28,800	\$44,640	\$58,500	
Meeting Space	\$50,000	\$51,500	\$53,045	
Events-team	\$12,500	\$37,500	\$62,500	
Events-community	\$12,500	\$50,000	\$135,000	
Online Sales	\$18,000	\$27,000	\$36,000	
Curated Basket of goods	\$22,500	\$31,500	\$49,500	
Referral Fees	\$60,000	\$97,500	\$150,000	
Total Revenue	\$417,900	\$673,900	\$1,037,007	
Expenses				Notes
Facility Costs	\$80,000.00	\$82,400.00	\$84,872.00	CAMS/Taxes
Utilities	\$80,000.00	\$88,000.00	\$96,800.00	10% annual increases
Financing	\$160,000.00	\$164,800.00	\$169,744.00	Rent or Financing
Staffing	\$348,000	\$358,440	\$369,193	Manager and 2 support
Repairs and Maintenance	\$27,500	\$28,325	\$29,175	5% Project budget
Marketing & Advertising	\$45,000.00	\$46,350.00	\$47,740.50	As stated in notes
Professional Services	\$50,000.00	\$51,500.00	\$53,045.00	Legal and Accounting
Program Expenses	\$100,000.00	\$103,000.00	\$106,090.00	For running on site programming
Communications	\$20,000.00	\$20,600.00	\$21,218.00	internet and phones
General Office Expenses & Supplies	\$30,000	\$30,900	\$31,827	Supplies
Operating Contingency	\$94,050.00	\$96,871.50	\$99,777.65	10% of expenses
Amortization	\$163,090	\$284,090	\$284,090	20% equipment and 5% facility
Total Expenses	\$1,197,640.00	\$1,355,276.50	\$1,393,572.10	
Annual Operating Shortfall	-\$779,740.00	-\$681,376.50	-\$356,565.34	
Cumulative Cash Shortfall	-\$1,817,681.84			

We identify the following assumptions:

- It is our assumption that for years 1-3, 50-75% of operational funding will be covered through grants
- It is our assumption that 50-75% of capital costs will be covered through grants
- It will be difficult for the incubator to be completely self sustaining. We would assume that 25-35% of ongoing funding will be secured via grant and programming dollars on goingly

There are additional sources of revenue that organizations in similar circumstances utilize:

- % of tenant revenue, much like a commercial shopping centre
- % of tenant ownership
- Corporate donations
- Through a financial partner offering lines of credit or equipment financing
- Be a distributor of grant funds for incubator tenants and others in the sector

These are more complex and are strategies that the management team of the incubator can investigate best practices and models and consult with experts in each field that can comment on the best means of exploring these alternative revenue generators.



SOURCES OF FUNDING

In this section we detail some common and alternative sources of funding that the incubator can procure and use as a launching pad for capital and ongoing program and operating expenses.



Grants from government

There is a great deal of interest in restarting the economy after COVID implications, job losses and economic slowdown. One of the areas of interest is in agriculture and agri-food businesses. There is a recognition that Southwestern Ontario's historical economic base was related to agriculture and there is increased interest in attracting existing agri-food companies to the area and supporting new and emerging businesses. However, not all funding available needs to be targeted to agriculture/food processing specifically – there are also funding opportunities related to job creation, labour market development and business expansion regardless of sector. Some of the funding sources are aimed at existing businesses with some financial history.



Grants Supporting Agriculture

We would identify the hard construction or retrofit costs as based on the number of square feet and encompassing the following costs:

- A. **AgriInvest** which is administered by Agricorp. Each year, you can deposit up to 100% of your Allowable Net Sales, with the first 1% matched by governments. The limit on matching government contributions is \$10,000 per year. ANS are the net sales of most primary agricultural commodities, except those covered by supply management (dairy, poultry and eggs). Production Insurance claims are considered allowable commodities.
- B. **AgriAssurance** – SME Stream. AgriAssurance is specifically designed to help businesses implement third-party assurance certification projects that address international market requirements and help expand export opportunities.
- C. **AgriInnovate** – This program is specifically designed to help businesses commercialize and/or adopt innovative agri-based products, technologies, processes or services. Access up to 50% of project costs to a maximum of \$10M
- D. **Canadian Agriculture Partnership** – Canadian/Ontario partnership with 3 streams: (1) Food Processors, (2) Food Producers, and a rebranded (3) Place to Grow: Agri-Food Innovation Initiative stream for Organizations & Collaborations to help overcome agri-industry challenges.
- E. **Canadian Agricultural Strategic Priorities Program** – Supports projects that help the agricultural industry mitigate emerging issues and capitalize on opportunities. Up to 50% of project costs to a maximum of \$1M
- E. **Protein Industries Canada** – Supports collaborative product or process research, technology development, and export market development projects related to expanding Canada's plant-based protein sector.



Grants Supporting Business including Start Ups

- A. **FedDev Ontario Business Scale-up and Productivity Program** - This program offsets upfront project costs and helps southern Ontario businesses grow more quickly. It provides no-interest repayable contributions (government loans) with repayment beginning within a year of project completion. This supports businesses as they adopt new, innovative technologies that support scale-up, productivity, and the development of and entry into new markets to become globally competitive. Program provides business expansion loans of up to 35% of project costs to a maximum \$10 million.

- B. AgriAssurance** – SME Stream. AgriAssurance is specifically designed to help businesses implement third-party assurance certification projects that address international market requirements and help expand export opportunities.
- C. Canada Small Business Financing Program** – Supports business growth through business loans with competitive interest rate. Up to a maximum of \$1M
- D. Innovative Solutions Canada** – The program helps startups and small/medium-sized businesses (SMEs) overcome technology development hurdles so that they can produce globally-demanded products and services
- E. Business Scale Up and Productivity Program** – Helps to offset upfront project costs and helps southern Ontario businesses grow more quickly. Access repayable funding for up to 35% of project costs to a maximum \$10M
- F. Industrial Research Assistance Program** – Company must be financially stable and incorporated. This program is designed to accelerate the research and development projects of Canadian innovators. Up to 60 – 80% of costs to maximum of \$10M
- G. Southwestern Ontario Development Fund** – Supports companies investing in new facilities and equipment to advance regional priorities. Two streams 1. Business 2. Community Economic Development
- G. Strategic Innovation Fund** – Supports projects that drive sustained productivity and economic benefits. Five streams: (1) Research, Development, and Commercialization, (2) Business Growth and Expansion, (3) Investment Attraction and Retention, (4) Collaborative Technology Development and Demonstration, and (5) National Ecosystems.



Grants Supporting Manufacturing

- A. CME Technology Assessment Program** - Supports manufacturers in Southern Ontario looking to complete a technology assessment to improve their systems, processes, and equipment. Organization has to have minimum of 16 full time employees
- B. SONAMI: Southern Ontario Network for Advanced Manufacturing Innovation** - Helps manufacturers and innovation-based businesses overcome innovation challenges. Up to 50% total project costs.



Grants Supporting Job Creation

- A. **Canada-Ontario Job Grant** - This is an Ontario government funding program that offers training grants to employers. Through the program, companies may receive non-repayable funding from the government to purchase third-party business training programs, including training for in-demand skillsets. Training is expected to improve the employability and value employees can provide; including new hires in these training sessions can also maximize your funding potential.
- B. **Canada Summer Jobs** – Support for employers providing supervised career-related work experience for youth employees. Up to 50% of employee minimum hourly rate; Non-profits can receive grants up to 100% of minimum wage plus Mandatory Employment Related Costs (MERCs); Amount is capped at a max \$300K per employer/province or territory. Maximum 40 hours/week/employee can be included.
- C. **IRAP Youth Employment Program** – Designed to assist funding of hiring young Canadian post-secondary graduates. Graduate can be applied to most areas from business development to technical to customer service/administration. Provides up to \$30,000 per graduate (up to two) for a period of 6 to 12 months.



Grants Supporting Partnerships Between Industry & Academia

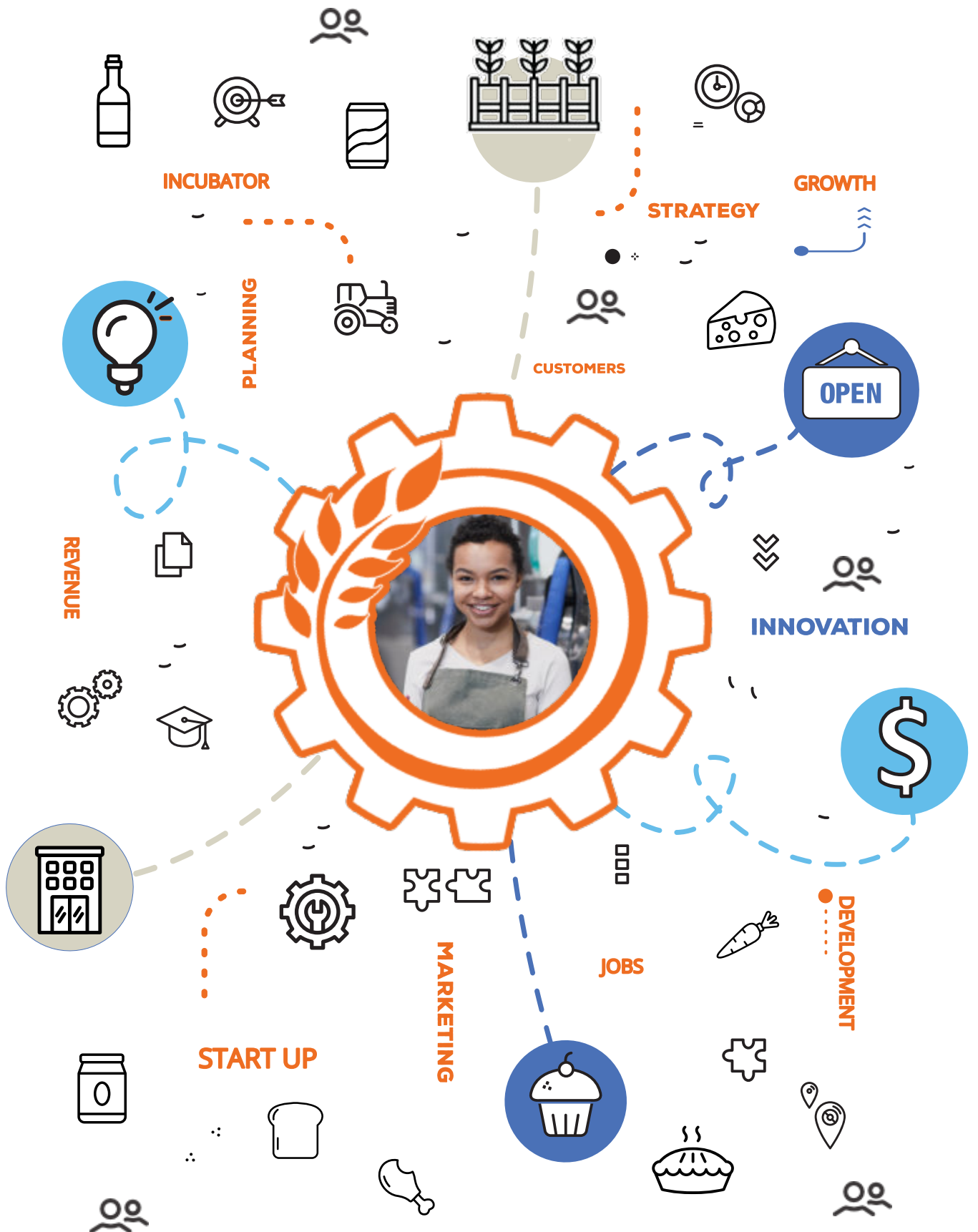
- A. **Market Readiness Program** - Supports academic spin-off companies, OCI accelerator (CLA/OCIA) graduates, and SmartStart Seed Fund awardees with Ontario government grants to further their early-stage commercialization and support scalable business growth. The program offsets a portion of costs related to customer creation and company-building activities. The funding helps to reduce the risk of other investment opportunities and helps attract additional private investments.
- B. **MITACS Elevate** - Supports industry and academic partnerships to solve current issues through innovative means. Up to \$25,000.
- C. **NSERC Alliance** - Supporting collaborative R&D projects between Canadian businesses and universities.



CONCLUSION

In this chapter we have examined some of the financial assumptions and projections that building and operating an incubator may include. We forecast that even with heavy program revenue, a project of this magnitude is forecasted to carry losses for the first three years at a minimum. The cumulative impact of those losses will be close to \$2 million dollars. Offsetting these losses through grants and partnerships will help the incubator with sustainability. Included in our sources of funds we identify potential grants that the incubator and or its partners may apply for.

We have provided some cost estimates for both construction and operations, but we recommend that all costs be verified at the time that development and purchasing budgets are established. While the operator of the incubator will need to balance creative revenue generation with cost containment, we are confident that this project can be developed feasibly and that utilizing some of the strategies discussed in this chapter, will be a strong addition to the food processing ecosystem in the province. The impact of this project to the region will be significant and have far-reaching implications for both business and local economic development. Overall, this is a project that is worthy of investment, that will bring positive results to the community and region for years to come.





ASSESSING THE IMPACT OF A

FOOD PROCESSING INCUBATOR

IN THE LONDON REGION

A Labour Market Partnership



This Project is funded in part by the Government of Canada and the Government of Ontario