



50 New Businesses, Collaborations, and Social Enterprises Report

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An initiative of



Table of Contents

- Executive Summary** 2
- 50 New Businesses and Collaborations Report**..... 4
 - Models of Circularity 4
 - Seeding Our Food Future** 5
 - SOFF Business Summaries (*alphabetically*)..... 6
 - Collaborations**.....14
 - Collaboration Summaries (*alphabetically*).....15
 - R-Purpose Program**.....18
 - R-Purpose Summaries (*alphabetically*).....19
 - Circular Economy Digital Passport**21
 - Circular Economy Digital Passport Summaries (*alphabetically*).....21
 - Residential Waste Data Technology Challenge**..... 22
 - Residential Waste Data Technology Challenge Summary..... 22
 - Future Circular Businesses: Food Recovery and Waste Diversion in IC&I Sector Pilot** 23
 - Conclusions and Lessons Learned** 23
- Appendix** 24
 - 1.1 Total SOFF Businesses (41)..... 24
 - 1.2 Total Collaborations (113)..... 32
 - 1.3 Total R-Purpose MICRO Businesses (50) 42
 - 1.4 Total R-Purpose Businesses (8) 48
 - 1.5 Total Circular Economy Digital Passport Businesses (20).....50
 - 1.6 Total Urban Agriculture Challenge Businesses/Organizations (10) 53

Executive Summary

As part of the mission to create Canada's first circular food economy in Guelph-Wellington, the second Our Food Future goal is to build 50 new circular businesses, collaborations, and social enterprises by 2023. This includes new business that are circular, existing businesses that have pivoted to integrate circularity, and circular collaborations. This report includes a summary of each of the 50 businesses and collaborations organized by the Our Food Future program they participated in (Seeding Our Food Future, R-Purpose Program, Circular Economy Digital Passport).

A total of 163 unique business embedded new circular practices into their operations and these businesses make up the 321 individual projects and collaborations supported by Our Food Future programming. The selected 50 businesses consist of: 12 new businesses, 29 existing businesses that have implemented new circular practices, and 9 circular collaborations.

Models of Circularity

To select the 50 businesses, we assessed the most captivating stories of the businesses that utilized circular business models, including: regenerative materials, recovering waste, circular design, and shared ownership. Among the selected 50 businesses, using regenerative materials (32%) was the most prevalent circular business model while shared ownership was the least prevalent (8%).

Seeding Our Food Future

Seeding Our Food Future (SOFF) was a micro-grant program launched to support businesses in response to the COVID-19 pandemic. A total of 40 businesses participated and 33 were selected as part of the 50 new circular businesses, collaborations, and social enterprises. Each of the 40 businesses created 3 key performance indicators (120 total), 28% of which had a social benefit, 40% had an environmental benefit, and 32% had environmental benefits. The 33 selected businesses are listed alphabetically by business name, type of benefit, and the percent of their project they completed.

Collaborations

A total of 105 collaborations were facilitated by Our Food Future programming. Of these collaborations, 54% focused on achieving an economic benefit while the remaining collaborations were split between social and environmental benefits at 23% each. The collaborations can be defined as symbiotic interactions between two or more individuals, businesses, and organizations that focus on either: a social goal, supply solution, sales solution, waste reduction, or education. At 37%, the most prevalent collaboration category was supply solution, while the least prevalent were a focus on education and sales solutions at 12% each. The 9 selected collaborations that were considered toward the 50 are listed alphabetically by businesses name and type of benefit.

R-Purpose Program

The R-Purpose program was developed by Provision Coalition for food and beverage businesses dealing with the impact of COVID-19. A total of 8 businesses participated, 6 of which were considered toward the 50 new businesses, collaborations, and social enterprises. Provision Coalition also provided this opportunity to micro-sized companies through R-Purpose MICRO which was offered to participants in the SOFF program. 24 of the 33 selected SOFF businesses were among the companies that completed R-Purpose MICRO. The 6 selected R-Purpose businesses considered toward the 50 are listed alphabetically by business name. Additional information is pending.

Circular Economy Digital Passport

The circular economy digital passport provides free access to a diverse community of organizations, businesses resources, and experts that are co-creating innovative solutions in support of a circular economy. A total of 12 businesses are engaged in the digital passport community. Of these, 27% are focused on social benefits, 55% on environmental benefit, and 18% on economic benefit. The finding that 75% of the businesses involved in the digital passport are not SOFF participants shows the growing number of businesses interested in adopting circular practices. The 2 selected businesses considered toward the 50 are listed alphabetically by business name and type of benefit.

Residential Waste Data Challenge

The residential waste data technology challenge called for submissions by businesses in Guelph-Wellington in an effort to identify better, more consistent data collection methods. The selected company to develop a solution was Eagle Vision Systems who have a focus on environmental benefit. They were considered toward the list of 50 new circular businesses, collaborations, and social enterprises.

Conclusions and Lessons Learned

The wide range of different programs allowed businesses at all sizes and stages to be involved in the Our Food Future initiative. Factors that often hinder the access of programming to businesses include revenue, investor, and partner requirements. The variety of program types addressed these hinderances and strengthened the local circular food economy in Guelph-Wellington for both new and existing businesses. Added value comes from the recognition of incremental change toward circularity and support with next steps. Our Food Future programming supported innovation by facilitating local collaboration efforts toward creating value from waste and increasing access to affordable, nutritious foods.

50 New Businesses and Collaborations Report

When businesses work together, they can reimagine a food system. By addressing Our Food Future’s second goal of creating 50 newly circular food businesses, collaborations, and social enterprises, we are fostering new ideas to support systemic change. A total of 344 businesses were involved in individual projects or partook in collaborations and partnerships. From those, 173 unique businesses implemented new circular practices. To determine which of the 344 businesses and collaborations counted towards the Our Food Future goal, we assessed which ones placed circularity at the core of their operations and business models. The breakdown of the 50 includes 12 new businesses, 30 existing businesses that have implemented circular practices, and 8 circular collaborations (Figure 1).

Figure 1 Distribution of the types of businesses included in the 50: new businesses (12), existing businesses (29), and collaborations (9).



Models of Circularity

All over the world, there are examples of businesses that place circularity at the core of their business model. Circular business models can exist in any industry and any stage of a value chain. To help us determine which businesses contributed to the 50 new circular businesses and collaborations, we assessed which model of circularity they followed.

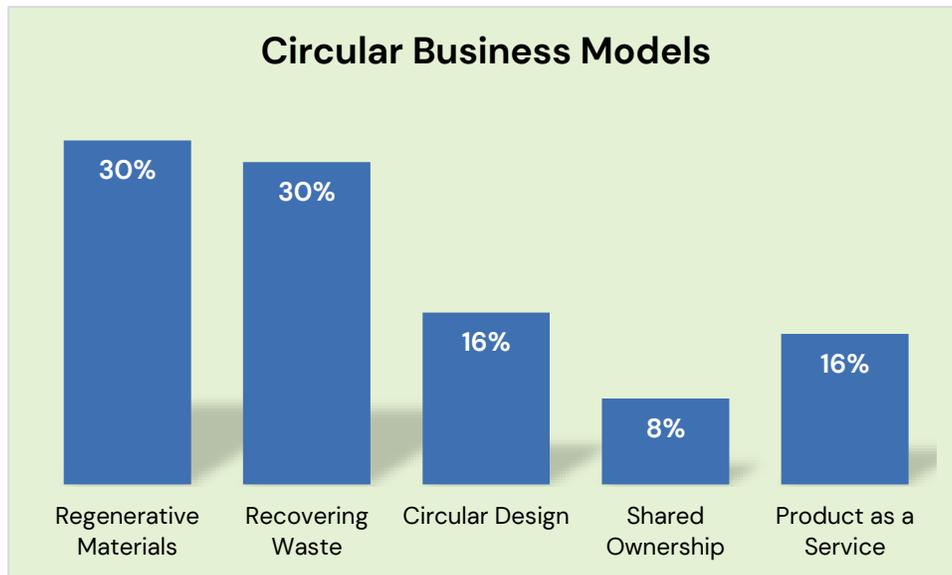
Common circular business models include:

1. Regenerative materials: a company reduces the need for new material inputs through the use of bio-based, renewable or recovered materials.
2. Recovering waste: a company uses as little energy and natural resources as possible through using waste as an input or incentivizing the return of used products or packaging.
3. Circular design: a company designs products to last and optimizes products and materials for reuse, repair, or refurbishment.
4. Shared ownership: a company leases products and uses them until the end of their life cycle rather than selling brand-new products to individuals or businesses.

5. Product as a service: a company offers the outcomes of a product rather than the product itself.

Among the 50 new circular businesses and collaborations, the regenerative materials and the recovering waste circular business models are the most prevalent at 30% (n=15) each. Only 8% (n=4) of the new businesses and collaborations used the shared ownership business model, making it the least commonly used model (Figure 2). These results are likely due to the nature of the businesses participating in the Our Food Future programming. Many already have a background in utilizing regenerative and sustainable practices, allowing them to improve on their current business model by making it more circular or by adopting the circular business model most relevant to them.

Figure 2 Distribution of common circular business models among the 50 new businesses and collaborations.



Seeding Our Food Future

With the implementation of the Seeding Our Food Future (SOFF) program, we were able to count 32 out of 40 businesses towards this goal ([Appendix 1.1](#)). 25% (n=10) of the SOFF

Figure 3 Distribution of the 3 types of KPI's created by SOFF participants: social (28%), environmental (40%), and economic (32%).



Social

28%



Environmental

40%



Economic

32%

businesses were new businesses, 62.5% (n=25) were pivoting or enhancing the circularity of an existing business and 12.5% (n=5) represented new collaborations between multiple organizations. The following businesses contributed to the Our Food Future goal because of their innovative new products or services. Additionally, each SOFF business was required to identify 3 Key Performance Indicators that were focused on either environmental, economic, or social issues. Across the 40 businesses, 48 environmental KPIs, 39 economic KPIs, and 33 social KPIs were identified (Figure 3).

SOFF Business Summaries (*alphabetically*)

Listed alphabetically by name, types of benefits addressed, and percentage of project completed.

3 Beets to the Wind Farm (Environmental, Economic, Environmental) 100%

Regenerative Materials

3 Beets to the Wind expanded the amount of produce available for sale during the winter months by creating storage units that use sustainable energy methods. They built two hoop houses, a garden row storage area and a root cellar from an old refrigerator. Both builds have reduced energy, greenhouse gases and food waste, while providing access to local, sustainably produced products in the off-season.

4th Line Cattle Co. (Econ, Econ, Enviro) 100%

Regenerative Materials

4th Line Cattle was able to implement more rotational grazing fencing and improve current fencing, to allow them to pasture more cattle, have higher yielding beef, and implement regenerative agriculture practices (Figure 4). They also purchased non-GMO seed and rented a no till drill to add more diversity to the pastures without disturbing the current soil which has improved soil health and increased the regenerative process. This has created better feed quality causing higher yielding beef in a shorter amount of time and allows supply to more of the community with sustainably raised nutrient dense beef and pork.

Figure 4 Cattle at 4th Line Cattle Co.



A Friendlier Company (Enviro, Econ, Econ) 100%

Shared Ownership

A Friendlier Company has created a smart, reusable food packaging system to reduce the use of single-use alternatives. The system uses a mobile application to facilitate the

tracking and reuse of various disposable food-packaging solutions. The project involved trials with the SEED (to provide healthy meals to the community without the plastic waste), as well as with local restaurants in Guelph. The pilot trials allowed A Friendlier Company to learn beyond surveys and interviews about how consumers behave and validate the concept and logistical processes. The process of collecting, cleaning, and redistributing containers for businesses has allowed for a waste-free circular economy with minimal energy input.

Ag Business & Crop Inc. (Social, Social, Enviro) 100%

Product as a Service

Ag Business and Crop's project focused on creating awareness through the creation of educational videos, reaching out to create collaborations, and executing a marketing/awareness program for their Wintex Soil Samplers. These are a reliable and user-friendly system that provides detailed soil information so precise nutrient balancing can be achieved in the soil, increasing yield, crop quality and reducing over fertilization of areas of soil that are nutrient rich already. They have partnered with seven dealers and users to increase awareness of the Wintex system to help farmers better analyze their soils.

Ambiances Gourmandes (Enviro, Social, Econ) 100%

Recovering Waste

Ambiances Gourmandes purchased an industrial dishwasher to improve energy and water usage, as well as saving staff time and improving the operational efficiency. This new appliance has saved time and money in operating costs at their tea shop, as well as water usage. Ambiances Gourmandes also focused on curating relationships (Figure 5) with local suppliers to offer more products in her shop. With that, Ambiances has focused more efforts into their online store and were able to increase sales from 5% to 55%.

Figure 5 Christelle Martin, owner of Ambiances Gourmandes.



BioFerm Functional Food (Econ, Enviro, Social) 98%

Circular Design

BioFerm Functional Food is a start-up company focused on healthy baking and have two products now ready to launch: a vegan cake mix and a multigrain sourdough bread mix. Their mixes include a dried starter to eliminate the need for activated yeasts and bacteria's, making them completely shelf stable. Their project included validating the product through consumer feedback, developing a marketing and brand strategy, and sourcing copackers and distributors to take to market.

Elora Farmers' Market (Environmental, Social, Econ) 100%

Shared Ownership

Elora Farmer's Market felt the effects of COVID-19 as it shortened their season by at least two months and reduced the in-person traffic to its premises. The Market refined and increased the traffic and utilization of their online presence and implemented an innovative project that will see increased access to fresh food and reduced farmer wastage, saving 5,700lbs of food. Their main project established an opportunity for the local farmers to create a common stand where low-income customers were able to access produce at a reduced or pay-as-you-can cost.

Eramosa Herbals (Econ, Social, Enviro) 100%

Regenerative Materials

Eramosa Herbals scaled up their medicinal and culinary herbal garden using permaculture and regenerative principles by increasing growing area from 1000 square feet to .5 acres. They were also able to purchase tools and increase their public engagement through newsletters, blogs, and social media. Eramosa Herbals implemented a Community Shared Agriculture model focused on herbs and related products.

Escarpment Laboratories (Enviro, Enviro, Econ) 73%

Recovering Waste

Escarpment Laboratories was able to reuse its expired yeast instead of importing yeast extract, dramatically increasing the circularity of its main yeast products which projects a cost-savings of \$20,000/year (Figure 6). Reusing expired yeast mitigates the waste treatment implications of yeast (high BOD/COD) and drying fermentation inoculums allowed for room-temperature storage and limited the need for refrigeration. With the success of this project, they were able to launch their first food fermentation product, a sour dough starter kit in early 2021.

Figure 6 Photo of koji by Escarpment Laboratories.



Fan/Joy (Econ, Social, Enviro) 100%

Product as a Service

Fan/Joy expanded their Junior Chef programs and established a Youth and Family Culinary Centre because of COVID-19 that focuses on healthy eating, positive relationships with family and food, and minimizing food waste. They have also created the Fan/Joy Impact

Fund to increase the reach of therapeutic programs being offered to high-risk youth in need of mental health services that cannot afford current fee-for-service therapeutic cooking classes.

Fifth Bean Inc. (Econ, Social, Enviro) 100%

Recovering Waste

Fifth Bean is a start-up that created the world's first soy cream liqueur from tofu waste products. The product fills a key void in the market for the environmentally conscious, plant-based and lactose intolerant consumers. Their project involved establishing a stable raw material supply chain, solidifying a contract distilling agreement with an existing distillery, and obtaining the proper licenses.

Food Venture Program (Econ, Enviro, Social) 100%

Product as a Service

Food Venture Program is a consultancy that offers a series of educational programs that are designed for those looking to start or build their businesses and to learn more about food industry. Their project was to expand and enhance their educational content to ensure a focus on the implementation of circular practices, systems or processes are included in new entrepreneurial ventures.

GR365N Ltd. (Enviro, Social, Social) 100%

Regenerative Materials

The focus of GR365N's SOFF project was to engage with community agencies to increase the accessibility of food through vertical farming (Figure 7). They aimed to work with community agencies to provide food security and food literacy through hydroponic training programs and equipment partnerships. Their systems use 95% less water than traditional growing methods and allow growth all year-round. As part of this project, they planned to increase the use of their hydroponic growing systems implemented in Guelph-Wellington while empowering people to enter the hydroponic food growing sector.

Figure 7 Colin McVicker, co-founder of GR365N.



Grow Well Eat Well (Econ, Econ, Social) 100%

Product as a Service

Grow Well Eat Well is an offshoot of Blue Sky Beef/The Craig Family Farm. It is a podcast that aims to connect farmers, wholesalers, chefs, consumers, and meal makers. It will

showcase innovative food system players, providing them with a platform to find value in marketing to an expanding and engaged audience. Episodes will include calls to action that will encourage the audience to participate in the food system and work with/support food producers to create unique products and a stronger more circular food system.

Handsome Devil Bistro (Enviro, Enviro, Social) 100%

Recovering Waste

The Handsome Devil Bistro acquired two very old and ill-functioning keg fridges and would like to replace these with a new one. This purchase has allowed for a reduction in product waste, a continuous relationship with the local brewers by being able to offer their product at a viable profit margin, and the ability to save energy and reduce the drain on their limited energy supply. The new appliances also allowed them to offer growlers and incentivize their return by providing refills.

Heartwood Farm & Cidery (Econ, Social, Social) 100%

Recovering Waste

Heartwood Farm & Cidery created a four-season farm engagement program for people to learn about regenerative agriculture and how it impacts the food and beverages they love. This year-round program also contributes to the growing understanding of challenges to the circular food economy. As an additional part of their SOFF project, Heartwood is working with Provision Coalition to further expand processing opportunities in the cider house to prevent wasted ingredients and by-products.

Kortright Presbyterian Church (Social, Enviro, Social) 83%

Product as a Service

Kortright Presbyterian Church utilized their property's greenspace to expand their gardens and grow food to help their neighbours and the food insecure in Guelph. In 2020 they harvested 750lbs of potatoes to give to four local food organizations and expect to double it for 2021. At the end of the SOFF project period, they had already harvested approximately 875lbs of various vegetables and expect to see at least 1000lbs.

New Earth Solutions (Enviro, Social, Econ) 67%

Circular Design

New Earth Solutions developed a technology that allows for vertical farming in optimal conditions through machine learning and artificial intelligence. Due to their patented design, they can build and scale their vertical farms in a cost effective and timely manor. This project enabled New Earth to adapt their technology for indoor residential use, so that people living in urban areas can grow their own fresh produce with minimal inputs.

Reroot Farm (Enviro, Social, Social) 93%

Recovering Waste

Reroot's project focused on using more of this farm's annual harvest of produce by using excess and cosmetically undesirable vegetables to make value-added products. To enhance community collaboration, Reroot is working with Raw Carrot in Mt. Forest, a local chef in Harriston who has access to a commercial kitchen, and with Funky Ferments in Holstein to make these value-added products. To make more nutritious food available to those in need, Reroot has also partnered with local foodbanks to distribute value added products

Spiral Farm (Enviro, Social, Econ) 100%

Regenerative Materials

Spiral Farm shifted to organic no-till practices, a more ecologically sound way to grow (Figure 8). This shift involved a learning curve and a specific approach to soil health plus some adjustments to the daily workings of the farm. The project included an assessment of the soil, the purchase of soil amendments, equipment and/or professional support. Spiral Farm was also able to expand into growing more perennial fruits such as berries, and perennial crops, as well as purchasing a larger energy efficient refrigeration unit to serve more customers with the increase in product.

Figure 8 Martina Schaefer, owner of Spiral Farm.



Taste Detours (Social, Enviro, Econ) 100%

Product as a Service

Taste Detours has created two new culinary experiences that showcase circular food and business collaborations in the Guelph-Wellington area in response to the COVID-19 pandemic. These online tours offer people the ability to experience local circular businesses without leaving their homes. Additionally, Taste Detours has curated multiple picnic offerings that feature a variety of local products from circular businesses.

The Conscious Kitchen (Econ, Econ, Enviro) 100%

Recovering Waste

The Conscious Kitchen is a prepared meal, recipe box, and grocery subscription service. They source imperfect produce from local farms that would otherwise go to waste and turned them into value-added products for their recipe boxes and preserves.

The Urban Orchardist (Enviro, Social, Econ) 100%

Product as a Service

The Urban Orchardist is a circular, purpose-driven start-up consultancy for fruit trees to help owners properly care for and utilize the fruits on their property. Their project was aimed towards marketing, creating a sustainable business model, and obtaining strategic local partnerships to help communities gain access to more nutritious foods and reduce the amount that is wasted.

Urban Stalk Inc. (Enviro, Econ, Social) 100%

Circular Design

Urban Stalk Inc. and The Guelph Food Bank have partnered to develop innovative hydroponic system solutions to help food insecure people gain access to stable and sustainable sources of nutritious foods. The Guelph Food Bank has provided Urban Stalk with guidance and feedback on how to operate hydroponic systems in foodbanks. Part of their project also looked into these systems in grocery stores as well to minimize consumer costs.

The Pfisterer Farm (Enviro, Enviro, Econ) 94%

Regenerative Materials

VegetaBALES is a new product offered by The Pfisterer Farm and is the first complete outdoor gardening kit that includes everything needed to grow a variety of vegetables wherever needed. Each kit is made from a recycled agricultural by-product, is 100% compostable and all seeds are locally sourced. Their project consists of launching this new offering and increasing the amount of people with gardening space and repurposing otherwise wasted bean straw (Figure 9).



Figure 9 Jess Pfisterer, co-owner of The Pfisterer Farm.

Ward One Brewing Company Inc. (Enviro, Social, Enviro) 100%

Recovering Waste

Ward 1 Brewing Company investigated how they could utilize their brewing knowledge to operate hydroponics in a more circular way. Their project involved keeping the brewing water on site as much as possible and utilizing it in their hydroponic gardens. Ward 1 Brewing has been able to successfully filter their brew wastewater into clean, usable water for their hydroponics.

WaterFarmers Urban Agriculture Innovation Inc. (Econ, Enviro, Social) 100%

Regenerative Materials

WaterFarmers Urban Agriculture developed a complete rainwater harvesting residential system for seasonal irrigation with a capacity of 1000L that is approved by the City of Guelph water harvesting program. Their project included creating packages for residential consumers to purchase as part of the offer so customers can choose a design that best suits the location needs and obtaining a demonstration site (University of Guelph, Arboretum).

Well Baked Box Inc. (Social, Econ, Enviro) 100%

Circular Design

Well baked box is a healthy baked good delivery service start-up which offers delicious and nutritious baked good and snack ingredients each week in a convenient pre-portioned package (Figure 10). Their project goal is to market and launch the business and target a variety of growth milestones including sales, marketing, and media awareness. They also transitioned their packaging to 100% recyclable, compostable, and returnable.

Figure 10 Stewart and Courtney Clayson-Russel, founders of Well Baked Box.



Wild Grove Regenerative|Ag (Social, Econ, Enviro) 100%

Regenerative Materials

Wild Grove is a start-up offering consultancy and cultivation of native crops to meet local produce demands and replacing traditionally imported ingredients. Specifically, their focus is on replacing herbal liqueur ingredients and craft beverage ingredients. Wild Grove cultivates native plant relatives to provide these ingredients within a circular economy using permaculture and regenerative practices. Their project focused on collaborations with a wide variety of local brewers, distilleries, restaurants, and nurseries to utilize native ingredients.

Winterhill Farm and Garden (Econ, Enviro, Econ) 97%

Regenerative Materials

Winterhill Farm and Garden needed to expand their operation to meet growing demand. With some upgraded irrigation and the addition of some small tools they were able to double the number of families they service. They expanded their irrigation system and have been recycling the wash water from their washing station where they clean vegetables and eggs. They were able to do this by digging a small pond near the garden to catch the wastewater and then pumping it through the irrigation system back onto the garden.

Zerocery (Econ, Econ, Enviro) 100%

Circular Design

Zerocery is an online, zero-waste grocery store that makes it easy to shop with reusable containers. Their project was focused on increasing their revenue and the number of clients served by expediting ordering times and in doing so, improving the economic and environmental efficiencies of the business. They were able to decrease the average delivery distance between customers and increase their weekly sales.

Zocalo Organics (Econ, Social, Enviro) 98%

Regenerative Materials

Zocalo Organics has focused on their business model and investigated how they can pay all

Figure 11 Distribution of the types of benefits between collaborators.



employees a living wage and make their packaging more environmentally friendly. Additionally, they started doing webinars on sustainable farming practices to help educate more people and farmers about the benefits of circularity. These practices include nutrient cycling by using compost to add nutrients to their crops as well as using permaculture techniques and soil testing to help build the health of their soil.

Collaborations

The following 8 business collaborations were considered as a part of the 50 new businesses and collaborations. They were chosen from the 113 collaborations facilitated by Our Food Future programming because of their innovation toward new products or services ([Appendix 1.2](#)). Of those 113 collaborations, over half (n=62) focused on achieving an economic benefit while the rest were split between social (n=25) and environmental (n=26) benefits (Figure 11). It is worth noting that most collaborations resulted in a combination of economic, social, and environmental benefits. We also categorized the collaborations into different types based on the nature of the relationship. The five types of collaborations we identified were: social goal, supply solution, sales solution, waste reduction, and educational. The most common type of collaboration was supply solution (38%), followed by waste reduction (26%), social goal (13%), and then sales solution and educational (each at 12%) (Figure 12).

Figure 12 The types of collaborators categorized by social goal (14%), supply solution (37%), sales solution (12%), waste reduction (25%), and educational (12%).



While many SOFF businesses engaged with one another during the program, they also reached out to other businesses across Guelph and Wellington County. In fact, of the 113 collaborations 97 were between SOFF and non-SOFF businesses, 7 were between one SOFF business and another, and 9 were between two non-SOFF businesses. This might be a result of the nature of the differing goals of their individual SOFF projects and target markets. It also suggests that the program positively impacted businesses and the community beyond those directly involved in the program.

The collaborations facilitated by Our Food Future programming range from being focused on a supply solution, waste reduction, a social goal, a sales solution, or education. Supply solution means businesses have partnered to find efficiencies in their supply chains, helping their business become more resilient and competitive. Waste reduction collaborations made a large impact finding new ways to reuse and reduce the number of materials that would otherwise have gone to waste. Collaborations with a social goal worked to provide a positive social impact in their community through various programs and incentives (e.g., donating to community support agencies). Collaborations categorized as having a focus on sales solutions are partnerships that benefit the marketing and sale of a particular product or service. By working together locally to find these sales solutions, we are moving from a competitive to a collaborative system. Collaborations with an educational focus support the reach of circular and sustainable concepts that help to build this new system.

Collaboration Summaries *(alphabetically)*

Friendlier and The SEED (Enviro)

Shared Ownership

Friendlier started an ongoing collaboration with The SEED, a Guelph-based non-profit organization working toward a connected community where everyone has access to healthy food. Launching their business by integrating their returnable container model with The SEED's meal delivery services has benefited both parties and eliminates packaging waste. Each week when The SEED delivers a meal, they pick up the empty containers from the previous week and Friendlier comes to collect the containers. The containers are then washed, sanitized, and repackaged at the University of Guelph and sold back to The SEED to create a closed-loop system (Figure 13).

Heartwood Farm & Cidery, Chef Scotty Yates, and Grain Revolution (Econ)

Regenerative Materials

Heartwood Farm & Cidery collaborated with Guelph-based bakery, Grain Revolution and Guelph-based Chef Scotty Yates to create a new offering for Heartwood's shop: a BBQ Burger Box. As part of this collaboration, Chef Scotty Yates created a BBQ recipe with Heartwood's cider and maple syrup. The boxed offering includes burgers, buns, barbeque sauce, and cider. It sold out quickly and they plan to replicate it. This collaboration between local businesses using their own products to create something new and the well-received community response demonstrates Guelph-Wellington's willingness to build the circular economy.

Figure 13 Jacqueline Hutchings and Kayli Dale, co-founders of Friendlier.



Planet Bean Coffee and Fill it Forward (Enviro)

Circular Design

Guelph-based coffee shop, Planet Bean Coffee is working in collaboration with Fill it Forward, an organization that creates reusable products and is focused on designing the best solutions to eliminate single-use waste. As part of their SOFF project, Planet Bean will initiate a returnable cup program called the "re-CUP" and collaborated with Fill it Forward to design the cups. Together they determined that the double-walled stainless-steel cup is the best option as it is not only durable and long-lasting, but also completely recyclable. This circular business model allows Planet Bean to reduce their waste and allows consumers to have a more sustainable option.

Reroot Organic Farm and the Raw Carrot (Social)

Recovering Waste

Reroot Organic Farm is collaborating with Wellington County-based social franchise, The Raw Carrot. Using chicken and excess produce from Reroot, the Raw Carrot now makes two custom gourmet soups: a carrot soup and a chicken noodle soup. To further provide healthy food to their community, Reroot donates a portion of the gourmet frozen soups to their local food bank. This collaboration allowed them to direct more of their farm's annual harvest of produce to human nutrition by finding value in their cosmetically undesired vegetables to make new products, instead of letting them go to waste. It has also enabled Reroot Organic Farm and the Raw Carrot to increase access to nutritious foods in their community (Figure 14).

Figure 14 Caitlin Hall, owner of Reroot Organic Farm.



Retour Bistro and Garlic Suppliers (Econ)

Recovering Waste

Guelph-based restaurant, Retour Bistro is collaborating with local garlic farmers. As part of their SOFF project, Retour created a new line of garlic sauce using garlic that is small and difficult for farmers to sell. They manufacture this sauce for sale in bulk as well as in a new line of family meal kits. This collaboration not only helps reduce the amount of wasted garlic that farmers cannot sell, but it also reduces emissions by sourcing locally instead of importing from other areas. To increase the circularity of their products, Retour transitioned into almost entirely compostable or recyclable materials. They can now offer their customers a new circular option while providing additional revenue to local farms.

Spiral Farm and Local Animal Sanctuary (Enviro)

Regenerative Materials

Spiral Farm is collaborating with a local animal sanctuary. The animal sanctuary produces compost that is made with the bedding from the animals and green waste from local grocers that is diverted from the landfill. Spiral Farm uses this compost to improve the health of their soil as it helps to build soil structure and enables the soil to retain nutrients and moisture. This symbiotic interaction between Spiral Farm and the animal sanctuary enables them both to contribute to the circular food economy and allows Spiral Farm to increase their use of regenerative farming practices.

Transition Guelph and Woodside Root Cellars (Social)

Circular Design

Not-for-profit group, Transition Guelph is collaborating with Woodside Root Cellars, a Guelph-based construction and consulting company focused on traditional food storage solutions. Transition Guelph incubated this innovative business to create passively cooled cold-rooms in Guelph and Wellington County. The three key components of their SOFF project are to promote the concept by creating awareness of the benefits of cold-rooms and how it supports local, regenerative agriculture; sharing knowledge on how to effectively use a cold-room; and creating fully functional cold-rooms in Wellington County area homes and community buildings (Figure 15).

Figure 15 Steve Tedesco, Transition Guelph.



Wellington Made and Dillon’s Small Batch Distillers (Econ)

Recovering Waste

Wellington County-based business, Wellington Made is collaborating with Dillon’s Small Batch Distillers to create one of their best-selling products: whiskey infused maple syrup. This process is completed through the cyclical reuse of whiskey barrels that are then sent back to the distiller who uses them to make a maple syrup infused whiskey. Repurposing the whiskey maple barrels prevents waste and reduces the carbon footprint of sourcing new barrels. Unlocking the value of these barrels allows for two new circular products to be created, increasing the economic benefits for both Wellington Made and the distiller.

R-Purpose Program

The R-Purpose program was developed by Provision Coalition for food and beverage businesses dealing with the impact of COVID-19 to improve performance, address risks, lower costs of production and elevate brand by embedding purpose, sustainability, circularity at the heart of their business. As part of the comprehensive program, the RP8 (R-Purpose 8) Our Food Future companies have been participating in monthly coaching calls as a group, during which different elements of the circularity transformation process have been explored. The purpose of these calls is to create a “cohort” where companies share insights and experiences and foster collaborative opportunities. Buddy calls between program participants have also been established between cohort meetings to facilitate such sharing.

As Provision Coalition is an Our Food Future collaborator, the following 7 businesses were considered the most interesting to be part of the 50 new businesses and collaborations. They were chosen from the 8 businesses that completed the R-Purpose program ([Appendix 1.4](#)). Heartwood Farm & Cidery, part of the RP8, has already been counted as part of the 50 under the Seeding Our Food Future program.

Provision Coalition also offered this opportunity to micro-sized companies through R-Purpose MICRO, an intensive high-impact program aimed to accelerate growth and build resiliency. The MICRO course was offered to all 40 SOFF participants and 24 of the 32 selected were among the companies that participated in this program ([Appendix 1.3](#)).

R-Purpose Summaries (*alphabetically*)

Fergies Fine Foods

[Recovering Waste](#)

Fergie's is a gourmet food retailer and catering business that produces all their food on sight. Their Fergus store location sells prepared meals and other gourmet food products. Fergie's integrates circular practices by finding ways to recover waste and support local businesses who do the same by showcasing their sustainable products in their store.

GoodLeaf Farms

[Regenerative Materials](#)

GoodLeaf is a producer of local micro and baby greens. In 2019, GoodLeaf's first full-scale commercial farm in Guelph began supplying their greens to retail and restaurant locations throughout Ontario. Through the R-purpose conservation work, an opportunity was identified for GoodLeaf Farms to send 2.39 million kg of substrate to local Guelph Meadowville Nursery for composting, saving \$150,000 per year in transportation and disposal costs. Goodleaf Farms is also currently working to secure a collaboration with Outcast Foods to upcycle their harvested leafy greens that do not meet retail specifications and turn them into a plant-based protein powder. This opportunity is still in the development stage.

Organic Meadow

[Regenerative Materials](#)

Organic Meadow offers a complete line of organic dairy products made at their Guelph processing facilities, which are sold in retail stores across Canada. Organic Meadow's Consumer Touch Point Tool is a spin-off collaboration from the R-Purpose work. The collaboration is to build a consumer touchpoint tool with WholeChain and Provision, that will allow consumers to access environmental data, and real time sustainability and circularity stories that will surprise consumers with the depth of data and the authenticity and honesty by which the stories are told. This collaboration is currently in progress.

Roothams Gourmet Preserves

[Recovering Waste](#)

Based in Guelph, Roothams is a family owned and operated company that produces small-batch, premium preserves made from local ingredients. Rootham's products can be found at independent retailers throughout Ontario or purchased online. Roothams and GoodLeaf have begun the planning stages to develop an arugula pesto with upcycled finished goods (arugula) from GoodLeaf Farms. This opportunity is still in the development stage. A Collaboration between Roothams and Heartwood resulted in the creation of a grilling sauce created by Roothams repurposing Heartwood's end of batch cider and end of season maple syrup.

Thatcher Farms

[Regenerative Materials](#)

Thatcher Farms is a family farm which was established to promote and offer local, sustainable products. The farm raises beef, pork, lamb, chicken and turkey which they sell through their on-farm Butcher Shop and online delivery services. They also sell other locally produced products in their on-site Farm Market shop and have an on farm bakery that produces locally made baked goods.

Wellington Brewery

[Recovering Waste](#)

Since 1985, Wellington Brewery has been a pioneer in the craft brewing scene by producing timeless, traditional style ales as well as experimenting with new recipes as part of their Welly One-Off Series. As an independent and locally owned brewery, they take pride in being an active member of the community, taking part in countless events and supporting charitable causes. In exploring upcycling opportunities with Wellington Brewery, Provision was able to bring together six local businesses to collaborate to develop a Gourmet Circular Meal; Oreka Solutions, Izumi Aquaculture, Escarpment Laboratories, Smoyd Farms, Grain Revolution and three restaurants (The Wooly Pub, Mijjidaa Cafe & Bistro, Park Eatery) from The Neighbourhood Group. Together they launched a gourmet circular meal that started with Wellington's spent grains that went to feeding insects at Oreka Solutions, which then fed rainbow trout at Izumi Aquaculture. The detritus (fish waste) went to fertilize potatoes at Smoyd Farms. Wellington's spent grains and spent yeast from Escarpment Laboratories also went to create sourdough from Grain Revolution. All these ingredients came together on plates at the three Neighbourhood Group restaurants in the form of sourdough breaded trout and fries, hot smoked trout sandwich and chips and cured steelhead trout.

Yorkshire Valley Farms

[Recovering Waste](#)

Yorkshire Valley Farms is a producer of free-range organic chicken, turkey, and eggs. Farm Fresh Poultry Ltd processes the poultry in Harriston, Ontario. Through the R-Purpose work a

feasibility study identified a viable market with the pet food industry where Yorkshire Valley can upcycle their poultry offal byproducts (hearts and livers). They have made a commitment to build this into their facility expansion plan in the next two years, which will repurpose the unavoidable by-product to a higher value market.

Circular Economy Digital Passport

The circular economy digital passport provides free access to a diverse community of organizations committed to building a circular economy and connects businesses with



Figure 16 Distribution of the types of benefits between digital passport users.

programs, business resources, and experts that can support them on their circular journey. The following 2 businesses were considered as a part of the 50 new businesses and collaborations because of the innovative, scalable, and circular nature of their businesses. They were chosen from the 12 businesses (as of August 2021) that joined the circular economy digital passport ([Appendix 1.5](#)). Of those 12 businesses, 6 are currently focused on improving the environmental benefits of their business, 2 are focused on improving the economic benefits and 3 are focused on the social benefits (Figure 16). When signing up for the digital passport, each business identified the specific ways in which they support all 3 Our Food Future goals, demonstrating that their businesses also have a combination of environmental, social, and economic benefits. It was found that 75% (n=9) of the businesses involved in the digital passport initiative are not SOFF businesses. This shows the growing number of businesses in Guelph, Wellington County and beyond that are working to adopt circular practices and circular business models.

Circular Economy Digital Passport Summaries (*alphabetically*)

Circulr (Enviro)

Shared Ownership

Ciculr is a Guelph-based business that provides seamless back-end logistics and washing infrastructure for consumer-packaged goods companies in the circular economy. They help companies who already have zero-waste packaging manage their reverse logistics and help companies who are looking to become zero waste create and operate their packaging infrastructure. Through the digital passport network, they have already connected with

numerous businesses in Guelph and Wellington County with the aim of helping them become more circular in an easy and affordable way.

Crafty Ramen (Enviro)

Recovering Waste

Crafty Ramen is a noodle shop and market with locations in Guelph and Kitchener. They offer a subscription meal kit and sell their consumer packed goods in grocery stores. Crafty Ramen joined the circular economy digital passport to support their growth as a circular business. Already minimizing waste wherever they can, Crafty Ramen is actively looking for new ways to collaborate with other food businesses in order to make their production more circular. They are currently involved in the Circular Innovation Council's ICI pilot project to better manage their organic waste. To expand their network and find new value for their waste, Crafty Ramen also joined ReSource Exchange Marketplace.

Residential Waste Data Technology Challenge

The residential waste data technology challenge is an innovative way to call for submission to solve a problem with waste collection data. Currently, the only way for the City of Guelph to gather data on the food waste going into green carts is through visual or manual waste audits. These are labour intensive and only consider a small sample of waste the City collects. To design effective waste reduction programs, we need to identify a better, more consistent data to identify trends and measure change. The selected company to develop a solution was Eagle Vision Systems and they are currently in the proof-of-concept stage.

Residential Waste Data Technology Challenge Summary

Eagle Vision Systems (Enviro)

Product as a Service

Eagle Vision Systems is a technology company focused on modernizing waste management practices using AI, data and other emerging technologies. Their CartSeeker patented AI-based cart recognition technology identifies and locates curbside waste carts and fully automates the operation of the truck's robotic lift arm without joystick manipulation. This provides more efficient residential waste collection. As winners of the challenge, they have developed a technology that provides real-time data on avoidable food waste and other contaminants collected through the municipal organics waste stream. Their solution, developed over 16 weeks in collaboration with the University of Guelph, Department of Computer Science, has been able to identify five-streams of contaminants in the organics stream (including avoidable food waste) with 94% accuracy.

Future Circular Businesses: Food Recovery and Waste

Diversion in IC&I Sector Pilot

With support from Our Food Future, City of Guelph and County of Wellington, the Circular Innovation Council is facilitating collaboration among businesses to explore a non-profit cost-shared system that collects food waste for organics processing, and edible food for rescue. Their pilot aims to mimic the municipal model to test the viability of a shared collection and consolidation system for commercial, retail, and multi-residential tenants to optimize organics recycling in geographic clusters, along with the added social benefit of redirecting edible food to food rescue agencies. The goal is to create an effective and consolidated collection and transport system to maximize organics diversion and food recovery while minimizing costs and greenhouse gas emissions in the industrial, commercial, and institutional sector (IC&I).

The pilot is scheduled to launch November 2021. Through this pilot, participating businesses will be able to increase their circularity and will be assessed as circular businesses in 2022.

Conclusions and Lessons Learned

While reviewing the businesses and collaborations involved in creating the 50 report, we identified that a variety of programming helped local businesses develop their business models into circular ones. By offering a multitude of different programs that are involved in the circular economy, businesses were able to participate at the level they were currently at. For SOFF especially, many participants stated they found the program to be the most valuable because there were no revenue, investor, or partner requirements. It is also important that there are different programs that offer funding because it allows businesses of all sizes to succeed with their innovative projects and ideas.

By having our programs available to a wide range of businesses, it has greatly strengthened the local circular economy in Guelph-Wellington for both new and existing businesses. Businesses were able to recognize the value of incremental change with small steps towards circularity and a plan to continue to the next steps. With the help of Digital Passport, businesses can continue to participate in the circular economy and be recognized for their achievements and collaborations. Programming throughout the Our Food Future ecosystem also encouraged more local partnerships and collaboration efforts towards both creating value from waste and increasing access to affordable, nutritious foods.

Appendix

1.1 Total SOFF Businesses (41)

#	Business	Project Description
1.	3 Beets to the Wind Farm	3 Beets to the Wind expanded the amount of produce available for sale during the winter months by creating storage units that use sustainable energy methods. They built two hoop houses, a garden row storage area and a root cellar from an old refrigerator. Both builds have reduced energy, greenhouse gases and food waste, while providing access to local, sustainably produced products in the off-season.
2.	4th Line Cattle Co.	4th Line Cattle was able to implement more rotational grazing fencing and improve current fencing, to allow them to pasture more cattle, have higher yielding beef, and implement regenerative agriculture practices. They also purchased non-GMO seed and rented a no till drill to add more diversity to the pastures without disturbing the current soil which has improved soil health and increased the regenerative process. This has created better feed quality causing higher yielding beef in a shorter amount of time and allows supply to more of the community with sustainably raised nutrient dense beef and pork.
3.	A Friendlier Company	A Friendlier Company has created a smart, reusable food packaging system to reduce the use of single-use alternatives. The system uses a mobile application to facilitate the tracking and reuse of various disposable food-packaging solutions. The project involved trials with the SEED (to provide healthy meals to the community without the plastic waste), as well as with local restaurants in Guelph. The pilot trials allowed A Friendlier Company to learn beyond surveys and interviews about how consumers behave and validate the concept and logistical processes. The process of collecting, cleaning and redistributing has allowed for a waste-free circular economy with minimal energy input.

4.	Ag Business and Crop	Ag Business and Crop’s project focused on creating awareness through the creation of educational videos, reaching out to create collaborations, and executing a marketing/awareness program for their Wintex Soil Samplers. These are a reliable and user-friendly system that provides detailed soil information so precise nutrient balancing can be achieved in the soil, increasing yield, crop quality and reducing over fertilization of areas of soil that are nutrient rich already. They have partnered with seven dealers and users to increase awareness of the Wintex system.
5.	Ambiances Gourmandes	Ambiances Gourmandes purchased an industrial dishwasher to improve energy and water usage, as well as saving staff time and improving the operational efficiency. This new appliance has saved time and money in operating costs at their tea shop, as well as water usage. Ambiances Gourmandes also focused on curating relationships with local suppliers to offer more products in her shop. With that, Ambiances has focused more efforts into their online store and were able to increase sales from 5% to 55%.
6.	BioFerm Functional Food	BioFerm is a start up company focused on healthy baking and have two products now ready to launch: a vegan cake mix and a multigrain sourdough bread mix. Their project included validating the product through consumer feedback, developing a marketing and brand strategy, and sourcing copackers and distributors to take to market.
7.	Black Powder Bison	Black Powder Bison runs a strong, grass-fed bison herd that is 100% natural. The bison herd grazes on nearly 20 acres of pasture and handling is kept to a minimum to avoid unnecessary stresses. The pasture is split into 4 sections which allows for rotational grazing, meaning the herd always has access to fresh pasture and the fields are given time to naturally regenerate.
8.	The Conscious Kitchen	The Conscious Kitchen sourced imperfect produce from local farms that would otherwise go to waste and turned them into value-added products for their recipe boxes and preserves.
9.	Elora Farmers' Market	Elora Farmer’s Market felt the effects of COVID-19 as it shortened their season by at least two month and reduced the in-person traffic to its premises. EFM refined and increased the traffic and utilization of their online presence and implemented an innovative project that will see increased access to fresh food and reduced farmer wastage, saving 5700lbs of food. Their main project

		established an opportunity for farmers to create a common stand where low-income customers were able to access produce at a reduced or pay-as-you-can cost.
10.	Eramosa Herbals	Eramosa Herbals scaled up their medicinal and culinary herbal garden using permaculture principles by increasing growing area from 1000 square feet to .5 acres. They were also able to purchase tools and increase their public engagement through newsletters, blogs, and social media. Eramosa Herbals implemented a Community Shared Agriculture model focused on herbs and related products.
11.	Escarpment Laboratories	Escarpment Laboratories was able to reuse its expired yeast instead of importing yeast extract, dramatically increasing the circularity of its main yeast products which projects a cost-savings of \$20,000/year. Reusing expired yeast mitigates the waste treatment implications of yeast (high BOD/COD) and drying fermentation inoculums allowed for room-temperature storage and limited the need for refrigeration. With the success of this project, they were able to launch their first food fermentation product, a sour dough starter kit in early 2021.
12.	Fan/Joy	Fan/Joy expand their Junior Chef programs and established a Youth and Family Culinary Centre as a result of COVID-19 that focuses on healthy eating, positive relationships with family and food, and minimizing food waste. They have also created the Fan/Joy Impact Fund to increase the reach of therapeutic programs being offered to high-risk youth in need of mental health services that can not afford current fee-for-service therapeutic cooking classes.
13.	Fifth Bean	Fifth Bean is a start-up who has created the world's first soy cream liqueur, filling a key void in the market for the environmentally conscious, plant-based and lactose intolerant consumers. Their project involved establishing a stable raw material supply chain, solidifying a contract distilling agreement with an existing distillery, and obtaining the proper licenses.
14.	Food Venture Program	The Food Venture Program (FVP) is a consultancy that offers a series of educational programs that are designed for those looking to start or build their businesses and to learn more about food industry. Their project was to expand and enhance their educational content to ensure a focus on the implementation of circular practices, systems or processes are included in new entrepreneurial ventures.

15.	GR365N	The focus of GR365N's SOFF project was to engage with community agencies to increase the accessibility of food through vertical farming. They aimed to work with community agencies to provide food security and food literacy through hydroponic training programs and equipment partnerships. As part of this project, they planned to increase the use of their hydroponic growing systems implemented in Guelph-Wellington while empowering people to enter the hydroponic food growing sector.
16.	GreenTech AgriFood & Innovation Canada (GAIC)	The GAIC team has an interdisciplinary expertise to deal with the sustainable agri-food system development, food security and food waste, food carbon footprint, integrated waste management, bioresource technology development, bioenergy and biomaterials, enterprise development as well as international development. In addition, GAIC has developed Adaptable Smart Urban Agriculture (ASUA) that is an urban growing system to make gardening easier for seniors and busy families.
17.	Grow Well Eat Well / Blue Sky Beef	Grow Well Eat Well is an off shoot of Blue Sky Beef/The Craig Family Farm. It is a podcast aimed to connect farmers, wholesalers, chefs, consumers, and meal makers. It will showcase innovative food system players, providing them with a platform to find value in marketing to an expanding and engaged audience. Episodes will include calls to action that will encourage the audience to participate in the food system and work with/support food producers to create unique products and a stronger more circular food system.
18.	Handsome Devil Bistro	The Handsome Devil Bistro acquired two very old and ill-functioning keg fridges and would like to replace these with a new one. This purchase has allowed for a reduction in product waste, a continuous relationship with the local brewers by being able to offer their product at a viable profit margin, and the ability to save energy and reduce the drain on their limited energy supply.
19.	Heartwood Farm & Cidery	Heartwood Farm & Cidery has created a four-season farm engagement program for people to learn about regenerative agriculture and how it impacts the food and beverages they love. This year-round program also contributes to the growing understanding of challenges to the circular food economy. As an additional part of their SOFF project, Heartwood is working with Provision

		Coalition to further expand processing opportunities in the cider house to prevent waste.
20.	Junction Food Network	The Junction Food Network is a community initiative contributing to a circular food economy by ensuring no food grown in the neighbourhood goes to waste. By joining forces with the Seed Voyage web platform, they have connected home food growers with eaters in their community. Through this initiative Junction Food Network has inspired more conversations between neighbours and increased community gardening knowledge.
21.	Kortright Presbyterian	Kortright Presbyterian Church has utilized their property's greenspace to expand their gardens and grow food to help their neighbours and the food insecure in Guelph. In 2020 they harvested 750lbs of potatoes to give to local food organizations and expect to double it for 2021. At the end of the SOFF project period, they had already harvested approximately 875lbs of various vegetables and expect to see at least 1000lbs.
22.	New Earth Solutions	New Earth Solutions has developed a technology that allows for vertical farming in optimal conditions through machine learning and artificial intelligence. Due to their patented design, they can build and scale their vertical farms in a cost effective and timely manor. This project enabled New Earth to adapt their technology for indoor residential use, so that people living in urban areas can grow their own fresh produce.
23.	The Pfisterer Farm	VegetaBALES is a new product offered by The Pfisterer Farm and is the first complete outdoor gardening kit that includes everything needed to grow a variety of vegetables wherever needed. Each kit is made from a recycled agricultural by-product, is 100% compostable and all seeds are locally sourced. Their project consists of launching this new offering and increasing the amount of people with gardening space and repurposing otherwise wasted bean straw.
24.	Planet Bean Coffee x Fill It Forward	The purpose of this project is to pilot "reCUP", a waste reduction program. ReCUP is an eco-friendly cup that customers put a deposit on. Each time they return they hand in their used cup for a fresh one. Planet Bean gathers up the used cups, washes and sanitizes them. Planet Bean ensures that the cups are always clean - something they cannot do now with people who bring in their own travel mugs. The deposit will encourage people to bring the cups back.

25.	Reroot Organic Farm	Reroot’s project focused on using more of this farm’s annual harvest of produce by using excess and cosmetically undesirable vegetables to make value-added products. To enhance community collaboration, Reroot is working with Raw Carrot in Mt. Forest, a local chef in Harriston who has access to a commercial kitchen, and with Funky Ferments in Holstein to make these value-added products. To make more nutritious food available to those in need, Reroot has also partnered with local foodbanks to distribute value added products.
26.	Retour Bistro	Retour Bistro has created a new line of garlic sauce using garlic that would otherwise be wasted that is small and difficult for farms to sell. They have also began manufacturing the sauce for sale in bulk as well as in a new line of family meal kits. Additionally, Retour Bistro has transitioned their packaging from completely disposable to compostable and recyclable.
27.	Spiral Farm	Spiral Farm shifted to organic no-till practices, a more ecologically sound way to grow. This shift involved a learning curve and a specific approach to soil health plus some adjustments to the daily workings of the farm. The project included an assessment of the soil, the purchase of soil amendments, equipment and/or professional support. Spiral Farm was also able to expand into growing more perennial fruits such as berries, and perennial crops, as well as purchasing a larger energy efficient refrigeration unit to serve more customers with the increase in product.
28.	Taste Detours	Taste Detours has created two new culinary experiences that showcase circular food and business collaborations in the Guelph-Wellington area in response to the COVID-19 pandemic. These online tours offer people the ability to experience local circular businesses without leaving their homes. Additionally, Taste Detours has curated multiple picnic offerings that feature a variety of local products from circular businesses.
29.	The Friendly Society	The Friendly Society’s project focused on their inspiration and passion for food by providing home grown ingredients to their clients. By cultivating their own food, they will go from Seed to Table. Their vision is to use the land around their restaurant, as well as pots both indoors and outdoors. It will decrease their carbon footprint and provide creative new educational events for the community through selected educational and local partners. Due to the pandemic, they have been delayed in the progress of their

		project but are on track to start growing their own ingredients.
30.	The Red Express	The Red Express opened on July 1, 2020, to satisfy the needs of the community in Clifford and provide them with locally grown and produced wares. Clifford only has variety stores and minimal options for locals to purchase grocery items. Their project included raising community awareness and building a local (and transient) customer base, supporting local growers and local producers, becoming a marketplace for fresh produce, cheese, meats, frozen meals, and specialty items to increase community draw.
31.	The Urban Orchardist	The Urban Orchardist is a circular, purpose-driven start-up consultancy for fruit trees to help owners properly care for and utilize the fruits on their property. Their project was aimed towards marketing, creating a sustainable business model, and obtaining strategic local partnerships to help communities gain access to more nutritious foods and reduce the amount that is wasted.
32.	Transition Guelph	Transition Guelph incubated an innovative business to create passively cooled cold-rooms in Guelph and Wellington County. The three key components of this project are to promote the concept by creating awareness of the benefits of cold-rooms and how it supports local, regenerative agriculture; share knowledge on how to effectively use a cold-room; and create fully functional cold-rooms in Wellington County area homes and community buildings.
33.	Uprooted Farm	Uprooted Farm has fully automated their hydroponic grow/feed system and to allow the business to scale and provide more, year-round, high quality local food and employ local. The increased efficiency also allowed for consistent water quality to plants, higher quality of plant, increased output and a reduction of waste. Although this business closed, they have provided another SOFF participant with their systems and knowledge.
34.	Urban Stalk	Urban Stalk Inc. and The Guelph Food Bank have partnered to develop innovative hydroponic system solutions to help food insecure people gain access to stable and sustainable sources of nutritious foods. The Guelph Food Bank has provided Urban Stalk with guidance and feedback on how to operate hydroponic systems in foodbanks. Part of their project also looked into these systems in grocery stores as well to minimize consumer costs.

35.	Ward 1 Brewing	Ward 1 Brewing Company investigated how they could utilize their brewing knowledge to operate hydroponics in a more circular way. Their project involved keeping the brewing water on site as much as possible and utilizing it in their hydroponic gardens. Ward 1 Brewing has been able to successfully filter their brew wastewater into clean, usable water for their hydroponics.
36.	WaterFarmers Urban Agriculture Innovation Inc.	WaterFarmers Urban Agriculture has developed a complete rainwater harvesting residential system for seasonal irrigation with a capacity of 1000L that is approved by the City of Guelph water harvesting program. Their project included creating packages for residential consumers to purchase as part of the offer so customers can choose a design that best suits the location needs and obtaining a demonstration site (University of Guelph, Arboretum).
37.	Well Baked Box	Well baked box is a healthy baked good delivery service start-up which offers delicious and nutritious baked good and snack ingredients each week in a convenient pre-portioned package. Their project goal is to market and launch the business and target a variety of growth milestones including sales, marketing, and media awareness.
38.	Wellington Made	Wellington Made partnered with local food businesses to expand production, allowing them to maximize berry pressing, store frozen syrup and must (pressed fruit skins), which increases efficiencies, reduces waste, and expands sales. These partnerships have also accommodated storage of repurposed whiskey maple barrels for further cycling into reprocessing, brewing, and redistilling.
39.	WildGrove	WildGrove is a start-up offering consultancy and cultivation of native crops to meet local produce demands and replacing imported ingredients. Specifically focusing on replacing herbal liqueur ingredients and craft beverage ingredients. WildGrove cultivates native plant relatives to provide these ingredients within a circular economy. Their project focused on collaborations with a wide variety of local brewers, distilleries, restaurants, and nurseries.

40.	Winterhill Farm and Garden	Winterhill Farm and Garden needed to expand their operation to meet growing demand. With some upgraded irrigation and the addition of some small tools they were able to double the number of families they service. They expanded their irrigation system and have been recycling the wash water from their washing station where they clean vegetables and eggs. They were able to do this by digging a small pond near the garden to catch the wastewater and then pumping it through the irrigation system back onto the garden.
41.	Zerocery	Zerocery is an online, zero-waste grocery store that makes it easy to shop zero-waste. Their project was focused on increasing their revenue and the number of clients served by expediting ordering times and in doing so, improving the economic and environmental efficiencies of the business. They were able to decrease the average delivery distance between customers and increase their weekly sales.
42.	Zocalo Organics	Zocalo Organics has focused on their business model and investigated how they can pay all employees a living wage and make their packaging more environmentally friendly. Additionally, they started doing webinars on sustainable farming practices to help educate more people and farmers about the benefits of circularity.

1.2 Total Collaborations (113)

Note: Due to the nature of the collaborations, certain businesses chose not to disclose the name of the business or organization they are working with.

#	Our Food Future Business	Collaborating Business	Collaboration Description
1.	A Friendlier Company	Ambiances Gourmandes	Supply their food in A Friendlier Company's containers.
2.	A Friendlier Company	Carbon Cafe	Supply their food in A Friendlier Company's containers.
3.	A Friendlier Company	Corner Market Guelph	Supply their food in A Friendlier Company's containers.
4.	A Friendlier Company	Dar's Market	Supply their food in A Friendlier Company's containers.
5.	A Friendlier Company	Frabert's Market	Supply their food in A Friendlier Company's containers.
6.	A Friendlier Company	Lady Sara's Bounty	Supply their food in A Friendlier Company's containers.

7.	A Friendlier Company	The Cornerstone	Supply their food in A Friendlier Company's containers.
8.	A Friendlier Company	The SEED	Integrated the returnable container model with The SEED's meal delivery services.
9.	A Friendlier Company	The Wooly Pub	Supply their food in A Friendlier Company's containers.
10.	Ag Business & Crop	AbTech	RPAS-Drone contract completed.
11.	Ag Business & Crop	Bud Auto Electric	Bud Auto Electric is now a service location; already has started servicing and installing some client's units (Wintex).
12.	Ag Business & Crop	CartoCanada	Ag Business & Crop is now a CartoCanada dealer.
13.	Ag Business & Crop	Craig Gilbert	Craig has purchased a used Wintex from ABC and will start a new business.
14.	Ag Business & Crop	GPS Ontario	Contract for water resource management partnership.
15.	Ag Business & Crop	Sean Fraser	Sean Fraser accepted a contract and should be finalized within the next month. He has sold for Ag Business & Crop in the past but has renewed contact and is interested in signing as a partner/ distributor.
16.	Ag Business & Crop	Valorix	Created a partnership with Wintex dealer, Valorix.
17.	Ambiances Gourmandes	Althaea Herb Farm	Ambiances Gourmandes has brought their products to retail in her shop.
18.	Ambiances Gourmandes	Domaine Acer	Ambiances Gourmandes has brought their products to retail in her shop.
19.	Ambiances Gourmandes	Genuineo Coffe Co.	Ambiances Gourmandes has brought their products to retail in her shop.
20.	Ambiances Gourmandes	Local Supplier	Ambiances Gourmandes has brought their products to retail in her shop.
21.	Ambiances Gourmandes	Local Supplier	Ambiances Gourmandes has brought their products to retail in her shop.
22.	Ambiances Gourmandes	Local Supplier	Ambiances Gourmandes has brought their products to retail in her shop.
23.	Ambiances Gourmandes	Local Supplier	Ambiances Gourmandes has brought their products to retail in her shop.
24.	Ambiances Gourmandes	Local Supplier	Ambiances Gourmandes has brought their products to retail in her shop.
25.	Ambiances Gourmandes	Local Supplier	Ambiances Gourmandes has brought their products to retail in her shop.

26.	BioFerm Functional Foods	Dr. Lisa Duizer at the University of Guelph	Collaborated with Dr. Lisa Duizer at the University of Guelph and applied the 2021 Gryphon's LAAIR Market Validation Grant (grant approved in February 2021 and started May 2021). BioFerm Functional Foods Inc. will serve as business partner in this project. They will work with UoG to carry out market validation for our products and build marketing and sales strategies accordingly.
27.	BioFerm Functional Foods	Shaza Mezian	Developed BioFerm's prototype design for Treetly brand label and packaging (front and back) with an Ontario-based Web & Graphic Designer (Shaza Mezian)
28.	BioFerm Functional Foods	University of Guelph	Working with U of G to carry out market validation for their products
29.	Fan/Joy	Forever Berries	Fan/Joy is using excess beef bones from Forever Berries to make a value-added product (soup/broth)
30.	Fifth Bean	Circular Businesses	Partnering with other Provision Coalition circular food economy businesses to augment pre-existing marketing strategies related to a fully circular meal.
31.	Fifth Bean	Dixon's Distillery	Fifth Bean entered into a manufacturing agreement with Dixon's Distillery in Guelph to be the producer of 5th Bean beverage
32.	Fifth Bean	Sunrise Tofu	Fifth Bean entered into an agreement with Sunrise Tofu in Mississauga to supply tofu whey, which diversifies supplies and reduces reliance on Ying Ying
33.	Fifth Bean	Ying Ying Soy Foods	Fifth Bean entered into a supply agreement with Ying Ying Soy Foods of Mississauga to supply tofu by-products for the production of alcohol beverage.
34.	GoodLeaf Farms	Meadowville Nursery & Garden Centre	Through the R-purpose conservation work, an opportunity was identified for GoodLeaf Farms to send 2.39 million kg of substrate to local Guelph Meadowville Nursery for composting, saving \$150,000 per year in transportation and disposal costs.
35.	GoodLeaf Farms	Outcast Foods	GoodLeaf Farms is currently working to secure a collaboration with Outcast Foods to upcycle their harvested leafy greens that

			do not meet retail specifications and turn them into a plant based protein powder. This opportunity is still in the development stage.
36.	Grow Well Eat Well	Brandon Hebor	Brandon Hebor: New to farming and Vertical Farming – willing to be featured in the podcast
37.	Grow Well Eat Well	Martin de Groote	Martin de Groote: local dairy whipped up – willing to be featured in the podcast
38.	Grow Well Eat Well	Regeneration Canada	Gabrielle from Regeneration Canada regarding the regenerative farming movement – willing to be featured in the podcast
39.	Grow Well Eat Well	Revolution Wool	Romi Schill from Revolution Wool regarding sustainable farm fashion – willing to be featured in the podcast
40.	Grow Well Eat Well	Taste Real	Christina Maan from Taste Real regarding Rural Romp – willing to be featured in the podcast
41.	Grow Well Eat Well	Well Baked Box	Stewart from Well Baked Box: nutritionifying our local food system – willing to be featured in the podcast
42.	Handsome Devil Bistro	Fixed Gear Brewing Co.	Using their new appliances, Handsome Devil Bistro now has the capacity to collaborate with Fixed Gear Brewing to serve their products.
43.	Heartwood Farm & Cidery	Fergies	Heartwood's non-alcoholic cider is being showcased at Fergies Fine Foods
44.	Heartwood Farm & Cidery	Chef Scotty & Grain Revolution	BBQ sauce using Scotty's BBQ recipe with Heartwood's cider and maple syrup. They have started this partnership, with boxed offerings with burgers, buns, BBQ sauce and cider. This sold out quickly and they plan to replicate.
45.	Heartwood Farm & Cidery	Sunny Farm	Started a collaborative partnership (beef)
46.	Heartwood Farm & Cidery	Three Sisters Honey	Started a collaborative partnership (honey)
47.	Heartwood Farm & Cidery	Uphill Farm	Started a collaborative partnership (asparagus)
48.	Heartwood Farm & Cidery	Willow Creek Farm	Started a collaborative partnership (maple syrup)
49.	Junction Food Network	Seed Voyage	Junction Food Network joined forces with the Seed Voyage web platform to

			effortlessly connect home food growers (who can share, sell or donate the foods they are growing) with eaters, people in their community
50.	Kortright Presbyterian Church	Chalmers	food distribution partner
51.	Kortright Presbyterian Church	Hope House	food distribution partner
52.	Kortright Presbyterian Church	Royal City Mission	food distribution partner
53.	Organic Meadow	WholeChain & Provision Coalition	Organic Meadow's Consumer Touch Point Tool is a spin-off collaboration from the R-Purpose work. The collaboration is to build a consumer touchpoint tool with WholeChain and Provision, that will allow consumers o access environmental data, and real time sustainability and circularity stories that will surprise consumers with the depth of data and the authenticity and honesty by which the stories are told. This collaboration is currently in progress.
54.	Planet Bean	Fill it Forward	Planet Bean partnered with Fill it Forward to design reusable cups.
55.	Planet Bean	Sisters' Story Coffee	sold online with 15 per cent of sales going to a local Canadian women's shelter or sexual assault centres
56.	Reroot Organic Farm	Funky Ferments	Funky Ferments uses excess produce from Reroot Organic Farm to make fermented products that have a longer shelf-life and a multitude of health benefits
57.	Reroot Organic Farm	Harriston Food Bank	Receive produce grown on Reroot Farm.
58.	Reroot Organic Farm	Local Chef	Receive produce grown on Reroot Farm.
59.	Reroot Organic Farm	Local Chef	Receive produce grown on Reroot Farm.
60.	Reroot Organic Farm	Raw Carrot	Raw Carrot makes two custom gourmet soups using produce and chicken from Reroot. Reroot donates a portion of the gourmet frozen soups to their local food bank.

61.	Reroot Organic Farm	The Stock Exchange	Receive produce grown on Reroot Farm.
62.	Retour Bistro	Local Garlic Suppliers	Retour Bistro creates a new line of garlic sauce using garlic “waste” (garlic that is small and difficult for farms to sell).
63.	Rootham	Goodleaf Farms	Rootham Gourmet will be making pesto out of spent microgreens from GoodLeaf.
64.	Roothams	Heartwood	Collaboration between Roothams and Heartwood resulted in the creation of a grilling sauce created by Roothams repurposing Heartwood’s end of batch cider and end of season maple syrup.
65.	Spiral Farm	3 Beets to the Wind	Martina is in collaboration with 3 Beets to the Wind farm to supply produce for their roadside stand
66.	Spiral Farm	Ecological Farmers Association of Ontario	Martina completed four sessions about no-till vegetable growing during 2020 Ecological Farmers Association of Ontario conference.
67.	Spiral Farm	Local Animal Sanctuary	Spiral Farm sources compost from a local animal sanctuary to use on their farm to better soil health.
68.	Spiral Farm	Ontario Agriculture Centre of Canada	Martina completed a 7-part webinar series on growing organic produce in a regenerative no-till system, with no bare soil (all cover cropped) offered by the Organic Agriculture Centre of Canada.
69.	Sunrise Soya	Abokichi Nature Knows	The Gourmet Circular Meal experience inspired Sunrise Soya to work with Provision to upcycle their unavoidable by-products (okara and soybean whey) into a meal kit experience. Abokichi (a RPM Sobeys graduate) is using the okara to upcycle it into ramen noodles, as well as providing upcycled miso for the meal kit. Nature Knows (also a RPM Sobeys graduate) is providing the upcycled vegetables and the compostable packaging for the meal kit.
70.	Sunrise Soya	Vision Bakeries	Vision Bakeries is also upcycling the Sunrise Soya's okara into flour and making upcycled muffins which will be sold at Sobeys grocery stores.
71.	Taste Detours	A Friendlier Company	Taste Detours uses A Friendlier Co.’s containers in their curated picnics.

72.	Taste Detours	Fill it Forward	Taste Detours uses Fill it Forward's reusables in their curated picnics.
73.	Taste Detours	Heartwood Farm & Cidery	Taste Detours uses Heartwood Sparkling non-alcoholic cider in their curated picnics.
74.	Taste Detours	Nourish's/Voss Baking	Taste Detours uses Nourish's/Voss Baking spent grain sourdough bread in their curated picnics.
75.	Taste Detours	The SEED	Taste Detours collaborated with The SEED to create added market awareness.
76.	The Red Express	Greenock Beef	The Red Express offers Greenock Beef products.
77.	The Red Express	Mambella's Italian Kitchen	The Red Express offers Mambella's frozen dishes.
78.	The Urban Orchardist	Junction Food Network	The Urban Orchardist is working with JFN on a workshop series
79.	The Urban Orchardist	Local Municipality	Partnership to restore neglected trees.
80.	The Urban Orchardist	Local Orchardist Consultants	Partnership to restore neglected trees.
81.	The Urban Orchardist	Non-profits	Partnership to restore neglected trees.
82.	The Urban Orchardist	Nurseries	Partnership to restore neglected trees.
83.	The Urban Orchardist	Transition Guelph	collaborating on Transition's Treemobile program to offer Urban Orchardist's expertise
84.	Transition Guelph	10C Shared Space	community cold storage
85.	Transition Guelph	Ignatious Farms	updated their old root cellar. Ignatius contact has reported a noticeable improvement in the effectiveness of the root cellar.
86.	Transition Guelph	Two Rivers community centre	community cold storage
87.	Transition Guelph	Woodside Root Cellars	With the help of Ian Findlay from Woodside Root Cellars, Transition Guelph launched their root cellar project
88.	Urban Stalk	Goodness Me	invitation to develop a cost of goods sold, production and waste management strategy for Urban Stalk Inc. to become the exclusive produce supplier to Goodness Me Canada
89.	Urban Stalk	Guelph Food Bank	A Letter of intent to work with the Guelph Food Bank has been received. This partnership will allow Urban Stalk to

			understand capacity, demand needs, level of innovation acceptance, type of produce or crop types most consumed and other strategic information to develop and position Urban Stalk technology.
90.	Urban Stalk	IDEAWORKS – Mohawk College	partnership contracts and proposals
91.	Urban Stalk	University of Victoria	working on manual together
92.	Urban Stalk	Venture Lab	prototyping
93.	Ward 1 Brewing Co.	Green Tech	Seedlings were donated to Green Tech.
94.	Waterfarmers	City of Guelph	Waterfarmers will attend and contribute to webinars and events hosted by the City of Guelph and be a part of a video to promote their rainwater harvesting system at the Arboretum.
95.	Waterfarmers	University of Guelph	Waterfarmers installed their first system at the U of G Arboretum as a demonstration site
96.	Well Baked Box	Guelph Farmer's Market	Well Baked Box now sells their products at the Guelph Farmer's Market.
97.	Wellington Brewery	Oreka Solutions Izumi Aquaculture Escarment Laboratories Smoyd Farms Grain Revolution The Woolly Pub Mijida Cafe & Cafe Park Eatery	In exploring upcycling opportunities with Wellington Brewery, Provision was able to bring together six local businesses to collaborate to develop a Gourmet Circular Meal; Oreka Solutions, Izumi Aquaculture, Escarpment Laboratories, Smoyd Farms, Grain Revolution and three restaurants (The Woolly Pub, Mijida Cafe & Bistro, Park Eatery) from The Neighbourhood Group. Together we launched a gourmet circular meal that started with Wellington's spent grains that went to feeding insects at Oreka Solutions, which then fed rainbow trout at Izumi Aquaculture. The detritus (fish waste) went to fertilize potatoes at Smoyd Farms. Wellington's spent grains and spent yeast from Escarpment Laboratories also went to create sourdough from Grain Revolution. All these ingredients came together on plates at the three Neighbourhood Group restaurants in the form of sourdough breaded trout and fries, hot smoked trout

			sandwich and chips and cured steelhead trout.
98.	Wellington Made	Berry Grower in Woodstock	Partnering with a berry grower in Woodstock, Shelly presses their elderberries for juice, bottles it, then sells it back to them.
99.	Wellington Made	Canadian Distiller	Collaborating with a Canadian distiller, Wellington Made was able to create one of her best-selling products: whisky infused maple syrup. This process is completed through the cyclical reuse of whiskey barrels that are then sent back to the distiller who uses them to make a maple syrup infused whiskey.
100.	Wellington Made	Avling Brewery	The leftover pulp waste from the process of pressing elderberries from a grower in Woodstock, and that left over from the process of pressing Wellington Made's own berries for syrup gets delivered to a brewer in Toronto who turns it into a successful craft beer.
101.	Wild Grove	Avling Kitchen and Brewery	Wild Grove collaborated with Avling to supply a native plant based product which imparts citrus flavours which breweries typically source from non-domestic suppliers.
102.	Wild Grove	Blood Brothers Brewing	Wild Grove has currently been contracted to supply a large order of native fruit imparting flavors typical to ice-wines which otherwise use non-native grape varieties.
103.	Wild Grove	Four Fathers Brewing Co.	A total of 2 products this season were developed using native plant-based ingredients in place of hops.
104.	Wild Grove	Great Lakes Brewery	This season Wild Grove worked with Great Lakes brewing to develop recipes for two complex products using approximately 23 ingredients that all were replaced with plant based ingredients I was able to cultivate locally. 7 of these ingredients are native plants in Canada.
105.	Wild Grove	Grow Wild	Wild Grove purchased seedlings from Grow Wild propagated from native plant material.
106.	Wild Grove	Monaghan Mushrooms	Nick partnered with local mushroom producer, Monaghan Mushrooms, to use

			their mushroom compost to fertilize the field.
107.	Wild Grove	Revel Cider Co.	A total of 8 products have been released this season which have been developed with Wild Grove's cultivated native produce. More are currently under development. The produce Wild Grove supplied was used to incorporate sensory attributes that are normally sourced from non-native and imported crops.
108.	Wild Grove	Richters Herbs	Wild Grove purchased seedlings from Richters Herbs propagated from native plant material.
109.	Wild Grove	Rosewood Estates Winery	Wild Grove provided locally cultivated naturalized plant species for the development of a new product.
110.	Wild Grove	Sunnybrook Winery/Ironwood Cider	Wild Grove provided several locally cultivated ingredients including 3 native plant-based ingredients which are currently being used in the development of new herbal infused beverage products.
111.	Wild Grove	Those Pizza Guys	Wild Grove helped Those Pizza Guys develop new product diversification strategy through providing several speciality herbal ingredients including a native plant species. Also provided naturalized plant ingredients to aide in developing several new pizza recipes.
112.	Wild Grove	Willibald Farm Distillery and Brewery	Wild Grove worked with Willibald Farm on a new collaborative project.
113.	Yorkshire Valley Farms	Pet Food Industry	Through the R-Purpose work a feasibility study identified a viable market with the pet food industry where Yorkshire Valley can upcycle their poultry offal by-products (hearts and livers). They have made a commitment to build this into their facility expansion plan in the next two years, which will repurpose the unavoidable by-product to a higher value market.

1.3 Total R–Purpose MICRO Businesses (50)

#	Business Name	Description
1.	3 Beets to the Wind Farm	3 Beets to the Wind Farm’s purpose is cultivating flavour for food lovers to discover. We are Ontario’s off-grid, year-round destination for flavour hunters. Join us on a flavour adventure. All the flavour, without the carbon footprint.
2.	5th Bean Inc.	Fifth Bean is an aspiring micro-distillery committed to creating the world’s first soycream liqueur. The product fills a key void in the market by offering vegan and lactose intolerant consumers with a dairy-free cream liqueur product. Fifth Bean utilizes a unique production process that uses soy waste by-product to make a liqueur that provides a sustainable alternative to traditional cream liqueurs. Fifth Bean creates a highly innovative use for local Ontario soybeans. The beverage opens a new market for soybeans and utilizes waste mitigation strategies throughout the entire production process. All of the ingredients are grown within Ontario, which ensures that customers are provided the highest quality product while supporting our local economy.
3.	A Friendlier Company	A Friendlier Company is simplifying reuse to eliminate single-use food packaging waste. We’ve leveraged technology to develop a turnkey, zero-waste system for takeout containers. We provide durable takeout containers to food service businesses, then facilitate the collection, sanitation, and redistribution to create a closed-loop system. We’re piloting our solution with takeout containers in Guelph, but our vision is to divert all food packaging waste from landfill in North America.
4.	Althaea Herb Farm	Combining his passion for farming, his knowledge of botanical medicine, and a desire to help others with herbs, herbalist Scott Reid created a line of unique, functional tea blends from his own organically grown herbs. Cultivating 4 acres of land and enlisting the help of friendly volunteers, paid staff and a few sales reps, Scott has created something truly special. Scott lives with his wife Susanne, daughter Linnaea and son Arlan in Guelph, ON.
5.	Ambiances Gourmandes	A Tea and Pastry shop offering retail items with more than 200 types of Loose tea and house made French pastries. We also have a sit-down area to experience a quality High Tea in a quaint atmosphere. Our products can be purchased on our on-line store.

6.	BioFerm Functional Foods	BioFerm Functional Foods is a plant-based bakery mix offered online. These mixes are healthy and delicious and include essential probiotics, vitamins, and fiber.
7.	Bliss Dough	Bliss Dough is Ontario's premium edible cookie dough company. Founded in 2018, Bliss Dough offers safe-to-eat, edible cookie dough in a variety of flavours with vegan and gluten-friendly options available.
8.	Blue Sky Beef	A family farm that offers high quality beef raised by regenerative farming techniques.
9.	Carbon Cafe	The food menu is bursting with fresh flavour, with a focus on healthy options including a selection of house-made soups, salads, paninis, wraps, and sandwiches. All menu items are made with the finest quality ingredients starting with locally sourced, grown and sustainable produce and products when possible.
10.	Chicken Thika Farm	Shaheer Abha and Bahaar Luhar are owners of the first small-scale farm in Ontario to be certified halal (HMA) and organic (CSI) since 2019. Shaheer brings over 20 years' experience in the manufacturing industry to raising chickens as a new Artisanal Farmer with CFO. He values quality, cost savings and safety
11.	Edenbrae Farms	Farm located in Fergus.
12.	Elora Farmer's Market	Elora Farmers' Market is operated by an association of the participating vendors and is predominantly local grower and producer based.
13.	Eramosa Herbals	I create products that foster a sense of connection with plants and place: infused honey, syrups, extracts, teas, and the like, made from herbs grown in my perennial gardens or wild harvested. Offering a Community Supported Herbalism program based on the CSA model wherein subscribers receive a box of small-batch, seasonal artisanal herbal products.
14.	Escarpment Labs	Escarpment Labs is Canada's premier yeast lab, providing pure brewing cultures to the beer industry. We are currently branching out into other food-related microbial cultures in an effort to share the wonder of microbes and help guide the trajectory of food and flavour in the modern kitchen.
15.	Fan/Joy	Fan/Joy is a culinary social enterprise ending the stigma of mental health and revolutionizing health and wellness one meal at a time! Founded by award winning Chopped Canada Champion, and clinical Family Therapist, Chef Pam Fanjoy, we create delicious Gourmet to Go meals that nourish body & mind while delivering innovative culinary

		life skills programs that are cooking up change that lasts a lifetime. We deliver our Gourmet to Go prepared meals, and our innovative Junior Chef Culinary Life Skills Programs because we know that food heals and has the power to feed connection that ultimately strengthens individuals, families & communities and THAT is what we do best.
16.	The Friendly Society	A licensed neighbourhood restaurant serving classic Canadian dishes with fresh ingredients. Aspiring to be a force for positive change in the community, at a level appropriate to their size.
17.	Full Moon Farm	All natural and organic products designed to take care of all the little things that people with periods could experience during "that time of the month"
18.	Gamble Farms	Gamble Farms grows organic non-GMO microgreens on organic hemp fiber. They are sold still growing in the hemp fiber and placed in sugarcane clamshells which biodegrade in 45 days.
19.	Goldfarm	Goldfarm Canada is a small, family-run vertical farm specializing in microgreens and edible flowers. We take great care in our growing methods so that we can ensure you are getting the freshest, most delicious product possible. All delivered straight to you within hours of harvest.
20.	GR365N	At GR365N we design and build customized hydroponic systems for homeowners who want fresh produce and a little extra income. Our friendly team will walk with you as we build a system that suits your individual needs. Through SMART phone technology we will help you maintain and monitor your system to ensure a high return on investment. We will even purchase your unused produce at a fair price and deliver it to others in your community.
21.	Grain Revolution	Purpose: Connecting Canadians with better bread Vision: Working at the boutique bakery volume continuing to explore circularity and develop sourdough technique, The Grain Revolution will create community, elevate local cuisine and disseminate knowledge globally by connecting Canadians with better bread. Crafting world class sourdough bread from house milled local grain and organic wheat is the main focus. Selling to local restaurants and to the public through local markets has both informed and broadened that focus.
22.	Heartwood Farm & Cidery	Heartwood Farm & Cidery produces craft cider, maple syrup, and grass-fed beef using regenerative agriculture

		practices. These products are sold on their online store, as well as offering an array of immersive, on-farm experiences that feed people's need to connect with the natural world.
23.	Ignatius Farm	In the last 20 years, Ignatius Farm has evolved to become a model for organic agriculture and the mentoring of organic growers. The Farm bridges the urban with rural and invites the surrounding community to enjoy and get involved in their local farm.
24.	Krishna Indian Cooking School	Inspiring easy, healthy, and economical home-style Indian cooking with just a few simple ingredients. Teaching Indian cooking classes at the Guelph Continuing Education since 2009 and now offering classes at Puslinch Community Centre and cooking parties at your home.
25.	Majestic Water Buffalo	Since 2016, Majestic Water Buffalo has been raising water buffalo for meat on a 97-acre farm in the Town of Erin. Focusing on sustainability, animal care and circular farming.
26.	New Earth Solutions	New Earth Solutions specializes in building and maintaining vertical living wall systems. They have created the infrastructure that allows almost any plant to grow vertically making best use of the space available. They strive to empower people and businesses to grow their own food indoors.
27.	Omega Solutions	n/a
28.	Pepprell Distilling	In 2010 the makings of Pepprell Distilling Co. began on Pepperell St. in Halifax, Canada. An award-winning craft distillery, Pepprell spirits are the perfect companion to stories shared and memories made.
29.	Polar Real Tropical Fruit	Polar Real Tropical Fruit ("PolarRTF") is a family run business founded by Jorge Melo in 1997 in Toronto, Ontario.
30.	Reroot Organic Farm	Reroot organic farm is a 70-acre property in Harriston, Ontario. Our farm is a small, diversified operation allowing us to produce a variety of local, high-quality food. The farm consists of 5 acres of certified organic produce; lush green pastures, productive hayfields, a small creek and a gorgeous old bank barn.
31.	Retour Bistro	Welcome to Retour Bistro- the home of a life filled with flavour! Authentic, fresh Lebanese Food. A blend of traditional and modern cuisine. Vegan and environmentally conscious. We believe that food made with pride and experienced with time creates memories that flavour our lives forever.
32.	River's Edge Goat Dairy	We are a sustainable Goat Dairy. We produce Farmstead Artisan Cheeses, yogurt and slow pasteurized milk. We

		produce goat meat and whey fed pork. Our animals graze on pasture during the warmer months and eat hay produced on our farm in winter months.
33.	Royal City Crickets	Indoor farm processing cricket protein for human consumption.
34.	Spiral Farm	Spiral Farm is a human-scale market garden growing produce for our Community Supported Agriculture program serving Guelph, as well as farm gate sales and supplying to local businesses. A one-woman show, using almost exclusively hand tools, the farm is heavily influenced by veganic/stock free farming and permaculture principles and is in the process of shifting to no-till practices. Currently almost all tasks are performed using hand tools, and no by-products of animal agriculture (i.e. blood or bone meal, compost from industrial animal facilities) are used. More about our growing methods here.
35.	Taste Detours	Award-winning locally flavoured food & drink Tasting Tours. Sharing their love of Wellington County by highlighting the links between rural food heritage and the growers and makers of today.
36.	The Conscious Kitchen	Our aim is to provide the Guelph and surrounding community with ready-to-eat, healthy, local, ethically sourced, farm-fresh, sustainable food delivered right to your door! We are an online shopping hub bringing you zero-waste groceries and prepared meals that align with Guelph's eco-conscious community values.
37.	The Red Express	The Red Express is a local grocery store with a mix of fresh produce, specialty groceries, cheeses, frozen meal ideas, flowers and home decor.
38.	Transition Guelph	Transition Guelph is a non-profit group of Guelph citizens with the vision of building resilience and sustainability into our community in response to peak oil and climate change.
39.	Troll Bridge Creek	Troll Bridge Creek Inc. is the only company to provide beverages made with 100% Ontario Maple Sap. A functional beverage that provides a healthy alternative to high fructose sports or energy drinks.
40.	Two Wingz	TwoWingz Inc. starts with Viki and Doug Barker co-founders of this local Ontario independent start-up company, producing a traditional quality ginger beer inspired in The Slow Food Movement that honors our rich family traditions. Each distinctive functional healthy product we produce contains whole plant ingredients in each crafted batch.

41.	Uprooted Farm	Uprooted Farm is an innovative agricultural company bringing year-round, locally grown and chemical free produce to consumers. Their mission is to increase the supply of produce available to the people of Wellington & Waterloo Counties.
42.	The Urban Orchardist	Offering fruit tree pruning, propagating unique berry bushes and fruit trees, and educational services.
43.	Urban Stalk Inc.	Urban Stalk is an agri-science organization dedicated to the continuous innovation of hydroponic technologies to develop micro-habitats for various crop types. Their goal is to both reduce negative environmental impacts from agricultural activities along with correcting the social inequality to food access in at risk and urban communities. Urban Stalk firmly believes that food should be a given commodity not a traded one.
44.	Ward One Brewing	Ward 1 Brewing Co. is an up-and-coming brewpub focusing on fresh delicious craft beer and mouth-watering smoked food. Their focus will be on not dumping their used beer water and instead utilizing it to grow produce both outdoors and indoors to supply their kitchen as well as donate some of this fresh nutrient dense produce back to those in need.
45.	WaterFarmers UA	WaterFarmers has designed and deployed small farm infrastructure and landscape systems for clients across Ontario since 2017. WaterFarmers exists to support the next generation of farmers, growers, and sustainability-minded people. We work with businesses, individuals, and community organizations to develop and build solutions appropriate for their growing needs.
46.	Well Baked Box	Well Baked Box is a new company that is currently operating in Guelph and surrounding areas. We are passionate about healthy baking that is great for the whole family. Our recipe kits are pre portioned, in compostable and recyclable materials, and are created to be both nutritious and delicious. Each recipe includes whole food ingredients that are all gluten-free, dairy-free, and refined sugar-free. Every week the recipes change, and there will always be a vegan and ketogenic option to be inclusive of all dietary restrictions.
47.	Wellington Made	Wellington Made is a grower and processor of artisanal syrups designed to compliment healthy lifestyles. Bringing "wow" to food and drink.

48.	Wild Grove Regenerative Ag	Wild Grove Regenerative Ag is a modern horticultural enterprise specializing in the production of ingredients for craft beverage production industries.
49.	Wild Leek Farm	Wild Leek Farm sits just outside the city of Guelph. We currently produce all manner of vegetables from our 1-acre market garden, and hope to include fruit, hops, mushrooms, and maybe even maple syrup, in coming seasons. We grow to meet or do better than the Canadian Organic Standards.
50.	Zocalo Organics/The Community Farmer?	The Community Farmer exists to "Cultivate Growers". We are all about supporting a wide variety of growers, backyard gardeners, hobby farmers, and small-scale commercial operations. We aim to understand each individual's needs and barriers and work with each client to come up with a tailormade solution to help them overcome their particular barriers and to achieve their own growing goals. The Community Farmer is a start-up with big dreams to be Canada's leader for small farm and garden progression.

1.4 Total R-Purpose Businesses (8)

#	Business Name	Description
1.	Fergies Fine Foods	Fergie's is a gourmet food retailer and catering business that produces all their food on sight. Their Fergus store location sells prepared meals and other gourmet food products. Fergie's integrates circular practices by finding ways to recover waste and support local businesses who do the same by showcasing their sustainable products in their store.
2.	GoodLeaf Farms	GoodLeaf is a producer of local micro and baby greens. In 2019, GoodLeaf's first full-scale commercial farm in Guelph began supplying their greens to retail and restaurant locations throughout Ontario. Through the R-purpose conservation work, an opportunity was identified for GoodLeaf Farms to send 2.39 million kg of substrate to local Guelph Meadowville Nursery for composting, saving \$150,000 per year in transportation and disposal costs. Goodleaf Farms is also currently working to secure a collaboration with Outcast Foods to upcycle their harvested leafy greens that do not meet retail specifications and turn them into a plant-based protein powder. This opportunity is still in the development stage.
3.	Heartwood Farm & Cidery	Heartwood is a regenerative farm and cidery based in Erin. In addition to the range of ciders they offer, they sell other

		products produced on farm, such as maple syrup and grass fed beef. The Cidery patio is open to the public, and customers can also enjoy on-farm experiences such as farm stays and nature walks on the property.
4.	Organic Meadow	Organic Meadow offers a complete line of organic dairy products made at their Guelph processing facilities, which are sold in retail stores across Canada. Organic Meadow's Consumer Touch Point Tool is a spin-off collaboration from the R-Purpose work. The collaboration is to build a consumer touchpoint tool with WholeChain and Provision, that will allow consumers to access environmental data, and real time sustainability and circularity stories that will surprise consumers with the depth of data and the authenticity and honesty by which the stories are told. This collaboration is currently in progress.
5.	Rootham Gourmet	Based in Guelph, Roothams is a family owned and operated company that produces small-batch, premium preserves made from local ingredients. Rootham's products can be found at independent retailers throughout Ontario or purchased online. Roothams and GoodLeaf have begun the planning stages to develop an arugula pesto with upcycled finished goods (arugula) from GoodLeaf Farms. This opportunity is still in the development stage. A Collaboration between Roothams and Heartwood resulted in the creation of a grilling sauce created by Roothams repurposing Heartwood's end of batch cider and end of season maple syrup.
6.	Thatchers Farm	Thatcher Farms is a family farm which was established to promote and offer local, sustainable products. The farm raises beef, pork, lamb, chicken and turkey which they sell through their on-farm Butcher Shop and online delivery services. They also sell other locally produced products in their on-site Farm Market shop and have an on farm bakery that produces locally made baked goods.
7.	Wellington Brewery	Since 1985, Wellington Brewery has been a pioneer in the craft brewing scene by producing timeless, traditional style ales as well as experimenting with new recipes as part of their Welly One-Off Series. As an independent and locally owned brewery, they take pride in being an active member of the community, taking part in countless events and supporting charitable causes. In exploring upcycling opportunities with Wellington Brewery, Provision was able to bring together six local businesses to collaborate to develop a Gourmet Circular Meal; Oreka Solutions, Izumi Aquaculture,

		<p>Escarpment Laboratories, Smoyd Farms, Grain Revolution and three restaurants (The Woolly Pub, Mijidaa Cafe & Bistro, Park Eatery) from The Neighbourhood Group. Together they launched a gourmet circular meal that started with Wellington's spent grains that went to feeding insects at Oreka Solutions, which then fed rainbow trout at Izumi Aquaculture. The detritus (fish waste) went to fertilize potatoes at Smoyd Farms. Wellington's spent grains and spent yeast from Escarpment Laboratories also went to create sourdough from Grain Revolution. All these ingredients came together on plates at the three Neighbourhood Group restaurants in the form of sourdough breaded trout and fries, hot smoked trout sandwich and chips and cured steelhead trout.</p>
8.	Yorkshire Valley Farms	<p>Yorkshire Valley Farms is a producer of free-range organic chicken, turkey, and eggs. Farm Fresh Poultry Ltd processes the poultry in Harriston, Ontario. Through the R-Purpose work a feasibility study identified a viable market with the pet food industry where Yorkshire Valley can upcycle their poultry offal byproducts (hearts and livers). They have made a commitment to build this into their facility expansion plan in the next two years, which will repurpose the unavoidable by-product to a higher value market.</p>

1.5 Total Circular Economy Digital Passport Businesses (20)

#	Business	Description
1.	Caju Winds Inc.	Caju Winds produces nutrient-dense, nutritious & delicious foods for optimal health. They offer Plant-Based Food Kits and Paleo Snacks, that are organic, paleo, vegan, gluten-free, dairy-free
2.	CanGreen Industries	We deal in biodegradable & compositable take out containers & cutlery as an alternative to 100% plastic products. We are currently trading these products & are setting up manufacturing of these products in Canada itself.
3.	Ciculr	Ciculr is a Guelph-based business that provides seamless back-end logistics and washing infrastructure for consumer-packaged goods companies in the circular economy. They help companies who already have zero-waste packaging manage their reverse logistics and help companies who are looking to become zero waste create and operate their packaging infrastructure.

4.	Colleaga	Colleaga operates the Ontario Impact Collaboratory which brings together purpose driven entrepreneurs, non profit organizations and impact investors. Our Food security supply chain stream develops collaborative ventures in food security and excess food redistribution.
5.	Crafty Ramen Holding Inc.	Crafty Ramen is a noodle shop and market with locations in Guelph and Kitchener. They offer a subscription meal kit and sell their consumer packed goods in grocery stores. Already minimizing waste wherever they can, Crafty Ramen is actively looking for new ways to collaborate with other food businesses in order to make their production more circular.
6.	Food Venture Program	The Food Venture Program (FVP) is a collaboration of senior business mentors, food industry executives, chefs, product developers and dietitians in the food industry. FVP offers educational programming based on design thinking with experiential workshops for food & beverage entrepreneurs across North America.
7.	Gamble Farms Live Microgreens	Gamble Farms sells live microgreens grown on hemp fiber that have a shelf life of two weeks with proper hydration.
8.	Go with the Grow Inc.	Go with the Grow is an upcoming urban farm based in the City of Guelph. They grow gourmet mushrooms and microgreens as well as sell grow kits for customers to grow from home.
9.	Indoor Grow Guides	Indoor Grow Guides provide products and assistance with indoor horticulture and gardening. Bringing the ability to grow fruits and vegetables from seed to finish, in the comfort of your own home without the hassle of outdoor pests and unfavourable weather.
10.	Provectus Enterprising Inc.	Provectus food Dehydration system is a batch system that is modular and scalable perfect for EPR and ESG initiatives. Ideal for food waste streams A & B creating circular economy and curbing GHG impact.
11.	Radhaa Renew Bio Corporation	Radhaa doing valorization of waste residues generated from food processing operation to generate various value added products. One example: beta carotene carotenoids from waste outer peel skin of banana fruit and this beta carotene can be used as ingredient in multiple applications such as cosmetics, pharmaceuticals, nutraceuticals, processed foods, animal feed etc.

12.	Taste Detours	Locally flavoured food & drink tasting tours that share the love of Wellington County by pointing out the culinary links between the rural heritage and our growers and makers of today. We celebrate the power of a full plate, cup, or bowl, to bring people and communities together. We connect and contribute to a thriving Wellington County.
13.	Terra Bio	We have developed a circular economy patented technology platform that can be integrated in Food Manufacturing processing facilities to produce and integrate Plant-based Protein ideal for meat-replacement products derived from Brewer's and Distiller's Spent Grain.
14.	The Aggressive Good Inc. (TAGPods)	TAG's cartridge based circular delivery system eliminates single-use packaging from the bulk product supply chain.
15.	The Fungal Jungle Mushrooms Ltd.	The Fungal Jungle specializes in homegrown mushroom kits, liquid culture, grain spawn, and essential mushroom growing supplies for hobby mycologists of all experience levels. We cultivate curiosity and are passionate about the rewards of experimentation and growing your own food.
16.	The Pfisterer Farm	Using sustainable and regenerative farming methods Pfisterer Farm provide local pasture raised meats, free range eggs, and seasonal products through direct-to-consumer sales. The Pfisterer Farm advocates for accessible, local, nutritious, affordable food for all and use the farm to raise funds supporting organizations with similar values and promote grow your own with our vegetaBALES initiative.
17.	The Urban Orchardist	Offering fruit tree consulting, pruning, propagating unique berry bushes and fruit trees, and educational services.
18.	Urban Stalk	Urban Stalk is creating innovations on hydroponic technologies to encompass leading vertical/indoor agriculture practices. These innovations are known as FOSESUS Pod Hydroponic Networks. Pod Networks use micro-controlled environments, precision-based agriculture, circularity, big data, and machine learning to optimize crop production for urban and at-risk communities in Canada and the USA.
19.	Winterhill Farm and Garden	We have a small, local family farm producing high quality food for our local customers. We specialize in organically grown mixed vegetables producing a wide variety of delicious seasonal vegetables, pastured chickens and pastured eggs. We also have a small sustainable logging and sawmill operation producing lumber and slabwood for local woodworkers.

20.	Beck's Broth	Behind Beck's broth is a Holistic Nutritionist specializing in gut health and stress management This drink nourishes the body and promotes relaxation – becoming a source of comfort to all individuals. All ingredients are sourced locally and pasture raised cattle and chicken bones that would have otherwise gone to waste are being repurposed into a new product.
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1.6 Total Urban Agriculture Challenge Businesses/Organizations (10)

#	Leading Business/Organization	Description
1.	The Urban Composting Field School of Guelph	This project designs and implements an essential, effective composting system appropriate for urban community gardens and develops and posts clear, easy-to-follow signage that instructs growers and community members who pass through these spaces about proper composting. Farmageddon will run workshops made available to all those renting plots at each of the City's community gardens and develop locally relevant instructional materials for the public.
2.	Immigrant Services Guelph-Wellington	Immigrant Services Guelph-Wellington (ISGW) offers an annual opportunity for youth to hone their leadership skills through a community service project that benefits other members of Guelph's newcomer community. The focus of this year's program will centre around urban food production and will culminate in the creation of a community garden.
3.	St. James Anglican Church	This project will offer mini garden kits to encourage people to grow their own food. These kits can be delivered to individuals who want to try mini gardening in their own small spaces (gardens, carport and balconies can be used). Kits are easy to use and require minimal maintenance after set-up and are also fully compostable at the end of the season.
4.	Burns Drive Park Community Garden	This project proposes to increase the physical accessibility of the garden, building raised beds, improving gates, and widening pathways. It would also increase the number of community members involved by holding regular instructional worktimes with hands-on educational activities. Members will learn basic gardening techniques while taking home fresh produce and growing food for families in need.

5.	Harcourt Communal Garden	Harcourt Communal Garden is an informal, small-scale urban agriculture program utilizing no-till, permaculture practices in on-ground and raised beds. It utilizes unused Church land and community volunteers to produce local, nutritious, organically grown vegetables to help feed those in need.
6.	Two Rivers Neighbourhood Group	Two Rivers Neighbourhood Group has two community gardens (Huron St garden and Lyon Park garden). This funding would increase local food security by offering more raised beds for community members to grow food at both gardens.
7.	Freedom Dreams Cooperative Education Program	Freedom Dreams Co-operative Education Program is an online and place-based workshop series that shares knowledge about co-operatives and the solidarity economy from a Black, Indigenous and Person of Colour (BIPOC) perspective. The long-term vision of this project is to see communities of colour launch food and farm co-operatives that increase local food access within these communities while increasing representation and inclusivity within Canada's co-op sector.
8.	Goldie Park Community Garden	Install rainwater harvesting benches at Goldie Park community garden. Having water onsite would attract more gardeners, expand the garden area and increase food production. This would contribute to local food security of families in our neighbourhood. In addition, portions of food produced would be donated to local food security organizations, as done in other community gardens, to support local food access and security. The Goldie Garden is also home to a pollinator patch and with water this too could be enhanced and contribute to the overall health of the park ecosystem.
9.	Ignatius Farm	With this funding, Ignatius Farm will increase access to healthy local food by expanding small plot peri-urban agriculture & local fruit production. Specifically, expand the farm's capacity by 100 new irrigable small-acreage plots by installing water lines to underutilized fields. This project will improve regional resilience by increasing new farmers' access to productive land through expanding capacity to rent small acreages.
10.	Shelldale Community Centre	An innovative, educational urban agriculture project located at Shelldale Community Centre in the Onward Willow neighbourhood of Guelph. Grow fresh crops

		using productive and simple technology, equipment, and systems, while achieving the highest possible crop yields per square meter. Engage and support low-income community members to grow their own food and, build community resilience.
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1.7 Total Circular Food Recovery and Waste Diversion Pilot participants (