

Sustainable Garden Socioeconomic Impact

Includes:

Final Report

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Completed for: Tecasy Ranch

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Course Code: FRSC 4890

Course Name: Forensic Community-Based Research Project

Completion Date: April, 2023

Project ID: 5092



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4890Y 2022 - 2023

Abstract

This project assesses the social and economical impact of the Tecasy Ranch's sustainable garden, where the produce is all donated and no monetary value is profited by the Ranch. A literature review was conducted to research the value of community gardens, food insecurity, the need for produce, and food banks. Interviews were conducted with workers in the sustainable garden and Nourish program volunteers to determine the quality, quantity, and diversity of the garden's produce. Interviewees reported that Tecasy was consistent, on time, caring, donated nutritional and fresh produce, and will continue to learn about managing and growing large-scale produce. The sustainable garden donated enough food to fill all of the Nourish program's small boxes during the summer and they maintain a healthy relationship with garden workers who adore the workplace environment and supervisor. The sustainable garden at the Tecasy Ranch can continue to grow and build connections with other local food banks and shelters as they currently have a positive reputation with the Nourish program.

Introduction and Background

The Tecasy Ranch is a 550-acre forested property located on Bolton's Road, Trent Lakes, Ontario and has been growing since 2014. Their slogan is "where good things happen", and they aim to enhance the well-being of individuals by facilitating connections with both people and nature through outdoor experiences. Together they mean to help support communities and create impactful connections. Tecasy has something for everyone, nature trails for hiking, biking, and snowshoeing, open fields, an amphitheatre, an outdoor movie screen, a stage, and starting in 2020 a sustainable garden covering two acres. When this garden began, its main goal was to provide food for the local community by growing nutrient rich and fresh produce. Since starting the garden has produced a variety of fresh vegetables, buckwheat, and flowers. The produce grown in this garden includes different types of tomatoes, a variety of cucumbers, onions, three or four kinds of peas including snap peas and snow peas, squashes, a bunch of lettuces, and collard greens. Also, yellow beans, different kinds of green beans, carrots, collard greens, zucchinis, different kinds of potatoes, cabbage, pumpkins, brussel sprouts, and kale.

It was noted that Tecasy Ranch makes no monetary profit from the produce grown and the costs to maintain the garden are paid for by the Tecasy Ranch and owners Stacey and Brydon Cruise. All the produce grown in the sustainable garden is all either donated to organisations, the community, or workers at Tecasy. Those who work in the garden make sure that little goes to waste and work to make sure all the produce gets picked on time. The Tecasy Ranch looks to grow and distribute fresh produce to families and individuals in need. The Tecasy Ranch regularly donates to the Young Women's Christian Association's (YWCA) Nourish Project during the growing season on a bi-weekly basis and makes occasional donations to different shelters in the community as available. Members of the Ranch are also permitted to take food from the garden and often make sure the food that is a bit overripe gets used quickly or is composted. The purpose of this project is to determine the socioeconomic impact of the Tecasy Ranch's sustainable garden, mainly focusing on the impact of donations to those facing food insecurity in the local community. The second is to take a look into other local organisations, food banks, and shelters to connect Tecasy with in order to increase the options of where they can donate their produce to.

The aim of this project is to determine how the Tecasy Ranch can use the produce from their sustainable garden to provide impactful donations to those facing food insecurity in the community. As well as to expand upon current partnerships in the distribution of their product to decrease any food waste/spoilage. Currently, the sustainable garden's produce is mainly donated to the YWCA's Nourish project from their small boxes, this occurs on a bi-weekly basis. Produce that becomes ripe between this two week period is either donated to a couple of shelters around the community, for example, a women's shelter or taken home by members of the Tecasy Ranch. As the sustainable garden continues to grow, the Tecasy Ranch want to understand how their actions are perceived by the community and any impact that is occurring. Tecasy wants to see if the Nourish program is satisfied with the quality, quantity, and diversity of the donated produce. They also want to distribute their produce to a wider community, including those who need access to food, reside in marginalised communities, and live in low income households.

These groups would benefit the most from fresh produce as they are at a disadvantage from being able to buy it from the store. Fresh fruits and vegetables are often more expensive than their canned alternatives, especially during the winter months when the local growing season has ended and imported produce is more heavily relied on and more expensive because of transportation costs. Individuals who are having financial difficulties are often unable to budget for fresh produce and experience some level of food insecurity. According to a survey by the Produce for Better Health Foundation, one of the most prominent barriers for individuals to get their servings of fresh vegetables and fruits in a day is cost [15]. Michigan State University studied the cost and nutrient comparisons of canned, frozen, and fresh produce, the canned vegetables showed to be up to 80% percent cheaper when compared to their fresh content and 50% cheaper than frozen [15]. Although canned produce has similar nutritional values, except for a decrease in water-soluble vitamin B and vitamin C, they also have added salt in order to make them shelf stable and when risen can lose the vitamins B and C.

Food insecurity is an issue worldwide and impacts one in seven Canadians [9]. When someone lacks the proper nutrients that their body needs to function properly they can be at a disposition to developing health issues. Both physical and mental health are impacted by food insecurity including a decreased immune system, an increased risk for chronic health impacts such as different diseases and diabetes, postpartum complications and poor mental health [4, 5, 6]. Using data collected in the 2004 Canadian Community Health Survey, the Household Food Security Survey Module, and the Ontario Diabetes Database the Cox's proportional hazard model to estimate hazard ratios, showing that Canadians were more than two times likely to develop type 2 diabetes when living in a food insecure household [4]. Food banks often lack fresh produce because it is difficult to keep the produce from going bad. Non-perishable foods hold the least amount of food related hazards to the consumer, since they do not require refrigeration and are often pre-packaged foods, canned or bottles, and dry goods [17]. Raw fruits and vegetables have a low hazard but require refrigeration, especially if they have been sliced. Partially spoiled raw produce can become odour and introduce a fly issue if not tended to causing hygiene issues for the organisation [17]. The temperature for dairy products, eggs, tofu, and meat products must be kept below 4°C or is frozen, below -18°C. Looking at the Waterloo Region Food Bank they have a high need for the following items, canned fruits and vegetables, canned meats and fish, dry beans and pasta, hot and cold cereal, individually packed snacks (granola bars, apple sauce, pudding cups), jam/fruit spread, pasta sauce, peanut butter, and rice [18]. The Burlington Food Bank listed their top ten most needed items which include cereal (hot and cold), soup, juice,

granola bars, peanut butter, crackers, canned fruit, canned tomatoes, canned vegetables, and baked beans [19]. Many food banks use donation bins which are set up in the community, often in grocery stores, where only non-perishable foods are allowed to be accepted. As donations are collected slowly, putting fresh produce in these donation bins could create complications such as decreasing the quality from getting crushed during storage and transport, as well as creating a mess or becoming mouldy. Food banks were to be used as a temporary fix to the issue of food insecurity, but with the cost of food on the rise and financial insecurities from the COVID-19 pandemic more individuals are relying on food banks for meals.

Many different types of gardens and initiatives for donating produce exist and Tecasy appears to be interested in exploring their options. The host of this community based research project showed an interest in the idea of hoop houses and how they function during a meeting with the student researcher. A hoop house is a type of passive solar greenhouse, made from a tubular frame of steel or wood and covered in heavy-duty plastic, they are often inexpensive without artificial lighting or temperature controls [16]. These hoop houses allow growers to extend their growing season, manage plants, soil and water quality, while also reducing nutrient and pesticide use on the crops [16]. Thus allowing an increase in produce that is fresh and can be grown locally. These structures can shelter crops from inclement weather conditions and different types of diseases. Since the plastic covering encloses the garden, the crops are also protected from unwanted pests including insects, birds and crop eating mammals. The inside of the hoop house uses the heat from the sun to maintain a higher temperature inside the house than outside. Due to this, it is also important to have good ventilation, as the house will become quite warm in the summer months. Hoop houses have become helpful in many communities, especially in northern populations who are able to grow traditional medicines and gain a source of income from growing produce in hoop houses [3].

Gleaning initiatives bring together volunteers who connect with local farmers to pick produce. They help to minimise food waste from gardens while supporting local food bank organisations, having a significant social and environmental impact. Produce received from these initiatives may be inconsistent as it is not a constant source of produce, but used when crops are grown in excess. Farmers and growers use this service when harvesting the rest of the crop would provide low economic benefit to them. These initiatives are beneficial to all parties involved, from the farmers, to the local community, and individuals who are members of the food bank.

In general, people with lower incomes will have a lower food budget, which can make it difficult to eat all the recommended food groups. Some people need to work a lot to provide for themselves or their families, meaning they might not have enough time to buy, waste, cut, prepare, and cook fresh produce. In these cases, fast food is something that is quick and easy for people to either pick-up or deliver but is high in calories, fats, sugars and processed ingredients.

Consuming large amounts of fast foods can increase your risk for obesity, diabetes, and different heart problems. An alternative to fast food is to purchase meal prep kits which cut down on the time spent in the grocery store and give you quick and easy recipes to follow. These options may not be for everyone and are more expensive than fast food.

The host organisation is also interested in building a root cellar somewhere to store some of their harvested produce before donations are dropped off. This cold storage is a great way to store fruits, vegetables, nuts, and other foods by keeping them in a cool place with moist soil

conditions. There are a few important features that a root cellar requires, such as ventilation which allows air to circulate and disperse ethylene gas which is produced by some produce and could increase spoilage [16]. It is also recommended to have an earth shelter where the cellar will naturally maintain a cooler temperature and be insulated with either packed soil or gravel floors. Darkness is key to keep produce from sprouting new roots or leaves, so make sure if there are windows or doors that they are properly covered. Finally, humidity levels should be kept around 80% to keep produce from drying out [16]. The Seasoned Spoon, located on the Trent Campus, has a root cellar that has been dug into a small hill with earth-bag walls using woven bags filled with dirt, a green roof that features native plants and is powered by solar power so it is completely off the grid [21]. They have multiple vents within the cellar to provide proper ventilation and wooden shelves for food storage. The Seasoned Spoon uses their root cellar to store fresh produce from the Trent Vegetable Garden, which is then used in their student-run restaurant during the school year from September to April [21].

Methodology

Surveys were to be distributed to individuals in the community who received Tecasy produce from the Nourish program in small boxes during the summer months. As well as interviews which were conducted with individuals who either worked in the sustainable garden at the Tecasy Ranch or volunteered with the YWCA's Nourish program and have experience packing small boxes during the summer. Through the gathering of experiences from both groups, we were to look at responses from not only the growers but also the community organisation that packs the produce for distribution within the community. Allowing us to investigate any gaps between the two areas or if there is room for improvement, depending on if responses do not align. Within the interviews inquiries were made to gauge the participant's thoughts on the produce's quality, level of diversity and amount donated. Then they were asked about their thoughts on the sustainable garden's impact if they had any labour comments for picking and packing and any final/further suggestions that they had for the sustainable garden.

Even though these interviews are anonymous, the participants may have felt compelled to say positive things about the sustainable garden as they are either working at the Tecasy Ranch or are receiving donations from them. This bias was to be mitigated by informing the participants of their right to consent and that they could skip a question, come back to it later, or email the researcher to adjust their response(s). The researcher also identified themselves as a student at Trent University, not having prior affiliations with the Tecasy Ranch. Another factor of this study is that the Nourish program also buys produce from food retailers and grocery stores when filling their boxes, especially the large boxes and during the colder months. For this research it was important that the Nourish program interviewee had experience with the Tecasy produce which was provided for the small boxes during the summer months. If the research was unsuccessful in asking about the sustainable garden's produce results could be misleading. This was performed by the researcher when asking further questions about when specific instances that were stated were observed so that the volunteers could elaborate.

For both the survey and interview the initial questions were created by the researcher with research question one in mind. Then the researcher meets with the host organisation to discuss the scope of the questions, the quality of questions, and any that they would like to add. After editing the questions with the comments from the host, they were revived by the course

instructor. Feedback included remarks about adjusting the formatting of the questions to be concise and straightforward in their meanings. The survey and interview questions were then added to the ethics proposal through the ROMEEO program. Finally, with a few small details to touch up, the survey and interview questions were complete.

The survey aspect of this research project was met with some logistical complications and limitations. These barriers around the survey's distribution were unable to be overcome and resulted in the cancellation of this aspect of the project. I inferred from the Food Bank Evaluation Report May 2022, an annual survey that the Nourish program performs for their food boxes [20] some of their general results. For the interview part of this research, participants had the option to be done either online over Zoom or in-person. All six interviews were done in person and information collected during those meetings included written notes and audio recordings on the researcher's personal devices. The recordings were later transcribed into a script where relevant information could be identified and separated for analysis. Responses were read over by the researcher to gain an understanding of ideas and comments that were expressed in multiple interviews. audio recordings were re-played by the researcher to help add the emotion, tone, and expression that the interviewee portrayed during the interview during specific responses. After reviewing the responses, the researcher took quotes relevant to the socioeconomic impact of the produce from the interviews and condensed them meaningfully.

From these shortened points the researcher labelled them with a theme from the following Quality (QI), Variety (V), Diversity (D), Edibility (E), Amount (A), Quantity (Qt), Balanced (B), Impact (I), Nutritional (N), Food Accessibility (FA), Labour (Lproduce and Lpacking) and coded them into one of four categories produce, donation, saving, future. Recurring themes from the interviews were formed into thematic word clusters and used to create a vertical bar graph and word cloud.

The ethics proposal for this project was created in November of 2022 using the ROMEEO platform used by Trent University and was submitted for approval in December 2022. Revisions were recommended on January 8th, 2023, corrections were then submitted and the ethics application was approved on January 12th, 2023. The specifics for this research project are file number 28323 which was reviewed by the Natural Science/Forensics Departmental Review Board and has given approval to the proposal entitled "#5092 Sustainable Garden: Socioeconomic Impact". Once ethics approval was received interviews were arranged with workers and volunteers, these were conducted from the middle of January to the beginning of February.

Results

The Nourish Food Box Evaluation is a yearly survey that is performed by the Nourish program to assess their boxes. This report looked into the amount of fruits and vegetables food box participants eat and prepare, if they find the provided recipes useful, who orders the box from their household, the number of adults and children in the household, the participant's employment status and if they receive income from any government assistance programs. The evaluation also goes into if the participant has faced some level of food insecurity, how many servings of fruits and vegetables they ate yesterday, do they access other strategies to access food, if they have any health conditions, why they purchased the food box, their personal view on the Nourish Food Boxes, and if they are treated with respect by the program.

From the series of interviews, the overall findings were that what the Tecasy Ranch has started with their sustainable garden has had a positive impact on the food-insecure community. The garden's produce has been described as maintaining great quality in consistent quantities. That the donated produce is fresh with few, if any, items either significantly under or over-ripe upon their arrival to the Nourish project for packing. Finally, from the interviews, it was evident that the workers in the garden had grown and picked the Produce with care. A literature review was conducted to look into themes around food banks, food insecurity, health impacts, and the role of community gardens in assisting to provide fresh produce. This literature review aided to add background knowledge and lay the foundation for the interview questions and further interactions.

Literature Review

An initial literature review on food insecurity, community gardens, food banks, health, and low income communities provided important context and information about best practices around food banks and community gardens. Food insecurity is a serious problem which spans the vastness of Ontario, Canada, and most corners of the world. In northwestern Ontario, fresh produce is expensive, although some innovative projects have started that use science and engineering to develop a greenhouse system to work ten months of the year [3]. Food systems are facing major problems including the shrinking of the agricultural labour force, resource depletion, climate pressures, an exponentially growing population, and rapid urbanisation [7]. Troubling times rose during the beginning of the COVID-19 pandemic when one in five Canadian households were unable to meet their financial needs [9]. It was also highlighted that those who faced moderate food insecurity were almost three times more likely to report fair or poor mental health and anxiety symptoms [9]. There is a strong relationship between food insecurity and poor physical and mental health. When the human body lacks the proper amount of nutrients there can be development issues, which can also lead to a variety of deficiencies and chronic diseases that can impose lasting negative impacts on individuals and their families.

Accessing food banks can be challenging for community members and are associated with a negative stigma of receiving what others no longer want. This stigma can deter people from even seeking out assistance and admitting their struggles to their colleagues, friends, and family members. Since so many traditional food banks only have the capacity to receive and store canned goods, those that are non-perishable, or deemed shelf safe the overall nutritional value of the food is lacking. These types of food can also be high in saturated and trans fats, sodium, sugars, as well as other additives and preservatives from the processing and manufacturing steps to make these foods non-perishable and prevent spoilage [14]. Eating a well balanced diet can be difficult when relying solely on these types of foods since fruits and vegetables are either dried or canned. Carbohydrates can be found in different grain products including pasta, rice, and barley while beans and lentils are a good source of protein. But traditional food banks lack fresh produce like leafy greens and more delicate fruits and vegetables, for example, grapes, berries, stone fruits, tomatoes, and green beans. They are also unable to store dairy products, like milk, yogurt, and cream cheese and foods like eggs that are fragile and need special packaging and storage producers.

Many traditional food banks provide pre-pack food boxes, often with foods that are shelf safe and non-perishable. This can make it difficult to meet the cultural, religious, dietary, or medical

needs of the individuals and families who are using the food bank [6]. One-third of individuals who participated in Teran and Tarasuk's (1999) study that received a pre-packed box noted that they received only enough food for a couple days and what they received was insufficient in key energy and nutritional requirements [10]. Eating healthy can be difficult for those receiving food donations that are full of non-perishables containing preservatives, high amounts of sugar, sodium, and fats. It was also noted that at least one of their items was damaged or expired and seemed unsafe to eat [10]. New approaches to how food banks operate have been arising now allowing for choice models of food selection, where people who visit the food bank can select from a variety of items instead of receiving pre-packed hampers [6]. Permitting individuals to choose what they would like to receive can make this process feel more like a normal grocery store, granting them the ability to follow religious or dietary restrictions without wasting food.

Some food banks have also introduced additional programming and are connected with community resources centres to provide more specific support for individuals who benefit them [6]. Another aspect is the negative stigma associated with food insecurity and using food banks. It is often thought that the food that is donated is unwanted by someone else or is close to its expiration date. Having people donate food that they no longer wish to consume creates an unwanted stigma around food banks [6]. To aid in decreasing this stigma it would be beneficial to receive donations from community gardens that have the capacity to provide fresh produce. Food that has the same quality of produce that would be sold at the farmer's market or grocery store. Finally, food access is correlated with socio-economic and political policy challenges, meaning it can be difficult to provide for yourself and others if your income is not enough to support your lifestyle, about 90% of food bank users hold low paying jobs. Low incomes and marginalised communities appear to be greatly impacted [8]. Individuals with higher paying jobs have more access to purchasing food from supermarkets and as they have an increased food budget.

One form of urban agriculture are community gardens, which can utilise underused urban spaces, transforming areas while yielding social, economic, and environmental returns. Community gardens can allow for fresh produce to be grown and distributed to the community providing much needed fibre, vitamins, and minerals coming in the form of mainly vegetables and fruits.

These projects are met with enthusiasm but research around their benefits can be lacking and are often viewed in a return of investment (ROI) analysis which measures the financial ratio of success that is generated [7]. Gardens that do not sell their produce are unable to make a financial profit since they are donating what they grow. This can deter interest from investors who are looking to make money, as they make no monetary profit. The sustainable garden at Tecasy Ranch falls into this category, they pay for the gardening tools, vegetable seeds, and their workers who help to maintain the garden. Tecasy is able to do this thanks to the generosity of their owners whose vision is "to provide an ideal location for a variety of impactful,

non-commercial functions and usages" [22]. Without investors who are focused on humanitarian and philanthropist initiatives over profits and financial gain, these projects for more community gardens would be difficult to get started. There are also modern gleaning initiatives which allow for community members to donate fresh products to local organisations [1] these crops are considered to be leftovers and are not economically profitable to harvest by the grower. A positive note on gleaning is that it allows for the collection of fresh produce to then be distributed to communities in need, but it adds a negative connotation that the grower does not want this produce.

Also, the type of produce income can be inconsistent since it is put into action when farmers and gardeners are in excess of their harvest. Some donations may be large and plentiful so that they may be vastly distributed within the organisation but it also means that sometimes small amounts or none are available and they are harder to distribute evenly among food bank users. Without consistent donations, food banks would either need to purchase food items to replace what would have been donated or give food bank participants less. If members of the food banks may not always be guaranteed food items it can be mentally and physically hard on them. Since they do not know where their next meal will come from or when they can become anxious and stressed as well as physically weakened by the lack of proper nutrients. These programs aid in decreasing the amount of produce that goes to waste, connecting community members, improving access to local food, and addressing issues of climate change. It is averaged that North American waste an estimated 168 million tonnes of food each year and that this organic food waste contributes to the formation and release of methane gas into the atmosphere which is 25 times more potent than carbon dioxide in regard to its global warming potential [1]. A way to prevent and divert food waste is to invest in programs that feed the hungry, therefore having a significant social impact while also increasing environmental and economic benefits by decreasing food waste. From a garden perspective gleaning initiatives would improve the collection of ripe produce, but there also needs to be more initiatives along the lines of food redistribution for surpluses of already prepared foods from restaurants. In the future reaching out to those who participate in gleaning activities would improve their perspective as recipients and measure the contribution these programs can have on individuals and families facing food insecurity.

Interviews

Six interviews were conducted for this research project including two sustainable garden workers from the Tecasy Ranch and four volunteers from the Nourish program with the YWCA. The responses from participants that are most relevant to this research project are recorded in Table 1. Overarching responses from the volunteers mentioned how the donations provided were always on time or even early, which they really appreciated. The Nourish program has a strict time frame that they have to keep to evenly distribute the produce into both small and large boxes before deliveries can be made to program members later the same day. These volunteers also commented on the consistently excellent quality and quantity of the produce while being diverse within the different types of vegetables which were donated. There was an overall agreement between the volunteers and the workers about the sustainable garden's produce regarding the produce's freshness, nutritional value, and compassion from Tecasy Ranch. The produce was fresh enough that someone could sell at a farmer's market, it was not wilted or mouldy. These types of vegetables would provide people with increased nutrients and higher amounts of vitamins, minerals, and fibres without the preservatives that standard food bank non-perishable food contains. Tecasy Ranch as an institution was expressed to be caring and generous. On the Ranch, the staff is inviting and supportive to workers and in the community, they are generous with their donations and handle their produce with respect when distributed to organisations. The sustainable garden at the Tecasy Ranch started in 2020, they are still learning about gardening and making connections. They have hosted research in soil management, have learned about gardening through trial and error and continue to make positive connections within their community.

Responses from the questions asked during interviews were transcribed and then went through the following qualitative analysis process. Meaningful responses were taken from the transcript and condensed to provide the key point(s) from each participant. These were then labelled with the appropriate theme(s) before being coded into categories, the most prominent being produce and donation. Recurring themes from the interviews were formed into thematic word clusters and used to create a vertical bar graph and word cloud. From the questions asked during interviews, there were many overlapping responses which were shortened to a single word and then grouped into a clustered theme. Words and their associated themes are shown in Table 2. These themes include consistency, nutritional, fresh food, large variety, saving money, and punctual, all of which are displayed in Figure 1. Large variety and saving money were the two themes with the highest amount of related responses from the interviews. The results from Table 2 were graphed in a vertical bar graph, Figure 1, to show the frequency of these themes. The themes do not directly relate to the questions asked during the interviews but instead comprise the focus of where the impact is being made from the sustainable garden to the community.

Potential Partners

Looking into research question two, an online review was conducted to determine other organisations which have the capacity to accept fresh produce. Five organisations were found to assist with the expansion of connections available for produce distribution from the sustainable garden. These include the YES Shelter, St. Luke's Food Bank, Good Neighbors Care Center, Kawartha Food Share, and St. Vinnies all of which are located in Peterborough. The YES Shelter provides shelter, food, school, and outreach services for youth and families. They accept non-perishables as well as fresh produce and meats, they do ask that if you are bringing food that will require to be refrigerated to please call ahead so that they can make sure that they have the space available. The Good Neighbors Care Center, is a non-profit organisation that provides food, clothing, and other services to the Peterborough community. They provide a large range of non-perishable and fresh produce. From their Facebook page items of produce include lettuces, tomatoes, beans, zucchinis, beans, and fruits. The Kawartha Food Share mission statement is to ensure that all members of the Peterborough community can access a reliable emergency food source while being treated with dignity. St. Luke's Food Bank, provides food with the Kawartha Food Share Programme and is aware of community needs through tough economic conditions. St. Vinnies has a food pantry that works on a point system based on the size of the family, allowing participants to choose what they need and what their family will use. Participants are allowed to visit the food pantry once every four weeks and have access to a variety of non-perishable foods and produce such as potatoes, onions, and apples. These five were selected as potential partners based on the following criteria, are they local, do they serve either marginalised communities or low income households, do they provide food distribution services, and finally do they have the ability to house fresh produce.

Conflicting Results

There were no overarching negative accounts from the Nourish program volunteers and few from the workers in the sustainable garden. There were a few minor issues with the growing and harvesting of the produce at the Teacy Ranch. The kale grew too quickly, so much so that workers were unsure what to do with it, leaving most to become wilted and wasted as leafy greens are difficult to keep crisp. Unfortunately, the crops containing potatoes became drowned and their

tubes could not breathe which impacted their growth and susceptibility to harmful microorganisms. Their crops of brussel sprouts were also susceptible to inclement weather in the form of too much rain this growing season. This left the harvesting of these crops to be not as successful as the garden workers would have hoped. Finally, one worker was unsure what the buckwheat the Ranch was growing was to be used for and mentioned that it had to be cut multiple times but only seemed to be good for pollination.

Discussion and Conclusion

Evaluation Report

From their most recent report, I gleaned from their food boxes that over 90% of surveyed members either agreed or strongly agreed that they feel good about ordering from the Nourish Food Boxes. Overall, this evaluation shows that more than 70% of members can prepare an increased number of meals in their homes and that over 80% have been able to increase the number of fruits and vegetables that they eat because of the produce that they receive through this program. Mental and physical health conditions were assessed and showed that many participants experience anxiety, Post-Traumatic Stress Disorder (PTSD), depression, high blood pressure, high cholesterol, and type 2 diabetes. This can show the types of conditions that people have that may leave them more susceptible to food insecurity and also those that may stem from a lack of proper and regular nutrients. Also noted within the evaluation was that the Nourish program food boxes have helped participants manage their health conditions in almost 80% of responses. Since this is a general evaluation of the Food Boxes, there is no data that is specific to the produce donated from the Tecasy Ranch's sustainable garden. The Ranch is only able to donate produce during the growing season and their produce is used to fill the small boxes.

Therefore, this evaluation is not specific to the sustainable garden's produce but provides an overview of the Nourish program and the Food Box program.

Interview Participants

Nourish program volunteers' responses were positive about the garden's consistently excellent quality. They were always happy with what they received from Tecasy, whether it was beets, zucchinis, lettuce, beans etc. Every donation was a little bit different which was appreciated so that they had additional variety. There were also staple food items that are familiar to the recipients allowing families to recognise the produce and know what to do with it. Although the Nourish program is not against putting in more unusual types of produce, such as kohlrabi, this year it was important the recipients had more standard food. Volunteers were in awe of the produce and the amount that a farm was willing to donate. This stems back to the initial reason the sustainable garden was started, to provide produce to the community. The Tecasy Ranch pays for all the garden equipment, seeds, and labour then they donate all the produce.

Since Tecasy donates all the produce, the Nourish program does not have to pay for the produce that goes into their small boxes during the summer months. From a financial standpoint, this saves them money which can be used in other ways to benefit the program and community.

Mainly used in the winter months to be able to buy enough produce for all the boxes to keep the number of times similar to the summer. As fresh produce often costs more in the winter because it is no longer the local growing season, not having to pay as much in the summer is helpful. The Tecasy Ranch did a great job at communicating what they were growing to the Nourish program. This was adamantly expressed by the individual who makes the recipe cards that go with the

boxes. This is done by the Nourish program so that recipients have an idea of the meals that they can make with what they receive in their box. The volunteer that also manages the budget and food purchases from food retailers was appreciative of this communication too, as it allowed them to plan what they still needed to order for the large boxes. Not to mention saved them money which they were then able to use in the winter months when produce is more expensive.

Another thing that volunteers were grateful for was that some of the items were grouped into pre-sized bags. This made it easier to split the produce evenly for distribution in the small boxes. It saves volunteers from guessing how many can go into each small box and then having to adjust either during or after packing. Types of larger produce like heads of lettuce or squash are simple to distribute as each small box would get one but smaller items need to be guessed or calculated and evaluated so that all the boxes have the same things. In the end, some swapping may happen so that the boxes have even amounts, one box doesn't get three large zucchinis and another gets three small zucchinis. The Nourish program has a tight schedule to keep on packing days so they were really appreciative that the Tecasy Ranch would show up early or on time during drop off. Right from the start, the volunteers had a sense that Tecasy was well organised and passionate about the sustainable garden. The Nourish volunteers expressed a great level of admiration for the produce donated from the sustainable garden at Tecasy. One of the volunteers, who has helped at the Nourish program for seven years, mentioned that the sustainable garden was the first donator to provide them with any sort of consistent bi-weekly donations. They love all the donations that they receive but having enough to fill all the small boxes for sure a great length of time was unprecedented. The Nourish volunteers appreciated when the produce was packaged or bundled into sizes for one box because it made box distribution super simple. They also liked that Tecasy told them what they were growing and what to expect in advance, even though sometimes mother nature could make these plans they had a good overall sense of the produce. They were also thankful that they were on time or early since packing takes a long time and follows a structure. They thought that the Tecasy donations were well organised for packing days and were an advantage to their organisation.

Both the workers that were interviewed noted the size of the zucchinis. One even went as far as to comment that they do not even buy zucchini from the store anymore because they are small in comparison. There were so many different items that were planted in the garden. Sometimes it was difficult to keep track of where things were and one of the workers needed to be reminded. Working with the plants in the garden made workers start to have a greater appreciation for vegetables and start eating more. This speaks to how working with the vegetables as they grow and seeing them progress from seed to plant can be gratifying and give one a sense of pride. By donating this produce that the growers are proud of really shows the strength and effort that the Tecasy Ranch puts into their sustainable garden and mission statement.

During the harvest of vegetables, it was noted that it seemed like the workers were picking beans and peas every day. There were a few different kinds of beans and four different kinds of peas. Workers felt that the biweekly pickup for the Nourish program was not enough for all the produce from the garden. Even though Tecasy would donate a truck trunk filled with buckets of food only being able to donate biweekly meant that there was still produce either leftover or harvested between the Nourish drop off. Some workers wished that the Nourish program would take more produce and any extra that was brought on the drop off day. They were confused why

the Nourish program did not want more free food. Since the boxes all have to be basically the same as people compare what they get in their boxes sometimes the Nourish program cannot take much extra. Also, if they added too much produce to the small boxes then they start to become more of the size of the large boxes. Sometimes these extras are helpful, during a packing day that Tecasy assisted with they brought extra produce, and it was used to help finish filling the large boxes.

The garden was well maintained and provided consistent biweekly donations to the Nourish program. The produce from the sustainable garden showed the love that everyone put into it, including the workers during the week and the event coordinator who also worked on the garden in the evenings and on weekends. As for harvesting it would be more cost effective to grow larger versions of produce, for example, instead of cherry tomatoes grow regular tomatoes. Although one worker mentioned that they enjoyed picking, they noted that it would save time and money if picking took less time. If possible, a volunteer program could be introduced to the garden for harvesting produce. It was mentioned in an interview with one of the workers that they were picking beans and peas every day and sometimes spent a full eight hour shift just picking and pickling since it was only the two workers for the entire garden. This could increase community involvement at the Tecasy Ranch and also provide students with more interactions with fresh produce and potentially increase their appreciation for vegetables as it did for one of the workers who did not used to be a big fan of vegetables. When individuals become more involved with growing fresh produce they not only become more knowledgeable about where their food is coming from, how to maintain a garden sustainably, and how to work with a group but it can also give them a sense of pride and increased appreciation for vegetables. By increasing the amount of time that an individual spends around fresh produce it can have many positive outcomes including an increased sense of community belonging, knowledge about local agriculture, and increased consumption of fruits and vegetables.

The produce grown in the garden has so much potential for local food banks, helping to not only stock their shelves but also to reduce the stigma around receiving food from food banks. Often thought of food that other people do not want instead of food that has the same quality as food that would be sold at a farmer's market or grocery store. From the worker's first-hand experience in the sustainable garden they believe that it still has so much potential as it continues to grow. Even if they just donate the produce to food banks this influx of fresh produce could do so much for the community. The workers mentioned how rewarding it was to donate the produce that they helped grow directly to individuals who needed it. They thought that it was rewarding to see how excited and grateful the community members were to receive the garden's produce. Both workers mentioned in their interview that the Tecasy Ranch sustainable garden has so much potential and that they enjoyed working at the Ranch.

Reviewing the results from the interview participants showed the recurring themes of quality, variety, diversity, labour and quantity between both groups. The groups consist of the volunteers from the Nourish program and workers from the sustainable garden at the Tecasy Ranch, had similar responses to the proposed interview questions. They mention the overall superb quality of produce coming from the sustainable garden. One Nourish volunteer mentioned that they might have received the odd piece of produce that may have been damaged during harvesting and or transporting, but that did not represent a large percentage. Volunteers commented multiple times

on the quality of the produce, saying that it was great, fresh, and excellent. They thought that the Tecasy Ranch had really good produce growing in their sustainable garden. One volunteer thought that the donated produce was diverse and that they were foods that the volunteers themselves would eat, speaking to the high quality of the donations. The variety of the produce was also mentioned multiple times throughout the series of interviews. The Nourish volunteers felt that the produce that made its way into the small boxes was diverse, containing simple vegetables that people are familiar with and know how to cook as well as hearty greens and squashes that require a bit more cooking expertise. The sustainable garden workers felt that the produce that they grew in the field was plentiful and produced an assorted variety. One worker mentioned that sometimes they needed to remind themselves which produce was planted where since there was just growing so many different vegetables.

Nourish volunteers value consistency within their boxes as the individuals who received the boxes (large and small) often talk amongst themselves about what they received in their boxes. Because of this, Nourish puts the same types of items in all the small boxes and the same number. The volunteers also keep the size of the vegetables in mind so that one box does not receive three large zucchinis while another receives three small zucchinis. Since keeping things consistent is important to the Nourish program they appreciated that the produce that Tecasy donated was as close as possible to being the same size, even when grown without restrictions put into place. Having vegetables packed by type and size would also be useful for this process so that volunteers knew which zucchinis were considered large for that harvest. This would also save Nourish time on their packaging days as it would limit the amount spent reorganising the distribution of the produce so that the sizes are more evenly dispersed.

All interviewees agreed that the amount the Tecasy Ranch donates from their sustainable garden is reasonable. Half of the participants commented that any amount is a good amount, since by helping at least one person an impact can be made. All of the produce is donated, so as long as it is going to someone it has that chance to make a difference in that person's life. The Nourish volunteers mentioned that there was always enough to fill all the small boxes on packing days. Sometimes, after all the small boxes were filled, there was some produce left over. This was not a problem for Nourish as they would either take the leftovers to a meal program somewhere in town at the end of the day. If another participant was late getting their order in they would make another box up or one of the volunteers would take it home themselves. Any leftovers at the Tecasy Ranch were distributed to the garden workers and ranch staff which the workers really appreciated.

Since the Tecasy Ranch donated all the produce they were able to save the Nourish program money from otherwise buying that same amount of produce from the store. Although this does not allow the Nourish program to buy more produce for more families in the summer months, it does allow for them to keep the number of items in the boxes consistent year round. So the costs that they save in the summer get reallocated to the winter months when food costs increase for items, especially fresh fruits and vegetables. Interviewing both Tecasy workers and Nourish volunteers showed that they had a positive working relationship between the two groups. They thought the work that the other was doing was important and admired by the local community. They worked well together by having meetings to talk about the year and what Tecasy was thinking of planting in their garden. Also, by being on time for donation days, helping unload the produce, packing the

boxes, and overall helping to run smoothly. The workers in the sustainable garden at the Tecasy Ranch mentioned that Tecasy is making great gardening advancements and are continuing to learn through trial and error. What grows well and what does not, how to manage the soil and how to prep, plant, and harvest the produce that they grow. Both the sustainable garden workers mentioned their admiration for Tecasy and the garden, seeing all the potential that this garden has as it continues to develop and how far it has come since it started in 2020.

The Nourish program also buys retail produce for their large boxes all year round and their small boxes in the colder months when the growing season is finished. This could make it difficult for volunteers to be able to distinctly identify which produce originated from the Tecasy Ranch. Although attempts were made by the research to mitigate these types of responses if the volunteer worked with both boxes they might have been unable to recall when the produce was from which. All interviewers were familiar with the Tecasy produce in the small boxes from the summer, which was a good point to clarify. Due to logistical issues, only interviews with workers and volunteers were conducted. Without the surveys we did not have any results from those who are receiving the food, cooking with it, and eating it.

Future Aspects and Recommendations

This research pathway has yielded insightful results on the socioeconomic impact of the sustainable garden at Tecasy Ranch and looked into other organisations that their produce can be donated to. If the Tecasy Ranch decided that they wanted to survey the individuals who participate in the Nourish program and receive the small boxes in the summer months, that is something that could be done during the summer. A simple survey or feedback card would be good to be included in those current boxes when Tecasy brings their bi-weekly donations. It would be recommended to reach out to the Nourish program for logistics and how to go about collecting the surveys. The Nourish programs have an annual Food Box Evaluation report, so this survey could follow the same logistics or even be in collaboration with their annual survey. Other possible research directions could include other garden based procedures, such as the other community-based research group that worked on soil management this year at the Tecasy Ranch

One of the Tecasy Ranch's board members expressed an interest in knowing what the monetary value of produce donated to the Nourish program was. As the Ranch records the amount of produce they donate this could be roughly calculated by using current grocery store prices.

Although this value may fluctuate, it could also be possible to reach out to the Nourish program to determine how much money the produce from Tecasy saved each month. Another thing that came up during the presentation of the major findings to the Tecasy Ranch's board members, was that the garden has a wide variety of produce types and variations including different vegetables like beans and peas, but also yellow beans, green beans, snap peas, and snow peas. If certain vegetables are determined to grow best in their garden, then the Ranch could reduce the amount of produce they plant while maintaining good variation, diversity, and providing foods that people are familiar with and enjoy. Volunteers from the Nourish program mentioned that a good baseline was to have foods which they called "family friendly" including vegetables like carrots, beans, potatoes and others that are easy to cook and familiar to children.

Currently, Tecasy Ranch does not have much cold storage space for their produce, if any, a root cellar would be helpful for keeping the harvested produce somewhere dark and cold while

waiting to be donated to an organisation or dropped off at a food bank. The host expressed that they were thinking of building one, so a short tour of the Seasoned Spoon's root cellar on the Trent Campus was arranged. Also, the Seasoned Spoon's director was contacted to arrange a meeting and official tour with them and the host at the Tecasy Ranch. Also, during some of my meetings with my host, I mentioned how hoop houses are used to extend the growing season. At Trent University the Trent Vegetable Garden uses hoop houses to grow food, this allows them to harvest produce like cabbage for the Seasoned Spoon well into the winter months.

Introducing this into the sustainable garden at the Tecasy Ranch could allow them to continue growing produce as the temperature begins to drop. This would be a great opportunity to grow herbs to be donated as one of the Nourish program volunteers mentioned that herbs are such a luxury item that can add a lot of flavour to a dish. Herbs could also then be dried and used late into the winter and early spring seasons. Another avenue for donations are gleaning initiatives, which can be helpful for the garden if workers find that they have too much produce harvested at one time and that they will not be able to donate it to a local organisation in time. This type of initiative would have been helpful the past growing season as one of the workers mentioned that the kale grew much faster than expected and wilted quickly, meaning that most of it went to waste. One of these gleaning programs stems from a connection within the Nourish program, called Peterborough Gleans where farmers can have volunteers come to their farm and pick donated produce.

From my findings working with the Tecasy Ranch, collecting literature, interviewing workers in the sustainable garden and volunteering at the Nourish program the produce that Tecasy grows and donates allows for individuals who are struggling with food insecurity to access fresh produce at a low cost. In the future, the Tecasy Ranch will continue to increase their garden expertise and find their footing, as the start has been trial and error to see what works. Try having a plan or schedule to streamline coordinating with multiple food banks, increasing the opportunities to drop produce off. Do not forget to add travel times and let the organisation know in advance that fresh produce is being donated. Having more than one donation organisation will be helpful in the long run so that crops are not being picked without a plan for where to take them. One example stated by a sustainable garden worker was when too much kale was ripe and harvested at once, leading to a small panic and causing most of the kale to wilt and go bad before being donated and consumed. Another way to avoid this is to plant sections at different times so that everything does not ripen all at once.

To make it even easier for the Nourish program they could be given a breakdown of the harvest so that they know how many of each produce they have to go into the boxes. Also having different boxes to distinguish different sizes of the same produce, just to give Nourish volunteers a better understanding of how to evenly distribute the produce in the boxes. If a hoop house is built at the Tecasy Ranch this would allow the growing season to be extended and would provide more opportunities for growing vegetables, herbs, and starting garlic for next year. Various types and thicknesses, of plastic, exist for covering hoop houses with different filtering capacities. This can also affect plant development and vary the time to marketable harvest. However, environmental controls under greenhouse conditions need to be refined to reduce the length of the growing season while maintaining, or improving, yields of optimally sized plants. Introducing volunteers to help in the garden, even if just for picking, could have a large impact not only for more manpower when harvesting but also in creating a broader sense of community and introducing people to the joys of growing fresh produce. With this new found knowledge of how the workers and volunteers feel about what the Tecasy Ranch is accomplishing with their sustainable garden may they continue to learn and grow, making positive connections within the community and helping to battle food insecurity.

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Tables and Figures:

Table 1:

Designation	Interview Transcript	Meaningful Condensation	Coding	Category
N4	I think it's usually pretty good, you know, there are sometimes the odd pepper that gets crushed or something, but most of the time it's pretty good quality.	Pretty good quality.	Quality (Q1)	Produce
N4	Sometimes I would say it's maybe a bit premature, needs to ripen a little bit more but you know	Sometimes premature [when asked further determined to happen around the last couple	Quality (Q1)	Produce

	the whole usually pretty good.	of months, Tecasy not currently donating]		
N4	I couldn't say for certain. I would say it's pretty on terms of what gets put in. It's stayed kind of the same items I guess. I like the range of items. I'd eat them. That's what we're gonna to judge it off	Staple items that were familiar	Variety (V), Edibility (E)	Produce
N4	And I think the the fact that any amount was donated is nice like. Like I think any amount is a good amount. I would say to me it seemed like it was a reasonable amount.	Any amount donated is good. Reasonable amount	Quantity (Qt)	Donation
N4	Well, I think like any amount creates a good impact. You know, like I think one thing that I always think about is each person is going to be on the receiving end of these boxes. So any amount it does make an impact, even if it's in a small Way I like those donated.	Any amount creates a good impact, even if it is in a small way	Impact (I)	Donation
N4	Is there more that could be done? I think just an extra eye on quality control on the way out. Saying consistent, they're very consistent. That's a positive thing.	Double check quality. They're very consistent.	Quality (QI), Food Accessibility (FA)	Produce, Donation
T1	Sure, um I thought it was excellent and I had worked in gardens before never on this scale though	Excellent, larger scale than used to	Quality (QI), Labour	Produce

Tl	the zucchinis were the biggest zucchinis I've ever seen in my life and we were picking like beans and peas what seemed to be like almost every day	Gigantic zucchinis, picking beans and peas every day	Quality (Ql), Amount (A), Labour (Lproduce)	Produce
Tl	every time we would go to donate at food banks Karie's truck would be like her entire back part of her pickup truck and like the back part of her car would be full it was like buckets and buckets of food so it was it was a lot of food.	Trunk of truck was full with buckets of food	Quantity (Qt), Impact (I)	Donation
Tl	um in terms of the quality though it was really good and myself I'm not a big vegetable person which was kind of like a joke all summer was trying to get me to eat like all the vegetables and such But um seeing it all and like working with the plants now like it actually made me start eating more vegetables. Um but yeah it looked really good.	Quality really good.	Quality (Ql)	Produce
Tl	yeah there was a lot um and another thing that kind of went along at least like for me for the summer was like I would forget what was here what was there like I had to be reminded of like everything we planted because there was so much	So much planted, forgot what was where.	Quantity (Qt), Amount (A), Variety (V)	Produce
Tl	like I don't even know if I could list them all like there was uh peas beans	Peas, beans, zucchini, carrots, lettuce, cabbage, tomatoes,	Quantity (Qt),	Produce

	<p>zuchinis Carrots uh we did lettuce cabbage we did like four or five types of lettuce uh Tomatoes we eventually did squash and Pumpkins um but the pumpkins kind of went more into the fall and we left um just before September started but and I know I'm missing so many oh we did, Onions. So yeah there was a lot. um for you know like the small part of the field that we used there was a huge diversity</p>	<p>squash, pumpkins, onions.</p> <p>Huge diversity in the field.</p>	<p>Diversity (D)</p>	
Tl	<p>I would say balanced like a lot um there was never like an excess like there was never any waste because I mean on or off record like the food that um didn't get donated or anything that was actually like we took or that would just give away</p>	<p>Never large excess</p> <p>Never any waste</p> <p>Any food slightly off was taken home by the Tecasy workers or given away</p>	<p>Amount (A), Balanced (B), Edibility (E)</p>	<p>Produce, Donation</p>
Tl	<p>one of the days we went to pack the boxes we had they used our stuff instead and they had extra leftovers (about 4mins)</p>	<p>Extra leftovers at Nourish packing</p>	<p>Amount (A), Labour (Lpacking)</p>	<p>Donation</p>
Tl	<p>I wanted to share it with so many other people and the garden was no exception to that like the scale or I guess it was it was a lot for like the smaller group that we had working on it um if that makes sense but it has so much potential. um and I think that even just from</p>	<p>Share it with community</p> <p>So much potential, in the garden and with food banks</p>	<p>Impact</p>	<p>Donation</p>

	the food banks that we did donate to and the places we donated to we could do or they could do so much.			
Tl	like the garden showed you know the love that everyone put into it and like me and um the other worker Autumn we Only in there for weekdays so of course there was you know like the nights um and weekends and I know karie was probably there like every single day for like hours and hours um but I think the garden definitely showed the amount of love that everyone put into it	Lots of love into the garden Many hours spent in the garden	Quality (Ql)	Quote?
Tl	for two people to pick the entire Garden um sometimes it would take us the entire day so the entire like seven eight hours we were there just picking and picking like every two to three days we would have like buckets and buckets of beans and peas	Entire days spent picking produce 2-3 days buckets and buckets of beans and peas	Labour (Lproduce), Quantity (Qt)	Produce
Tl	I can't imagine it being like bigger and so much but I think it would be so cool to have like volunteers come in or you know if you want to have a section to plant your own vegetables	No garden size increase Picking volunteers (couple hours) Individual plots for community members (rent monthly or seasonally)	Labour (Lproduce)	Future

T1	I think it can really only go up from There. like if that was what people could accomplish you know like three four five or six people um I think it can only really go up. so yeah I think it has like a lot of potential	Increase garden staffing	Labour (Lproduce)	Future
T2	the zucchinis were like literally the best zucchinis ever had. Like they had really good produce there.	Literally the best zucchinis Really good produce	Quality (QI)	Produce
T2	I don't even buy zucchinis now from the grocery store because like, they're so tiny in comparison.	Appreciated the size of the zucchinis (grocery store pales in comparison)	Quality (QI)	Produce
T2	There was a few things that like the potatoes got. Like drowned. Like it rained a lot for like a couple days and then they ended up getting drowned. So the potatoes didn't really last, but we had different, a couple different kinds of potatoes.	Potatoes got drowned from rain		Produce
T2	They had, I thought they had a really good variety of produce.	Really good variety of produce	Variety (V)	Produce
T2	We had a couple different kinds of potatoes. And like a few different kinds of peas (snow peas, snap peas, it's like 3 or 4 different kinds of peas). We had like kale we had un brussel sprouts (which also didn't really make it), we had some flowers, we	Different kinds of potatoes, peas, beans, lettuce, and cucumbers. Also grew kale, brussel sprouts, flowers, carrots, collar greens, squashes and pumpkins.	Variety (V), Diversity (D)	Produce

	<p>had different kinds of beans, like green beans and yellow beans and then some. And then we had carrots and we had like collard greens with a bunch of lettuces. We had squashes and pumpkins. Umm, zucchinis, different kinds of cucumbers.</p>			
T2	<p>Some of it went to waste like the kale we had a lot of the kale grew really fast and we like could not keep up with how much kale grew because it would like get too big. And then we would we had like at one point we had like 3 huge garbage bags of kale and the pickup days we did. Pick up days was like every two weeks for the Nourish project. So that, like, wasn't enough.</p> <p>Enough sometime we would drop of at other places if we had too much, but not always because it's hard to, like, coordinate sometimes.</p> <p>Producing too much of that and like the drop off times not being like enough. And if there was a way to like. Coordinate better with food banks and, like, have more opportunities to drop things off, just like whenever.</p>	<p>Kale grew really fast and would wilt</p> <p>For some produce biweekly pickups were not enough.</p> <p>Would be beneficial to coordinate donations with other places too</p>	<p>Edibility (E), Quality (QI), Quantity (Qt)</p>	<p>Produce Donation</p>
T2	<p>A more like organised thing between the different organisations, if that makes</p>	<p>More organised between multiple</p>	<p>Labour (Lpacking)</p>	<p>Donations</p>

	<p>sense. Then I think it would have been a lot easier. To like coordinate travel times and stuff like that. Other than like picking things and then panicking because they because they're gonna go wilty and we can't</p>	<p>organizations for pickups</p>		
T2	<p>Things like that for me, I think. I think like no matter what, if it's like free food, like it's going to someone, it's gonna make a difference.</p>	<p>Free food going to someone is going to make a difference in their life</p>	<p>Impact (I), Nutritional (N)</p>	<p>Donation</p>
T2	<p>And then like the nourish project. I didn't really understand how. Our. Relationship with them would like impact families because from my understanding, the nourish project. It's like saving the nourish project money, so that I guess, so that they can. I guess it all ties in because then the nourish project saves money because we're donating food for them. To use instead of them having to buy it, so then it saves them money and they can buy it from more families.</p>	<p><u>Nourish</u> Saving the nourish project money, allowing them to help more families</p>		<p>Donation</p>
T2	<p>And we did take it to the women's shelter a few times and they were like so grateful. They're like 'Oh my God, this is great'. It's such great food. And like,</p>	<p>Women's shelter - They're like 'Oh my God, this is great'. It's such great food.</p>	<p>Impact (I)</p>	<p>Donation</p>

	it was really nice seeing how excited and grateful they were for that.	Rewarding to see how individuals react to receiving produce		
T2	yeah, I was thinking about that. Like throughout the summer we were dropping it off because sometimes. They like. Wouldn't. They would like. Only take a certain amount sometimes somewhere like why, like this is all this free food.	Nourish would only take a certain amount of produce.	Impact (I)	Donation
T2	Like it was kind of confusing sometimes but. I think either way. In the grand scheme of things, it still helps families and I think I would have liked to see like to see it go to like. More like women shelter type things too, because like the nourish project, obviously it's going to help them because they're saving money. But it doesn't feel like it feels like a like second secondary impact like, I don't know how to describe it, but it doesn't feel like it's like. A primary like we're making this and that's going straight to a family in this family saving money because the family like subscribes to that thing, right.	Not directly impacting the families (feels secondary because of the 'middleman') Would like to see more direct impact (go right to the people going to use it)	Impact (I)	Donation
T2	yeah. And like they did have a problem with like	Use money Nourish saves to buy more boxes	Impact (I)	Donation

	<p>not having enough boxes and stuff so they could use the money that they would have spent on like buying the cucumbers or whatever to buy more boxes. Like it would even out anyways. Yeah.</p>			
T2	<p>Like strictly that and I don't. I mean, I'm not the one paying someone to do it, so I guess from like a money perspective. It would be more efficient to just have like. Bigger tomatoes because they're still the same nutrients, right? Like bigger tomatoes versus little tomatoes. So it probably would. Be more beneficial to have. Umm. Like the easier to harvest ones because then you save time and you can plant more big ones. For the same. Time versus a few little ones that would have taken a lot longer, if that makes sense.</p>	<p>Having larger produce would be more efficient for picking.</p> <p>Save time during harvesting</p>	Labour (Lproduce)	Produce
T2	<p>I think it's still relatively new like what they're doing. So they're still kind of. Experimenting and seeing like what works and what doesn't work. And. I don't know, like it's kind of a learning experiment right now. (p33)</p>	<p>-potatoes -buckwheat (attracted bees if nothing else)</p>		

T2	<p>Yeah, they're really like we read the most nice, generous people I've ever met, like. They <u>once they figure it out and like have a couple of years of experience</u> and. Make I think like make more connections in the community and.</p> <p>Are like more, well, like. I feel like they're not as well known as they should be for like what they are. So I feel like once they get to that point. There <u>is so much more potential</u>. I have nothing but good things to say about them. I love them so much.</p>	<p>Still figuring things out, but they have so much potential and need more experience and connections</p>	Impact (I)	Future
N1	<p>I thought it was great this year. I thought it was really good. It was, it was fresh, it was, it was excellent.</p>	Great, fresh, excellent	Quality (Q1)	Produce
N1	<p>Yeah, every week. But every time we did it, it was a little bit different and so they they I was really surprised that a farm would donate that much.</p>	Was always a bit different	Variety (V)	Produce
N1	<p>Often it wasn't an excess. Excess has always been falling over. Nice to have extra because then we sometimes. Sometimes take to the market or or or to the food boxes there's no problem when there is extra.</p>	<p>Brought a good amount to fill the boxes</p> <p>A bit extra may go to the market or into the boxes, no problem with a few extras</p>	Quantity (Qt), Amount (A), Balance (B)	Produce Donation
N1	<p>well because of the cost of food are the boxes are a</p>	Getting extra in the summer was good,	Impact (I)	Produce donation

	<p>little bit smaller right now than they have been. so getting extra in the summer has been good and I'm sure it was appreciated by the people. Because the box is always looked for nice and fresh. And we were always happy to get that extra.</p>	<p>always happy for that extra</p> <p>Always looked nice and fresh</p>		
N1	<p>everything they brought I thought was excellent. I mean, it's hard for you to remember exactly the things that individuals that came from and whether there's anything. were always happy with what we had from them.</p>	<p>Donated produce was excellent</p> <p>Always happy with produce from Tecasy</p>	<p>Quality (QI) Impact (I)</p>	<p>Produce donation</p>
N2	<p>I thought it was great um the fact that they bagged it um into like individual bags was. So it was really great that they brought stuff that we could easily divide. either because it was pre-bagged or we were putting one of something like a larger squash or like a zucchini or cabbage or cauliflower or whatever we knew that would be one of that would go into the small box</p>	<p>Great</p> <p>Bagging was helpful Or large items like cabbage, cauliflower easy to sort into the small boxes</p>	<p>Quality (QI)</p>	<p>Produce</p>
N2	<p>we're at a point now where they just need they're going to just need food that they will recognize I think and what they know what to do with.</p>	<p>People just need food, recognize what they can do with it</p>	<p>Impact (I), Edibility (E)</p>	<p>Produce</p>
N2	<p>but I found it was very helpful because Teasy would give Joelle an idea</p>	<p>Communication of donations, allow recipes to be created</p>	<p>Impact (I), Nutritional (N),</p>	<p>Donation</p>

	of what they were going to put in. so I could design recipes that you know would correspond to what was in the box because if I knew		Editibility (E)	
N2	I found that whatever they brought they they brought quite a bit I mean they did and if we had to maybe thin out a bunch of beets or carrots to make it go farther than um but it does it just really was helpful that they did bring as much as they did because it meant we didn't have to try to figure out oh where are we going to get enough to put in in all the small boxes right	Brought a good amount, helpful that they brought what they did, did not have to figure out what to put in the small boxes	Amount (A), Impact (I)	Produce, Saving
N2	anything that was left over I mean we were able to take to uh like I think you know Amanda was taking to like her lake or she was going to be taking to what we take to a meal program somewhere in town at the end of the day or we knew we'd do up an extra box maybe for another participant that maybe was late getting their order in so even if there is extra food we are very committed that it goes it does not go to waste and it will be distributed to a meal plan or to another Person.	Leftovers used by volunteers, donated to meal program, or made into an extra box	Impact (I)	Donation, Produce

N2	yeah tecasy was was great at putting in things that were you know close to being alike.	Consistent produce given	Quality (Q)	Produce, Donation
N2	well I think you know I think right from the get-go they were pretty well they were pretty organized I was very impressed with the fact that they were here on time in the morning	Well organized and punctual	Balanced (B), Impact (I), Labour (Lpacking	Donation, Future
N2	the quality of the produce was good the quantity was great the fact that it was sort of packaged or bundled was excellent	Quality was good Quantity was great Produce bundles were excellent	Quality (Ql), Quantity (Qt)	Produce
N2	felt the variety was good as I said and I'm not averse of putting Kohlrabi or you know a radish or something	Good variety	Diversity (D), Variety (V)	Produce, Donation
N2	you can't go wrong with potatoes carrots tomatoes um green onions um things I'm trying to think of things that are sort of easy even beets	Standard foods that are easy to eat/cook Consistent, so great	Variety (V), Edibility (E), Quality (Q), Nutritional (N)	Produce
N2	anything that people can contribute either in the way of their labor as a volunteer or a food um the thing about it is the consistency so it's great if somebody came in and said well here			
N2	I realized we also have to be very flexible and and it does hinge on you know the the kindness of Mother	Some flexibility because of nature	Amount (A),	Produce

	Nature cooperating with our delivery days for packing and delivery days			
N3	So if you tell me the produce I will absolutely remember it. But each week was different.	Different produce each week	Variety (V), Diversity (D), Quantity (Qt)	Produce
N3	So I've been working on this in this programme for in seven years and so I I work back and forth between, but I have been a <u>consistent</u> participant for a lot of years. This is our first summer that. I remember any sort of consistent amount of donated product. We get the odd donated product here and there. So this was a bit of a unique. Year, which was very nice. This was the year that it was so, so needed. But yeah, that was.	Consistent amount of donated product, something which they have not gotten before Tecasy	Amount (A), Impact (I)	Produce
N3	So as far as quality goes, I found the quality to be excellent. There were very, very few. Pieces that came to us that we couldn't use for damage or for rotting or whatever the case was.	Excellent produce quality	Quality (Q)	
N3	I myself don't remember a single piece, which is an unusual thing we usually even getting from the stores. We have, you know, a few things that that that we're not usable.	Don't remember any damaged produce. Some sizes were varymg	Quality (Q), Diversity (D)	Produce Donation

	The there was varying sizes.			
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Table 2: Shows counted terms and relevant clustering data.

Consistency	consistent	5
	consistency	1
Nutritional	nutrients	2
	nutritional	1
Fresh food	fresh	2
	great	3
Large variety	variety	2
	amount	7
	little bit different	1
Saving money	range	1
	saving/saves	6
	extra in summer	1
Punctual	on time	2

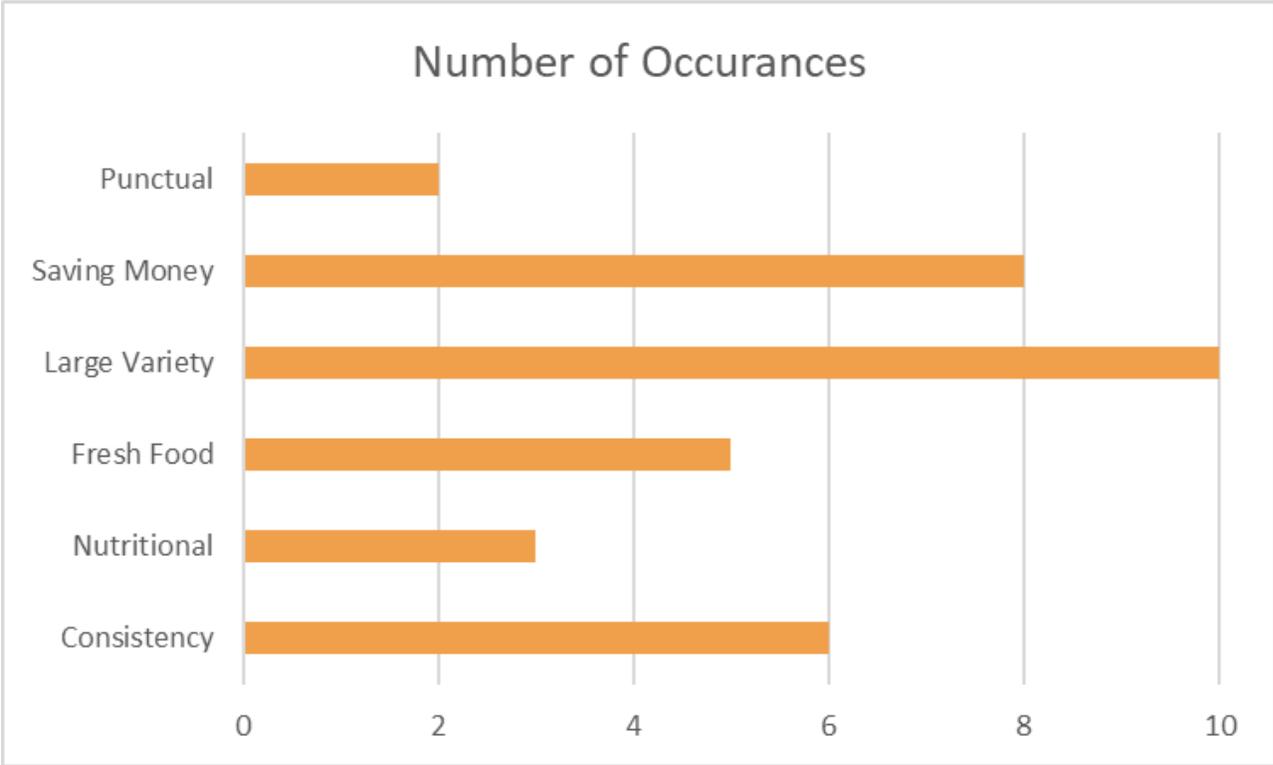


Figure 1: Number of times that chosen themes appeared during interviews with both groups.