



# 25% Local Food Shift Initiative

CSA Economic Model,  
Employment Potential & Farm  
Capacity

Study Completed April 2015

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# Executive Summary

The following research paper was conducted and written by students from Fleming College in the International Business Management Program. It was conducted on behalf of Transition Town Peterborough, a non-profit organization that focuses on building a more self-sustainable community through localizing food, water, energy, etc. Transition Town Peterborough is currently working on Peterborough doing a 25% shift in local food. The goal for this project is to move the local food expenditure from 5% (currently), to 30% over the course of the next ten years. The focus of this study was on local vegetable farmers in order for the results to be comparable to one another. Originally wanting to focus on CSA farms in Peterborough, due to the number the focus was expanded to include local farms in order to get a better understanding on the market.

This research study uses both exploratory and descriptive research. The exploratory research was used to gain a better understanding of growing techniques, and the desire to expand their farm. The descriptive research was used during the data collection phase for information such as, farms acreage, employment, and market sales. Data was collected through person to person interviews, located at a mutually beneficial area.

There are four community supported agriculture farms in Peterborough that offer weekly baskets of vegetables. Two of those CSA farms have 100 customers, one has 28, and the last has 15. Of those four farms participating in the CSA model all have expressed higher revenue over the last couple years. In terms of land the sample of farms chosen showed that 57% owned their land, and 29% of the farmers are renting the land they are producing on. One of the seven farms expressed that they own the land they grow on, and rent extra. Of the land that the farmers are using 100% of the sample interviewed said that they are not growing on all the land they could for various reasons. Of the crops that they farmers are producing 86% of the sample said they have been selling the majority of their crops, where 14% said they weren't.

Of our sample of seven farmers all owners of the farms were also the full time operators. Three of the seven do not look for outside help over the course of the season, and operate their farms only with the owners. Due to these numbers it is assumed they for every 1.53 acres one full time laborer is needed. Over the course of the interviews it was identified that there were three common inputs that were being sourced on a regular basis. These included seeds, compost, and packaging supplies.

When discussing the CSA model with our sample it was expressed that there wasn't a positive trend between the sales created from being a CSA and the selling radius. Interest in becoming a CSA for the farmers in our sample that are not currently one was dependable on the situation of the market, and how they would handle more customers. Non CSA farms of our sample also said that under their current operations the work that is required would not be worth it.

Due to the fact that our goal sample was not reached due to communication issues, and time constraints it is recommended that this paper be expanded. After conducting this research, it is also recommended that it would be useful to study the public's awareness about local food, and their thoughts on changing their method of buying. Creating more ways for the public to reach the farmers may also be beneficial in order to reach the people who are not as aware of it. A concern coming from the sample comes from increasing production if there is no market to support it. Because of this the CSA model can become more appealing due to potential expansion in the local food marketing focusing on households that are not currently aware of the movement.

As a result of the limited CSA farms in Peterborough, there is room for more farmers to become a part of this model. All farmers expressed that buying local was has more potential, and there is space for more to become established. The recommendation that has been suggested is to further complete this study for its potential value, and begin a second to gauge the 'public's desire for to being buying local food.

## THE FLEMING APPLIED AGENCY

March 3<sup>rd</sup>, 2015

Validation Letter from Fleming College

To Whom It May Concern,

This letter is to confirm that the following students are conducting a research study for Transition Town Peterborough. They are students at Fleming College in the post-graduate, International Business Management Program. They are to research and identify areas in the Peterborough area where a community shared Agriculture Economic Model can be integrated to achieve a 25% shift in local food consumption. This is for partial fulfilment of the requirements for their International Business Management Certificate.

As part of the research, the students will be interviewing local farms to better understand the operations which will enable them to appropriately scale the economic model. We would like to ask your cooperation by participating in the interview. Any information you will provide is highly appreciated and we assure you that your input will be confidential and is subject to the ethical standards in doing research.

Team Members (students):

- Michelle Boyer – Project Manager
- Michael Scanlon – Project Team Member
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Thank you for your assistance.



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## Table of Contents

Introduction .....	1
Methodology .....	2
Validity & Reliability.....	3
Limitations.....	3
Results .....	4
1) Current Position the CSA Economic Model .....	4
Increasing Sales .....	5
CSA Futures .....	5
2) Current Capacity of the Farms.....	6
Land Ownership .....	6
Farms That Own Their Land .....	6
Farms That Rent Land.....	7
Total Farm Capacity Break Down .....	7
Selling everything they grow .....	7
Plans for Expansion.....	7
3) Supply Chain – Employment, Sourcing, Selling.....	8
Employment.....	8
Full Time .....	9
Part Time .....	9
Larger Farms.....	10
Inputs .....	10
Market.....	11
Findings.....	12
Potential of the CSA Economic Model .....	12
Current Farms Capacity .....	12
Supply Chain (Employment, Sourcing, Selling) .....	13
Recommendations.....	14
Interview Research Design.....	15
Research Notes .....	17

## Introduction

This research project has been written by students at Sir Sandford Fleming College in the international business management program as a cumulative semester project for international marketing research. We have developed and conducted this research project on behalf of Transition Town Peterborough, in hopes that our project is not only used to facilitate our education, but also present meaningful data an organization can use.

Transition Town Peterborough is a grassroots, non-profit organization that focuses on creating a more resilient community through efforts to localize food, water, energy, culture and wellness. Currently Transition Town is working on their 25% Shift Local Food Peterborough. This project aims to move local food expenditure from 5% to 30% in the next ten years.

In order to aid Transition Town Peterborough with their initiative, we were initially presented with the project "*CSA Economic Model: Community Supported Agriculture*". Under this assignment we were to test if the current CSA model could be scaled up in order to help reach the 25% shift. A CSA model farm is a farm that sells a portion of what it produces at the beginning of the season and then delivers a weekly basket of produce to the buyers every week for the growing season.

For the purpose of our study we focused on vegetable farmers in order to keep similar farms comparable. However, upon learning that there are only 4 registered CSA farms in Peterborough we were required to expand our research to include local farms so we could get a more clear sense of the market and draw any meaningful conclusions.

By expanding our research we subsequently attempted to expand our project to include two other research questions of Transition Town Peterborough; what is the current capacity of farm production and from how many labourers are they using to reach it, as well as what is the potential of current farm expansion for economic benefit?

To determine answers to the research questions we have developed an interview outline that will be administered by us to local farmers. Once we have collected enough data we hope that the research will return valuable information that will answer the proposed questions.

## Methodology

The design of this research study is both exploratory and descriptive. In order to gain insight into farmers growing techniques and their desire to expand their farm it is necessary to conduct exploratory research due to a range of qualitative data that could be collected. This study also collects descriptive research. The data collected about the farms acreage, employment numbers and market sales are quantitative data that is subject to analysis to determine the degree at which variables depend on each other.

To help answer the research questions the data research collected is primary research and is collected through person-to-person interviews. This method is chosen, as the data is not readily available from previous studies. Answers to the questions may also be left up to interpretation by interviewees and it is necessary to facilitate the interview so that the questions are answered in completeness for reliable data.

The process of developing the interview questions, setting up and conducting interviews, and analyzing and interpretation of the results has been done over a 15 week period (or one semester).

The sample consists of local farmers that grow and sell locally in Peterborough. To determine that the sample farms grow and sell locally in the Peterborough area farms were chosen from the Peterborough Farmers Market and CSA online Registry. The parameter set to be a local farmer is that they grow and sell within 50 km of Peterborough.

There were setbacks in contacting our sample. Desired initially was a sample of 13 vegetable farmers to be reflective of the total farmers market vegetable producers. However being in the off-season of production directly approaching our sample farms at the market was reduced to cold calling and emailing. As a result only 7 farms were interviewed.

While we have population data for vegetable growing CSA's, there is only sample data for local farmers. Determining the sample farms was done through probability and non-probability sampling. Specifically selecting the CSA farms creates a non-probability sample, but to try and round out the rest of the sample random choices were taken from the farmers market list.

## Validity & Reliability

To reduce the extent to which answers may vary we attempted to reduce the systematic error. We focused on only vegetable farmers so that the data is comparable based on similar techniques, seasonality of vegetables, and the same foreseeable market. We also increased the validity of the interviews by talking with the primary owners of the farm. The owner is the most knowledgeable about their farm so the data collected is the most reliable.

To create internal validity we ensured to follow the interview methodology. By keeping the interview process the same throughout the interviews it allows for the same parameters to be set up for the interviewees to answer questions in the same type of environment. This included meeting participants in common places or on their farms where they felt most comfortable to focus more on the content of the answers, asking questions in the same order and attempting to keep the number of interviewees constant.

Under this method the results collected were more reliable than if only one member were to conduct the interview as complications could arise between keeping the flow of conversation and recording full answers down accurately.

## Limitations

A major limitation of this research study is time constraints. The process of meeting with clients, developing an interview, scheduling and conducting interviews, analysis and presentation of data was to be completed over a one semester period. 15 weeks was limiting as it only left a portion of weeks for conducting interviews.

As stated previously there was difficulty contacting farmers. As a result our ideal sample was reduced to 7 farms. In order to be able to draw more reliable conclusions a larger sample is needed. A smaller sample may skew the data, and we may not be able to draw as valuable as conclusions. While there are trends amongst the data, any random errors may not cancel themselves out across a smaller sample.

One such error may arise from having outlier farms in the sample that are not equalized out by a significant amount of data. Two farms that are significantly larger in our sample operate outside a different relative range of cost and production workers. Conclusions made for smaller farms can be different for a farm operating on hundreds of acres.

The non-random sampling aspect may create another limitation. Majority of the sample practice community shared agriculture. They therefore conduct sales through another revenue generating channel that the rest of the sample does not. By competing with other growers through a different sales route the revenue ranges and acreage may not be accurately cross-tabulated if the CSA generates substantial sales.

The final limitation is that the local farm sample is derived from the CSA and farmers market registry. It would be worthwhile to know how many local farmers are growing and selling through other means, such as roadside stands or direct to stores. If there is a significant amount doing so they are representative of a local food market and need to be incorporated into the study.

## Results

### 1) Current Position the CSA Economic Model

The total sample of community supported agriculture farms in Peterborough that grow and offer weekly baskets of vegetables is 4. Data was collected specific to the CSA model including selling distance of farms, number of registered customers under the CSA program and the weekly cost of their basket.

Table 1.1 CSA Selling Profiles

CSA Farm	Revenue	Number of Members	Selling Radius To Members (km)	Weekly Basket Cost
Farm 1	Over \$150,000	100	100 - 150	\$40
Farm 2	\$25,000 to \$75,000	28	Under 50	\$30
Farm 3	Over \$150,000	100	100 - 150	\$35
Farm 4	Under \$25,000	15	Under 50	\$36

Two CSA farms have around 100 customers. One CSA farm has 28 customers and the last sample has 15 CSA customers. It is therefore obvious to assume that revenue generated specifically by CSA customers for the farms is higher for farms with more CSA customers.

Revenue as it pertains to total sales (of CSA customers and other selling channels) follows the same trend as the CSA generated revenue. Sample farms one and three have revenues that exceed \$150,000. The farm that has 28 CSA customers has total revenue between \$25,000 and \$75,000. The last farm, which has 15 CSA customers, has total revenue under \$25,000.

When it came to selling radius to CSA customers it ranged from under 50km (customers in Peterborough) to over 100km. Sample farm one and sample farm three have a selling radius of 100-150km from Peterborough. The furthest distance identified is downtown Toronto. In each case one sold specifically their CSA baskets to Toronto buyers, while one farm sold their produce to a CSA co-operative store that operates the same model, but does not attribute to their selling distance for their CSA's. Sample farm 3 has 100 local CSAs.

The remaining 2 farms have selling distances both under 50km, and have identified that their CSA customers are only local buyers.

The revenue that is generated is affected by the amount of CSA customers. The revenue also seems to be affected by the selling radius of the farms.

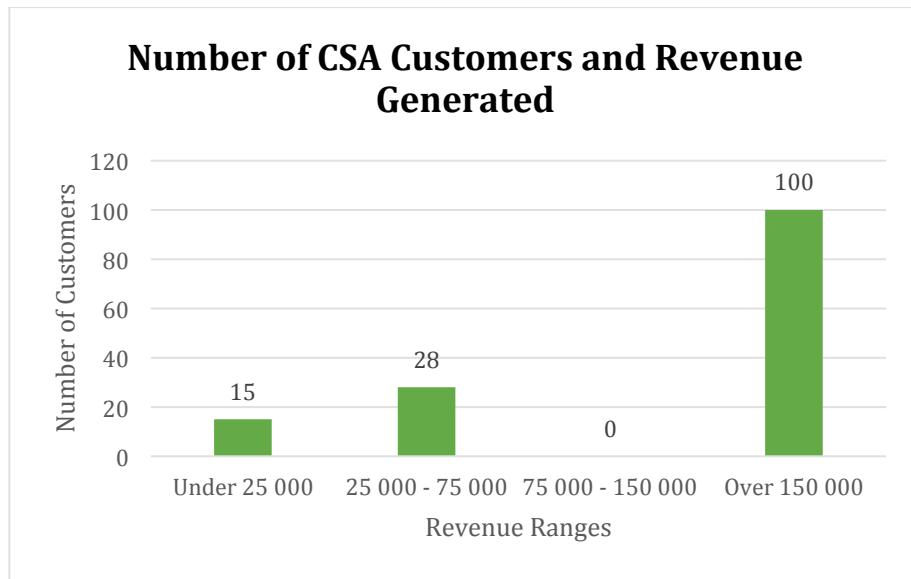


Figure 1.1 - Revenue of CSA Based On Membership

Farms that sold over \$150,000 have reached out to markets that are not local to the area. While the two farms that are local to the area and remain only selling as CSA locally are in the \$25,000 and \$25,000 to \$75,000 revenue bracket.

#### **Increasing Sales**

All four CSA farms have reported higher revenue in last couple years. Two farms changed or increased operations with greenhouses, which have helped them to expand their season and offer more variety. They have also implemented cold storage, creating an effective storage method for root vegetables to be preserved and not wasted.

All four CSA farms have increased in the number of CSA customers they have services in the last couple of years.

#### **CSA Futures**

Three of the four CSA farms have identified that they would like to gain more CSA customers. Two of the farms specifically identified that they wish to target 50 more customers each. The other farm welcomes more CSA customers but does not have a desired target number.

CSA farm four has decided to discontinue being a CSA operation. There were challenges that were faced on the customers end such as customers not understanding the seasonality of vegetables and baskets depending on the yield from the ground.

## 2) Current Capacity of the Farms

### Land Ownership

When looking at the current capacity of farms, based on the data, it is useful to distinguish between farms that rent their land and farms that grow on their own land.

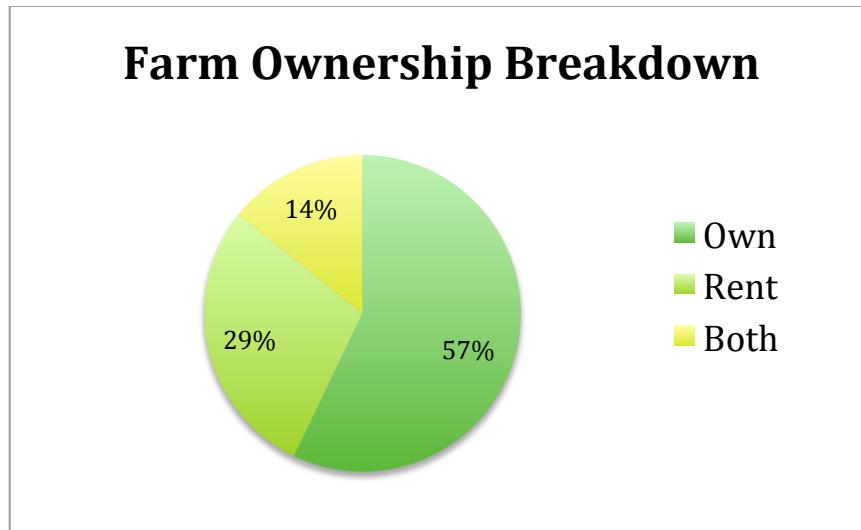


Figure 1.2- Farm Ownership Breakdown

The sample has revealed that the majority of farmers, 57%, owned their land while 29% of farmers rent the land they grow on. In only one case did a farm own its own land and rent extra land.

### Farms That Own Their Land

Table 1.3 – Capacity of Acreage Used By Owned Farms

Farms That Own The Property	Total Acres	Total Acres Farmed	Percentage of Property Used for vegetables	Growing Area Significantly Reduced From Other Land Uses
Farm 1	72	5	6.94%	No
Farm 2	200	200	100.00%	No
Farm 5	85	8	9.41%	Yes
Farm 6	250	200	80.00%	Yes
Farm 7	150	2	1.33%	No

Of the five farms that own land, two are using almost full capacity of their land with respect to vegetable growing. Sample farm 2 and sample farm 6 are using almost 100% and 80% of their acreage respectively.

Sample farm 1, 5 and 7 are using less than ten percent of total acreage. Two of these farms have arable land that can be used to expand upon immediately, while one is limited to increasing production due to land covered in wetland or forest.

Three of five farms therefore have the ability to allocate land immediately for expansion. Two of five are unable to allocate any significant land to producing more without looking to acquire more land, one of which has already done so.

### Farms That Rent Land

Two of the three farms that rent land have identified that they only rent a portion of land from a larger lot and are both are smaller farms (grow on less than five acres). Both of these farms have the option to expand further on adjacent acreage when ready. The remaining farm, sample farm 2, rents the total acreage of a substantial lot in addition to the land it owns.

### Total Farm Capacity Break Down

Table 1.4 – Farm Capacity and Expansion For All Farms

Sample	Property		Farming All Current Arable Acreage?		Plans For Expansion	Plan to Produce More on Currently Farmed Acreage
	Own	Rent				
Farm 1	X		No	Yes	No	No
Farm 2	X	X	No	Yes	Yes	No
Farm 3		X	No	Yes	Yes	No
Farm 4		X	No	Yes	Yes	Yes
Farm 5	X		No	Yes	No	Yes
Farm 6	X		No	Yes	No	No
Farm 7	X		No	No	Yes	No

100% of the sample has identified they are not growing on all the possible acreage they own. Two farms (29%) will be affected if deciding to expand growing land a significant amount. These two farms, sample farm 5 and sample farm 6, are limited by wetland and/or forest that cover the property.

### Selling everything they grow

86% of farms have identified that they sell the majority of crops they grow. 14% of farms do not sell the majority. The one farm that does not sell majority has identified that it is still becoming established as a newcomer to the market.

### Plans for Expansion

Four of seven farms have plans for growing more in the future, of which, three are immediate plans. The remaining farm wants to grow more efficiently on the land currently rented before beginning planting on new land.

Three farms have decided that they would not like to expand drastically or at all in the vegetable market. Two of these farms are limited to expansion on their acreage from forest or wetland. However one of these farms had decided they would also try growing more efficiently on land already owned.

The remaining farm that would not like to expand in vegetable production, but has the land to do so, has determined it would like to grow peripherally with processing what they grow into goods for sale.

### 3) Supply Chain – Employment, Sourcing, Selling

#### Employment

Table 1.5 – Farm Employment

Farm	Total Acres	Acres For Vegetables	Owners		Full Time	Seasonal Employees	
			Family	Co-Own		Local	Migrant
Farm 1	72	5	2			3	
Farm 2	286	200	3		1	30	12
Farm 3	55	0.5	1				
Farm 4	40	2		2			
Farm 5	85	8	2		1	3	3
Farm 6	250	200	4			5	
Farm 7	150	2	2				

All owners of the farms are also the full time operators who run the farm. In the case of the larger farms two and six, there were three and four owners respectively. For the remaining farms there were only one to two owners.

Three of the seven farms do no look for outside, and operate only with the owners. These are sample farms three, four, and seven.

There are only two farms that source outside, full time help. Sample farm two and sample farm 5 both hired one full time year round worker.

When it came to part time employees, four farms employed part time seasonal help. Farm one and farm 5 both hire three summer interns to help with production and selling. Farm five hires an additional 3 migrant workers, and during growing season 4 of the seasonal workers are employed as full time workers. These interns also have the option for room and board on the farm. Farm 2 hires 42 seasonal pickers. Farm 6 hires 5 seasonal employees.

### Full Time

In the event that local farms desire to increase production it will be useful to know the labour person that is required per acre. With this number known, if other farms are required to be created in order to increase production needs we will also be able to determine employment opportunities. The sample is slightly skewed as 5/7 of the farms are growing less than 10 acres, while the other two are outliers and produce 200.

Under the assumption that larger farms are outside of the relative range of accurate data, they will skew the results of other farms based on their size. For this reason they are omitted for a smaller farm calculation. Of the five farms that grow less than 10 acres a mean number per acreage can be calculated:

Table 1.6 – Average Full Time Labour Required Per Acre

Farm	Acres	Full Time & Owners	Acres Per Person
Farm 1	5	2	2.50
Farm 3	0.5	1	0.50
Farm 4	2	2	1.00
Farm 5	8	6	1.33
Farm 7	2	2	1.00
Average Acres Per Person:			1.27

This means that it is reasonable to assume that per every 1.27 acres a farm grows on, they will require one full time labourer. This number will only be reliable for smaller farms as they are within the relative range of small farm acreage. Once a farm reaches a threshold of hired labour, they may result in automation.

### Part Time

Since of the farms however do not work alone and hire for part time summer pickers it is valuable to know the average acre required for part time opportunities.

Table 1.7 – Average Part Time Labour Required Per Acre

Farm	Acres	Seasonal Part Time	Acres Per Person
Farm 1	5	3	1.67
Farm 3	0.5	0	0.00
Farm 4	2	0	0.00
Farm 5	8	2	4.00
Farm 7	2	0	0.00
Average Acres Per Person:			1.13

Total Acres Supporting Full Time and Owners and additional Seasonal Help is 1.13 acres per worker if the farm decides to participate in hiring.

### Larger Farms

For sample farm 2 and sample farm 6, they are outside the range of smaller farms, where number of owners/full time does not hold true at the 1.27 acres per person. Therefore this variable is not to be taken into consideration at this scale of farm. However seasonal labour can be a factor.

As the results conclude sample farm 2 employs part time and seasonal workers in total of 42. The other farm, which runs at almost the same land acreage, runs the farm with the help of 5 local seasonal workers. No conclusions can therefore be strictly determined based off of statistical analysis.

### Inputs

Farmers identified three common inputs that they source most often being seeds, compost, and packaging supplies. Seed sourcing occurs on both a local and non-local level.

Local	Non Local
Peterborough's Seedy	
Sunday	St. Catherine's
Millbrook	Hamilton
Stokes - Peterborough	United States
Seed Saving & Trading	

Most farmers tried to save seeds and source local when possible. Seeds were found outside of Peterborough when a different variety or type of seed was needed.

In some cases farms that produce vegetable crop also have pasture for animals on site. Compost is used from their own farms. For farms that do not have access to pasture they limited to where they can source their compost.

In all cases of compost sourcing none were local. Three farms found that they were sourcing from Kingston, Ottawa, or St. Catherines. This may pose a future problem as accessibility to compost is only being sourced outside Peterborough. In the event that farms decide to get organic farming certification some of this access to compost may be eliminate.

Packaging supplies, such as collecting bins, selling baskets and elastics have all been sourced locally from Co-ops, TSC, Canadian Tire and Ernst & Sons.

## Market

Table 1.8 – Breakdown of Selling Avenues Of Farms

Farm	Farmers Markets	CSA Program	Restaurants	Grocery & Store	Wholesale Co-operatives	At The Farm
Farm 1	3	✓	✓		✓	
Farm 2	4			✓	✓	✓
Farm 3	1	✓	✓		✓	
Farm 4	2	✓		✓		
Farm 5	1	✓	✓	✓	✓	
Farm 6	2			✓	✓	
Farm 7	2			✓		✓

Farms sell their produce through multiple avenues. All farms are active in at least one farmers market. Four farms operate under a CSA model; three of which sell to restaurants. Five farms sell to grocery stores and or wholesale packagers. Only two farms sell produce from their farms.

Farmers markets that farmers are active in include:

### **Farmers Markets By Most Popularly Sold To By Sample**

- Peterborough
- Lakefield
- Haliburton
- Hastings
- Norwood
- Minden

The most active farmers market participated in is the Peterborough farmers market, which 5 of 7 farms sell at, some farms selling at either one or both days of the Peterborough market. The second most popular market among the sample size is Lakefield. All other farmers markets are active with only one of the sample size.

Three farms sell to restaurants. Restaurants include the Food Forest, Riverhouse, and Elements. Stores or grocery stores that take local produce include:

### **Local Stores Buying Local From The Sample**

- No Frills
- Foodland
- Jo Anne's Place Peterborough
- Electric City Bakery
- Pastry Peddler

The most second most popular channel to sell produce is through co-operatives and wholesale packagers. The most popular co-operative is By The Bushel, in Peterborough, while other wholesaler packagers include Mama Earth in Toronto, and a potato wholesaler.

In only two cases farmers had direct sales at the farm where customer come to buy produce.

## Findings

### Potential of the CSA Economic Model

There is not a positive trend between selling radius and CSA sales. 3 farm's CSA customers are strictly local ranging from 15 to 100 customers. This indicates that finding CSA customers could be feasible by staying local. The one farm that sells both locally and to Toronto took advantage of an opportunity in Toronto, but has not said they identify a struggle to finding CSA customers locally.

The information that all their sales and CSA customers have been increasing, and are mostly desired to increase, may hint that market saturation is not reached when looking for CSA customers.

Only in one case was the CSA route not the right avenue for selling. However in an interview with a farmer that is not established as a CSA, they expressed interest in becoming a CSA if the market is right and once they can handle a larger amount of customers.

In a separate study with a farmer, when asked if they would consider becoming a CSA they said that they had considered it. However under their current operations, the work that would have to be put into setting up that program as well would not be worth it.

In these two instances the business model was not the right choice for their farm. With positive outlook from other current CSA farms and potential farm, there is opportunity for the economic model to help with the shift.

### Current Farms Capacity

The current status of farm capacity is that majority are not utilizing all of their arable land. In only one case the farmer who owns the land is developing onto rented land.

In general farmers that rent land have the ability to easily expand onto more acreage when ready as they rent a portion of larger land. There is therefore not a threshold level that is immediately a problem for them.

As for owners who own land there a divide between reaching capacity and not reaching capacity. Three farms that are fully planted on arable land but not on the total property face issues with swampland, forest, pasture and other non-farmable land. The other two owners do not face this immediate problem.

While all farms don't sell everything they grow, it does not deter the farm from farming at capacity. All the farms have said that there are benefits to leaving crop in the ground for soil recovery, three farms of which specifically practice the cover crop technique.

Expansion of the farm may not be determined only by capacity. There are some barriers that farms would face in growing larger. A lot of concern is if there is a market for it. Some farms that applied for a stand at the Peterborough's Farmers Market did not get it and they are also sceptical as to how much more local farming can be sustained through this avenue.

In some cases farms found that they would require significant capital if they decided to expand with greenhouses, more storage methods including cold storage methods, or with purchasing more land.

In all cases farmers have a very sustainable view of growing and are not focused on growing big fast. In a few cases farmers have identified that they don't need to keep expanding past a certain point if balancing the natural aspect of what they love with making a reasonable income. In which case they support the expansion idea and even welcome new farms to get on board with local farming as more small farms is much more sustainable.

### Supply Chain (Employment, Sourcing, Selling)

As assumed, the more acreage that a farm has the more outside labour that must be sourced. It holds true for farms 2 acres and smaller, where not help is needed. Upon getting to 5 and 8 acres, there is need for people to help with every day operations.

This is a reasonable conclusion as they are non-automated farms. The farms plant and pick by hand and therefore need labour as dependent on land.

As the two outlier farms that grow 200 acres or more, there is a large gap between 5 and 42 seasonal workers. The reason for such discrepancy is that one farm plants and picks based on the same method as the smaller farms, and therefore require a large workforce. The other farm however is more automated based on their crop. While some vegetables are harvested using machine there is still need for some picking labour for the rest of the farm.

When it comes to selling the most revenue is generated at farmers markets, and for some farmers that have chosen to do so, the CSA program. The other four methods, selling to stores, restaurants, wholesalers and packagers and right off the farm do not have a significant effect on revenue.

There are barriers to selling in these avenues. By selling these routes farmers must sell at a reduced price and cut their profit as the businesses buying has to also be able to make a profit.

There is also the barrier of quantity. Restaurants and grocery stores do not buy a significant quantity. Restaurants source only a very small quantity from farmers directly. When it comes to grocery stores major retailers such as Sobey's, Superstore, Metro, and the Independent don't purchase produce locally and therefore it comes to smaller stores to buy, which don't do so in large quantities.

## Recommendations

It is recommended that emphasis be taken to expand this research paper beyond the sample. As the capacity determination and labour opportunities that exist from our study may be skewed by such a small sample, the reliability of the numbers is lessened.

With the limited CSA farms in the area it would also be worthwhile to develop a second research paper to gauge the public's willingness and knowledge about local food buying and if they would be open to switching their method of buying.

Based on the findings the CSA model could be a viable route for selling in Peterborough. Through the use of farmers markets there is a limited avenue for farmers to sell locally as they only reach consumers that already know about local food.

There is scepticism from farmers about increasing production when there is not a larger market to sell to. For this reason a CSA model is appealing because farmers could potentially expand the local food market by targeting households that are not already aware of the local food movement and would be willing to purchase in this way.

There are only four CSA farms in the Peterborough area for vegetable farming so there is room for more farmers to take on this model if they wish to do so. No farms think that buying local is at its maximum, as farms desire to gain more CSA members. Since existing farms that are not CSA farms do not want to expand, there is a market for new CSA model farms to become established.

Depending on the demand it would be wise to follow some of the smaller farms methods of renting land. By doing this they can develop at a reasonable rate on small acreage and then choose to expand. By starting in this way there will be less capital risk for farmers and could increase desirability to establish farms.

Once both studies have been taken further, a new study to gauge the desire of public purchasing local and this study to look at local labour needed on farms, a reliable standard for number of employees can be used to see what economic benefits new farms could create for employment.

# 25% Local Food Shift Initiative

## Interview Research Questions

The following questions will help us to understand the contribution of your farm to the local community, and test the feasibility of growing the local food production for Transition Town Peterborough's initiative for more local consumption.

### **About The Farm**

1. How many acres do you farm?
2. What type of crops do you grow?
3. Do you have any farming certifications? (Ex. Organic, Certified Organic)
4. Are you farming all of your current land? Could you produce more on your current acreage?
5. How do you forecast how much you should grow in a season? Do you end up selling everything you grow?
6. Do you rent or own the property you grow on? Could you rent more?
7. What types of storage or growing techniques do you have for the winter season?

### **Livelihoods Supported By The Farm**

1. Who do you enlist to help run your farm? How many?
  - a. Family
  - b. Year Round Employees
  - c. Seasonal Employees
  - d. Other
2. At what point would you/do you look for outside help?
3. If you decided to expand your farm, how much more labour do you think you would need?
4. Do you rely on any businesses that your farm buys from for supplies, fertilizers etc.? If so which businesses?

### **Customers of The Farm**

1. What is the cost of your produce?
2. Who are your customers?
3. How are you reaching them?
  - a. CSA Customers
  - b. Farmers Market
  - c. Ship outside the Kawartha Region
  - d. Restaurants
  - e. Grocery Stores
  - f. Other, please elaborate:
4. What is your selling radius relative to your farm?
  - a. Under 50 km
  - b. Between 50 and 100 km
  - c. Between 100 and 150 km
  - d. Over 150 km

5. How much revenue would you estimate you make each year?
  - a. Under \$25000
  - b. \$25000 - \$75000
  - c. \$75000 - \$150000
  - d. Over \$150000
6. Would you say sales have been increasing in the past few years? Why?

#### **Your Opinion**

1. How do you view the 25% shift idea?
2. What are your thoughts on expanding your farm? Do you want to?
3. What do you identify as barriers to expanding your farm? (ex. Restrictions from Government boards, other farms etc.)
4. Would you consider becoming a CSA farm?