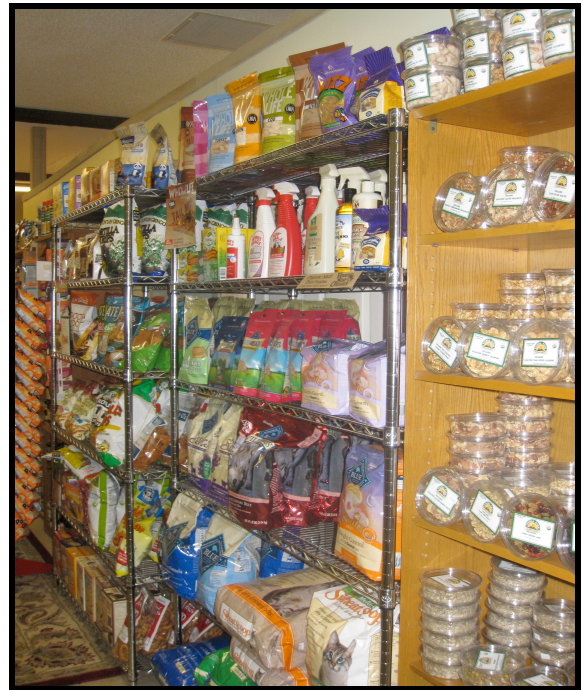


## **Developing New Markets for Farmers:**

### **The Berkshire Community Development Corporation Plan for a Commercial Kitchen and Value-Added Processing Facility**



Williams College  
Environmental Planning (Envi 302)  
Professor: Sarah Gardner  
Client: Denis E. Guyer  
December 14, 2010  
Elizabeth Dorr, Lauren McDonald, and Thuy Phung

## TABLE OF CONTENTS

### **Part I: Project Overview and Goals**

Project Overview.....	1
Goals.....	3

### **Part II: Background**

Berkshire County Agricultural Community Profile.....	4
What is a CDC? .....	8
Sample CDC Models.....	8
Franklin County, Massachusetts.....	9
Battenkill Kitchen Salem, New York .....	11
Dartmouth Grange Kitchen Dartmouth, Massachusetts .....	12
Lake County, Montana.....	13

### **Part III: Relevant Law and Policy**

Permitting and Processing Regulations.....	14
Healthy School Lunch Programs.....	16

### **Part IV: Technical and Economic Concerns**

Technical Aspects of Freezing.....	18
Estimated Equipment Costs.....	22

### **Part V: Results**.....24

### **Part VI: Recommendations**.....29

### **Appendices**

I: Farm Survey Results.....	34
II: Farm Cover Letter.....	37
III: Estimated Equipment Cost Table.....	38



## **PART I: PROJECT OVERVIEW AND GOALS**

### **Project Overview**

Denis E. Guyer, former state representative for Massachusetts, is in the process of creating a non-profit Community Development Corporation (CDC) in Dalton, Massachusetts. Within the next two years, he plans to convert the Crane Stationery Factory on Flansburg Avenue into a multipurpose community center to include residential units, retail, as well as a commercial kitchen and value-added processing facility. The main drive behind this new Community Development Corporation is to stimulate the local food economy by helping local growers connect with consumers through new markets for value-added agricultural goods. Mr. Guyer has spoken with various farmers in Berkshire County who expressed interest in producing value-added goods from their raw products, such as salsa from tomatoes, ice cream from milk, frozen vegetables to be sold throughout the year, etcetera. The Dalton location would situate this facility in the middle of Berkshire County, making it more conveniently available to both North and South County farmers. Our project will help him determine how best to use the space in the facility in order to meet the needs of Berkshire county farmers, restaurateurs, and the community.

This commercial kitchen and value-added facility would eliminate some of the upfront costs associated with equipment, space, and labor needed to produce value-added, processed goods on an individual farm. The connection between farmers as well as opportunities for selling these goods through the CDC's retail facility could open up new markets and increase profits for growers, especially over a longer season, past harvest. In the words of Kim McMann of Target:Hunger Northern Berkshire, a local organization which works to solve hunger and food

insecurity issues in Berkshire County, having this facility is “a huge step for farmers [because] they can sell their goods all year round”.<sup>1</sup>

The *commercial kitchen* would be a space with multiple work stations supplied with state-of-the-art kitchen appliances. These units could be rented by the hour by farmers (and other entrepreneurs) in order to process their crops themselves, on a small scale. Mr. Guyer hopes this facility will provide many “agripreneurs” a viable opportunity to process products that perhaps they did not have the equipment or certified commercial space to produce before.<sup>2</sup>

On a larger scale, the *value-added processing facility* in the lower levels of the building would provide the space, equipment, and labor needed to turn raw materials into more profitable end products. Growers could deliver a portion of their yield along with a recipe to the facility, where employees would process and package these products for market. These value-added goods could then be distributed or sold back on the farm from which they originated. As a result, the value-added processing facility would create new jobs for the community. The improved interactions between farmers, consumers, and restaurants would also provide a greater network for marketing, opportunities for profit, as well as education and awareness of the value of locally produced food.

Our role as consultants was to survey the local community of farmers and restaurateurs in order to gauge both the interest in the CDC, as well as what types of equipment would be most popular and beneficial. While the anecdotal evidence is telling, our goal was to quantify this demand and make recommendations for the best use of such a facility. Our project is largely survey-based, getting out into the community and speaking with people on both the production and consumption ends of the market. By working in conjunction with Berkshire Grown, the

---

<sup>1</sup> Dupont, Nichole. “Guyer Sees Room for Agriculture in Crane Mill.” *iBerkshires*. 24 August 2010. 3 Nov 2010. <http://www.iberkshires.com/story/35917/Guyer-Sees-Room-for-Agriculture-in-Crane-Mill.html>.

<sup>2</sup> Ibid.

Farm Bureau, and the USDA Berkshire County Farm Service Agency, we hope, through our research, to effectively assess the needs of the local community and improve the local food economy.

### **Project Goals**

1. Identify farmers within the region who have a desire to process crops/products into value added products. Also, identify farmers within the region who may change what they grow to take advantage of such a facility. Through a detailed survey covering topics from general interest in the CDC, to transportation, to equipment needs, we will gain a better understanding of how best to develop the commercial kitchen and value-added facility.
2. Identify restaurants in the area that would also like to outsource production of their own value-added products or potentially partner with local farmers through the CDC. This would open up new markets for locally grown crops as well as the value-added products coming directly from the facility. At the very least, the CDC could serve as a connector between these parties, eliminating some of the marketing stress as well as stimulating the local food economy.
3. Finally, combine all this data, along with information about similar projects already underway in the North East, into a report with specific recommendations for what equipment should be purchased for the commercial kitchen and value-added processing facility.

We sent surveys in conjunction with the Environmental Planning Class team working on the Foodshed Analysis of Berkshire County to a mailing list of the majority of farms in the county. The comprehensive survey along with a cover letter explained the proposed project and its potential merits. A different survey was sent out to a few local restaurants to gauge their

interest in partnering with local farmers, increasing the amount of local ingredients they use, and even branding and marketing their own processed goods. In this project we focused on farmers and restaurants, but once the CDC is underway, it may also be useful to survey the community to find members who wish to start small businesses and could benefit from using either the commercial kitchen or value-added processing facility.

## **PART II: BACKGROUND**

### **Berkshire County Agricultural Community Profile**

Developing this proposed CDC and associated facility can only be successful if put in the unique context of Berkshire County. Before we administered our surveys and interviews, it was imperative that we understood who will be using this facility. Mr. Guyer has already done a lot of informal research, which informed his creation of this project in the first place. He understands the current struggles of local farmers, and the overall aim of his project is to alleviate some of that burden and improve the local food and farm economy here in Berkshire County.

According to the 2007 USDA Massachusetts Agricultural Census, there are 522 farms on 66,352 acres in Berkshire County.<sup>3</sup> The average farm is only 127 acres, which is considered a small farm.<sup>4</sup> Not only are farms small in physical size, in terms of revenue, the majority of farms in Berkshire County make under \$10,000 a year.<sup>5</sup> Even though the number of farms has increased by 100 since 2003, the market value of products sold has decreased from \$54,178 in

---

<sup>3</sup> Massachusetts Agricultural Census. 2007. <http://www.mass.gov/agr/facts/docs/western-ma.pdf>.

<sup>4</sup> Massachusetts Agricultural Census. 2007.

[http://www.agcensus.usda.gov/Publications/2007/Online\\_Highlights/County\\_Profiles/Massachusetts/cp25003.pdf](http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/County_Profiles/Massachusetts/cp25003.pdf).

<sup>5</sup> Ibid.



2003 to \$29, 465 in 2007<sup>6</sup>. We also know, anecdotally, that most of the farms in Berkshire County are small family-operated farms. Due to the hilly and forested terrain of our region, there is limited physical land suitable for farming. With little space to spread out, large, expansive commercial farms are just not feasible currently.

Also, the New England tradition of small family farms remains a central aspect to rural life in Massachusetts. Perhaps this is why Berkshire County is also well known for its agriculture and especially the success of the local food movement here. In places like Williamstown, residents are likely to know their neighbors and know the farmers in town too. They are more apt to buy from people they know, keeping these small operations afloat, to some extent, and also perpetuating this almost quaint picture of small farms in Berkshire County.

This, in theory, makes buying local much easier than in a big city, and the values of the local food movement are already inherent in the culture of Berkshire County as a whole. The Berkshire region had been nationally recognized for its flourishing local food scene. The local food movement actually has roots in western Massachusetts: Berkshire County hosted the first US agricultural fair in the early 1800s and is also home to one of the two first CSA farms in the US.<sup>7</sup> While Berkshire County is clearly ahead of other parts of the state and the country, farmers here still lack government support and funding, and a reliable infrastructure for marketing their products. In the words of Left Field Farm's Maureen Sullivan, "As someone who's been doing this a long time, prices are not reflective of the work we put in because national policies have been put in place over the years that artificially lower the price of food and do not help the small farmer."<sup>8</sup> Also, the healthy, sustainably produced food is currently not affordable for much of the

---

<sup>6</sup> Massachusetts Agricultural Census. 2007.

[http://www.agcensus.usda.gov/Publications/2007/Online\\_Highlights/County\\_Profiles/Massachusetts/cp25003.pdf](http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/County_Profiles/Massachusetts/cp25003.pdf).

<sup>7</sup> "In the Berkshires, Dinner's Not Far Away." Mark Vanhoenacker. 18 Aug 2010. <http://markvr.com/wp>.

<sup>8</sup> Personal conversation with Maureen Sullivan, 12/6/2010.

county. Factors such as increased costs of production and thus prices make a lot of the goods produced locally more expensive. Why pay \$10 for a block of goat cheese from your neighbor, when goat cheese is only \$8 at the nearby Stop-n-Shop? These forces on both the production and consumption end of the process impede the success of the local food economy here, and cause local farmers to struggle.

The CDC proposed by Mr. Guyer aims at correcting this market failure by creating more affordable opportunities for farmers to make a profit by facilitating greater interaction between growers and consumers. Both the commercial kitchen and value-added processing facility eliminate some of the costs associated with space, equipment, storage, and labor. By opening up new markets for value-added goods, not just the raw materials from the farm, farmers have the advantage of selling these products at a higher price and making more profits. By helping farmers in this way, the CDC is also helping the local food economy, making eating local more affordable and at the very least spreading the word.

The small farm statistic is by the far the most useful and applicable to our study of Berkshire County farms, however there is more information available about the general demographics of the farming population in the region. There are a wide range of products grown, such as hay, vegetables, beef, dairy. However, other demographic diversity, especially racial diversity, is markedly absent from the population of Berkshire County farmers.

About 36% of all farms in Berkshire County make under \$1,000 a year.<sup>9</sup> This statistic coupled with the fact that about half of all primary farm operators do not list the farm as their main source of employment, indicates that these families are not relying on the farm for their

---

<sup>9</sup> Massachusetts Agricultural Census. 2007.  
[http://www.agcensus.usda.gov/Publications/2007/Online\\_Highlights/County\\_Profiles/Massachusetts/cp25003.pdf](http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/County_Profiles/Massachusetts/cp25003.pdf).

income.<sup>10</sup> They might be interested in the commercial kitchen but most likely not the value-added processing facility. The CDC facility is thus geared more towards the other two-thirds of the farmer population in Berkshire County, who do bear more risk and thus need more help.

The further breakdown of the farming population is consistent with the larger demographics of the county as a whole. The vast majority of farmers in Berkshire County are white and male.<sup>11</sup> Although Berkshire County has a larger percentage of female farm operators than compared to the state of Massachusetts at large, the men still outweigh the women two to one. Also, many of the female operators counted could be wives of male farmers already counted in the total, not independent female farmers. In terms of race and ethnicity, there was no data in the 2007 census for any minority except for people of Latino decent. There were only 8 Latino farmers compared to the 827 white farm operators, and one person of mixed race.<sup>12</sup> These results were to be expected coming from a fairly homogenous region. A more diverse farmer population would be beneficial not only in and of itself, but also because there is a growing demand for more ethnic foods, especially in Boston and other urban centers. It is important to have a farmer population that understands this new demand. For example, many farmers in the Pioneer Valley have switched from growing cucumbers to growing collard greens, which are marketed to the large Haitian immigrant population in Boston.<sup>13</sup>

In general it seems that farmers have either been farming for decades or have started more recently, with the average age of a Berkshire County farmer being 58.<sup>14</sup> There might be differences between the old-timers who are more set in their ways compared to the younger

---

<sup>10</sup> Massachusetts Agricultural Census. 2007.

[http://www.agcensus.usda.gov/Publications/2007/Online\\_Highlights/County\\_Profiles/Massachusetts/cp25003.pdf](http://www.agcensus.usda.gov/Publications/2007/Online_Highlights/County_Profiles/Massachusetts/cp25003.pdf).

<sup>11</sup> Ibid.

<sup>12</sup> Ibid.

<sup>13</sup> Personal conversation with Denis Guyer. Dec 9, 2010.

<sup>14</sup> "2007 Census of Agriculture: County Profile- Berkshire County- Massachusetts." United States Department of Agriculture. 2 Nov 2010.

farmers who are just beginning and are still figuring out the best way to grow and market their products. With the majority of farmers being near retirement age, an opportunity like the CDC is especially important. Once these farmers retire, it will be much easier to sell the farm if it is doing well, and the CDC offers new avenues for increased profits to help currently struggling farms become economically viable once again, at such a crucial time.

This lack of diversity, however, does not discount the extreme diversity of crops being grown in Berkshire County that can provide a multitude of new markets for various value-added agricultural goods. In addition, the demographics of race and gender, while interesting, probably did not impact our research extensively, as we were more focused on what is being produced, what could be produced, and how the CDC could help farmers in the long run.

### **What is a CDC?**

Community Development Corporations (CDC) are non-profit organizations which provide facilities, resources, affordable housing, community infrastructure, and educational opportunities for members of the community in order to stimulate local economies, especially through creating opportunities for new small business projects. They can “transform the lives of individuals and strengthen community prosperity” according to the Montana CDC.<sup>15</sup> Many offer business consulting and training workshops as well. The Berkshire CDC in Dalton will focus mostly on helping local farmers and food producers, with some affordable housing units upstairs.

### **Sample CDC Models**

Some examples of commercial kitchens and value-added food processing facilities similar to Mr. Guyer’s are the Franklin County CDC in Greenfield, Massachusetts, Battenkill

---

<sup>15</sup> “Our Mission.” Montana Community Development Corporation. 2010. 3 Nov 2010. [http://www.mtcdc.org/index.php?option=com\\_content&view=article&id=44&Itemid=57](http://www.mtcdc.org/index.php?option=com_content&view=article&id=44&Itemid=57).



Kitchen in Salem, New York, Dartmouth Grange Shared-Use Kitchen in Dartmouth, Massachusetts, and the Lake County CDC in Ronan, Montana. The three first examples are taken from the Northeast Center for Food Entrepreneurship (NECFE) list of Small Co-packers and Commercial Kitchens.<sup>16</sup> These are ones that are most comparable to the Dalton facility. We choose the Montana facility because it is one of the few CDCs that have a value-added food processing facility.

### ***Franklin County CDC***



17

The Franklin County CDC is a non-profit organization that aims to help current and future local business owners build their capacity and make sound business decisions. In addition to business development education and business lending, they also provide commercial kitchen space for value added food production through the Western Massachusetts Food Processing Center.<sup>18</sup> Mr. Guyer has been working closely with the Franklin County CDC and the Hilltown CDC (which provides affordable housing but no food service) to start his project in Dalton.<sup>19</sup>

The Western Massachusetts Food Processing Center (often known as the Greenfield facility) has a fully equipped production facility but also offers services to help entrepreneurs

---

<sup>16</sup> Simca Horwitz. "Plain Language Guide to Starting a Value Added Food Business". [nesfp.nutrition.tufts.edu/downloads/guides/PL\\_ValueAddedGuide.pdf](http://nesfp.nutrition.tufts.edu/downloads/guides/PL_ValueAddedGuide.pdf).

<sup>17</sup> "The Franklin County community development corporations Home Page." 4 Nov 2010. <http://www.fccdc.org/index.html>.

<sup>18</sup> Ibid.

<sup>19</sup> Ibid.

launch or expand their businesses. The Food Center provides assistance with business planning, recipe development, production scale-up, and referrals to labs for product testing on preparation for license inspections. Once the license is obtained, they assist with production, marketing support, and networking with distribution channels.

The Greenfield facility supports bottled and shelf-stable prepared foods, acidified foods, fresh-pack or frozen foods, dry mix, and bakery operations. The equipment in the commercial kitchen includes:

- 100- and 60-gallon steam kettles
- Hot-bottling/filling automation
- Convection and conventional ovens and range
- Large scale baking capacity
- 25-gallon tilting skillet
- Large capacity mixers, choppers, shredders
- Dry, cold and frozen storage
- Vegetable wash and prep areas
- Complete sanitation program and equipment

Membership at the Center costs \$50 per month, and includes access to the facility, technical advising services, and orientation and training. In addition, the Center charges hourly fees for production and fees for storage rental.<sup>20</sup>

Since its opening in 2001, over 170 businesses have used the Greenfield Food Center, and currently there are more than 40 members making close to 100 different products. However, interviews with farmers in Berkshire County reveal some dissatisfaction with the Greenfield facility in terms of its organization, distance, and other issues such as liability. One complaint is that the facility combines the commercial kitchen with co-packing in the same space, and thus is often overbooked, especially during peak seasons. Some farmers say that it is nearly impossible to reserve the kitchen when in need, while others say it is too far for them to transport their goods to Greenfield.

---

<sup>20</sup> “The Western Massachusetts Food Processing Center”. Nov 4 2010. <http://www.fccdc.org/fpcabout.html>.

## *Battenkill Kitchen*



21

The Battenkill Kitchen is the original kitchen of the Old Washington County Courthouse and Jail in Salem, New York. After the County built a new jail in Fort Edward, the building was vacated and transformed into a community center. Extensive cleaning and repair was done to turn the kitchen into a food processing facility. In addition to providing farmers, individuals, businesses, and community organizations with the space and equipment to process their products for individual use, retail sale, or community events, the facility also offers a variety of educational services. These include educational seminars and instruction in the areas of food preparation and processing for local farmers, food producers, and residents, as well as workshops and cooking classes for local school children.



22

<sup>21</sup> Battenkill Kitchen. Dec 7 2010. <http://www.battenkillkitchen.org/index.html>.

The Battenkill facility is an 800 square-foot commercial kitchen with a variety of commercial food processing equipment:

- Six Burner Gas Range
- Convection Oven
- Two Gas Fired Baking Ovens
- 40 gallon Steam Kettle
- Walk-In Cooler - 640 square foot
- High Temperature Dishwasher
- Hand Wash Station
- Rolling stainless steel Food Preparation Tables
- Aluminum Baking Sheets
- Two Bay Sanitizing Sink
- Broiler
- Griddle
- Steamer
- 40 quart Stand Mixer
- Digital Scale
- Storage areas<sup>23</sup>

The Battenkill Kitchen is a great model of a community facility that supports local growers, producers, and small business owners, while educating the community about food in general and about the value of local food.

### ***Dartmouth Grange Kitchen***



24

<sup>22</sup> Battenkill Kitchen. Dec 7 2010. <http://www.battenkillkitchen.org/index.html>.

<sup>23</sup> Ibid.

<sup>24</sup> Dartmouth Grange Kitchen. Dec 7 2010. [http://www.dartmouthgrange.org/services\\_kitchen.html](http://www.dartmouthgrange.org/services_kitchen.html).



The Dartmouth Grange Kitchen aims to help preserve local farms, of which there are over 250 located within a 30 mile radius of the Dartmouth Grange, through increasing the value of farm products and developing specialty food processing businesses.<sup>25</sup> The number of actual farms using the facility is unclear from their website. Users pay a membership fee, hourly fees for production, and fees for storage rental. The facility's equipment includes:

- 6-burner range with flattop and two conventional ovens
- Double-stacked convection ovens
- 40 gallon tilting braising/skillet pan
- 40 gallon tilting steam kettle
- Commercial mixer with 20 and 40 quart attachments
- 2 reach-in freezers
- 2 reach-in refrigerators
- 4 quart commercial food processor
- 40 quart immersion blender
- Automated filling machine for packaging
- Vegetable wash and prep areas

### *Lake County CDC*



26

The Lake County CDC is home to the Mission Mountain Food Processing Center, a statewide resource for food product development in Montana. Similar to the Franklin County program, the Mission Mountain Center has a shared-use commercial kitchen with food

---

<sup>25</sup> Dartmouth Grange Kitchen. Dec 7 2010. [http://www.dartmouthgrange.org/services\\_kitchen.html](http://www.dartmouthgrange.org/services_kitchen.html).

<sup>26</sup> "Mission Mountain Food Processing Center". Nov 4 2010. <http://www.mmfec.com/fpc.html>.

processing facilities, and provides assistance with specialty food product development and marketing as well as related regulatory procedures.<sup>27</sup>

The Mission Mountain Center is of a larger scale than the three commercial kitchens in New England mentioned above and includes a variety of equipment:

- Commercial Kitchen: Stove and Burners, Dishwasher and cleanup area, Convection Oven and Dual Mixer, Twin 40 gal Kettle
- Production Room: Twin 100 gal Steam Jacket Kettles, Automated Bottling Line, Pasteurizer, Automatic Bottler
- Dry Fill room: Dry filler, Ribbon mixer, tea bagger
- Packaging Room: induction sealer, vacuum sealer, ribbon sealer
- Harvest Wash Area
- USDA Meat Room: High volume equipment, Meat grinder, Drying racks, Vacuum Tumbler
- Dehydrator: Two walk in dehydrator walker
- Cooler/ Freezers: 1300 ft. of cooler/ freezer space
- Grain Milling room: Multi screen miller, weigh filler<sup>28</sup>

These four examples of commercial kitchens highlight the potential for success of the Berkshire County CDC, and will serve as useful references during the planning process.

### **PART III: RELEVANT LAW AND POLICY**

#### **Permitting and Processing Regulations**

A whole host of regulations is applicable to the CDC as both a commercial kitchen and food-processing facility. The issues of health and food safety are of the utmost importance when designing such a facility. The legal regulations are quite complex, especially because the Berkshire CDC incorporates food-processing, food-packaging, as well as retail.

The CDC's commercial kitchen and value-added processing facility require inspections and licenses. The CDC is subject to USDA and FDA regulations. However, regulations differ

---

<sup>27</sup> "Mission Mountain Food Processing Center". Nov 4 2010. <http://www.mmfec.com/fpc.html>.

<sup>28</sup> Ibid.

from state to state therefore the CDC also needs to check with the Massachusetts Department of Health and Department of Agriculture to find out the exact rules and application procedures.<sup>29</sup>

Some of the standards for commercial kitchens include floor space, cooking hoods, fire suppression systems, sinks, and electrical system.<sup>30</sup> The CDC must also provide food safety and sanitation training for staff members. Every food-processing business must have at least one person who is a “certified food manager.” The certified food manager must be a full-time employee that has passed a food safety course.<sup>31</sup> Most likely this role will be filled by an employee who will specifically manage the commercial kitchen and value-added processing facility. In addition, the CDC must comply with local zoning laws and building codes.<sup>32</sup>

In terms of labeling and marketing, there are more restrictions that both the CDC and individual farmers must follow. The USDA and FDA must approve recipes and nutritional labels. The actual bottling, packaging, and labeling processes are also subject to many regulations. Farmers need to apply for a food business license if they want to have their own brand for their value-added food product. For cooperative projects like frozen vegetable lines, the CDC would also need to have a food business license and meet the standards for labeling and packaging as well.

In terms of actual processing and equipment there are a myriad of different regulations to help ensure food safety and health. Food safety regulations are governed by the Massachusetts Department of Health’s Food Protection Program, and are divided into the following categories:

---

<sup>29</sup> Federal and state food regulations are available at the New England Food Entrepreneurs website [http://www.umass.edu/nefe/regulatory\\_requirements/index.html](http://www.umass.edu/nefe/regulatory_requirements/index.html) and the Massachusetts Food Protection Program website <http://www.mass.gov/dph/fpp>.

<sup>30</sup> Ezmeralda Lee. “Commercial Kitchen Requirements”. Nov 29 2010. [http://www.ehow.com/about\\_5127819\\_commercial-kitchen-requirements.html](http://www.ehow.com/about_5127819_commercial-kitchen-requirements.html).

<sup>31</sup> Simca Horwitz. “Plain Language Guide to Starting a Value Added Food Business.” [nesfp.nutrition.tufts.edu/downloads/guides/PL\\_ValueAddedGuide.pdf](http://nesfp.nutrition.tufts.edu/downloads/guides/PL_ValueAddedGuide.pdf).

<sup>32</sup> “The Massachusetts Food Processors Resource Manual”. Nov 29 2010. [http://www.mass.gov/agr/markets/specfood/food\\_processor\\_resource\\_manual.htm#chapter%203](http://www.mass.gov/agr/markets/specfood/food_processor_resource_manual.htm#chapter%203)

- Bottled Water
- Dairy
- Foodborne Illness Investigations
- Food Allergens
- Food Processing
- Food Defense
- Retail Food
- Seafood
- General Food Regulations (e.g. labeling)
- Consumer Protection<sup>33</sup>

Within food processing, regulations depend on the types of food products that the facility is producing. Products are classified as Thermally Processed Low-Acid Foods, Acidified Foods, or Meat and Poultry. Mr. Guyer has decided not to use his facility to slaughter animals, although animal products can be processed as long as they arrive butchered to the site. This decision was made in attempts to avoid the huge costs and burden of permitting and safely running a slaughterhouse, no matter the size of the operation. With this eliminated, there still are many legal actions that must be taken in order to open the CDC for business.

### **Healthy School Lunch Programs**

Another avenue to explore is connecting with local public schools to provide goods for school lunches. The federal government in August of 2010 passed the Healthy, Hungry-Free Kids Act that mandates nutritional standards for all public school lunches. It provides \$4.5 billion over the course of 10 years to help increase the quality and health of the food served in schools, including snacks and vending machine products, not just lunches.<sup>34</sup> Some of the money is also set aside to help subsidize school lunches for children living at or below the poverty line. The Act is part of an overall goal towards fighting childhood obesity, improving our nation's educational system, and improving the health of our nation. Additional funding for school

---

<sup>33</sup> Massachusetts Food Protection Program. Nov 29 2010. <http://www.mass.gov/dph/fpp>.

<sup>34</sup> New England Ethnic New. Nov 29 2010. <http://www.ethnicnewz.org/en/us-senate-bill-and-new-mass-law-push-nutritious-school-lunches>.



gardens and purchasing more local produce and goods has also been appropriated. The Healthy, Hungry-Free Kids Act is a landmark piece of legislation because this is the first time in 30 years that the federal government has increased funding for the school lunch program.

Similarly, in Massachusetts in July of 2010, the state legislature passed An Act Relative to School Nutrition, which had been in the planning process for ten years<sup>35</sup>. It fit nicely with Governor Deval Patrick's anti-obesity campaign. The nutritional standards for Massachusetts public schools are slightly stricter than the national standards. There is also more of a focus on using local and farm-fresh produce in school lunches. The final component of the Act is further education and training of school nurses in obesity, eating disorders, and diabetes.

These two pieces of school lunch legislation could prove very useful in the further development of this CDC project. While our main focus is local farmers, the public schools represent a huge, untapped market for bulk agricultural goods. Berkshire Organics already provides transportation of produce from farms to schools, but they are in the process of founding a new nonprofit, Berkshire Organics SEEDS, to expand this operation.<sup>36</sup> Transportation and timing appear to be the biggest problem in facilitating the partnership between local growers and the public schools, despite the demand for healthier, local foods. For example, Desiree at Holiday Farm, who already provides some produce to the schools, complained that the schools only want processed produce, for example "carrot coins" not whole carrots, and she lacks the time and equipment to do that herself, let alone transport them to the school. If there were enough interest in using the CDC, especially if multiple farms went in together on a frozen vegetable brand or something similar, it could provide a bulk supply for the schools while

---

<sup>35</sup> Press Release from Office of Governor Patrick. Nov 29 2010.  
[http://www.mass.gov/?pageID=gov3pressrelease&L=1&L0=Home&sid=Agov3&b=pressrelease&f=100730\\_School\\_Nutrition\\_Signing&csid=Agov3](http://www.mass.gov/?pageID=gov3pressrelease&L=1&L0=Home&sid=Agov3&b=pressrelease&f=100730_School_Nutrition_Signing&csid=Agov3).

<sup>36</sup> Personal conversation with Aleisha Gibbons, 11/30/2010.

helping them to meet their goals and mandates to provide more local, healthy food. At a base level, as well, the network created through the CDC could pair farmers directly with schools to provide raw produce that requires no processing at the actual facility.



Chronicle / Craig Lee

## **PART IV: TECHNICAL AND ECONOMIC CONCERNS**

### **Technical Aspects of Freezing**

A large proportion of farmers surveyed have expressed interest in freezing vegetables and fruits, so we looked into the technical aspects of this type of product. It is best to use fruits and vegetables harvested at peak quality. The produce should be frozen within a few hours after harvest, or stored in refrigerators to preserve freshness until it can be prepared and frozen. The steps involved in freezing vegetables and fruits are illustrated in Figures 1 and 2 respectively.

#### *Freezing vegetables:*

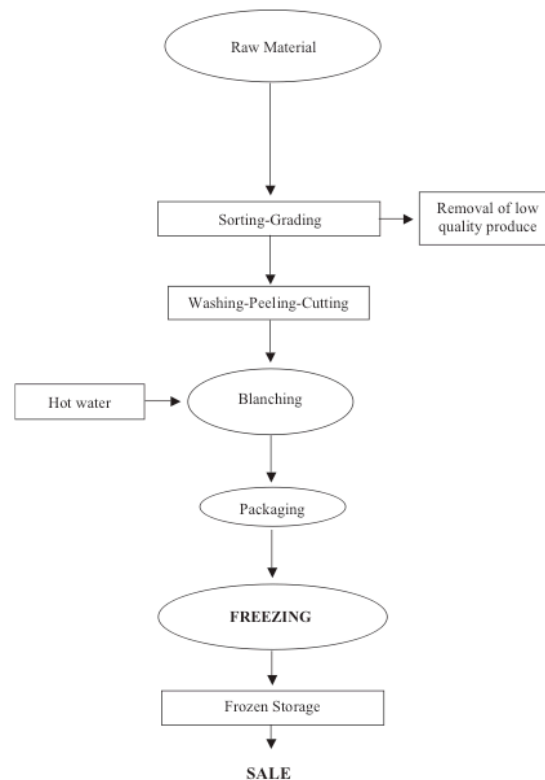
1. First sort and grade the vegetables, wash and then peel, slice, dice, and chop them etc.
2. Blanch vegetables in boiling water or steam

---

<sup>37</sup> Smiling Green Mom. <http://smilinggreenmom.com/wp-content/uploads/2010/10/school-lunch-2.jpg>.

3. After blanching, put vegetables immediately in a large quantity of cold or ice water, then drain thoroughly before packing. The vegetables should be cooled for the same amount of time as blanched.
4. Pack and freeze<sup>38</sup>

*Figure 1: Flow diagram of freezing process of vegetable-based product.<sup>39</sup>*



#### *Freezing fruits:*

Fruits can be frozen with or without sugar. A few fruits that freeze well without sweetening are blueberries and cranberries, but most will have better color, texture, and flavor if frozen with some sugar. Fruits packed in syrup are usually best for dessert, while those packed in dry sugar or unsweetened are best for cooking. Fruits prepared for making jelly or jam later should be frozen without sugar. The steps of freezing fruits are:

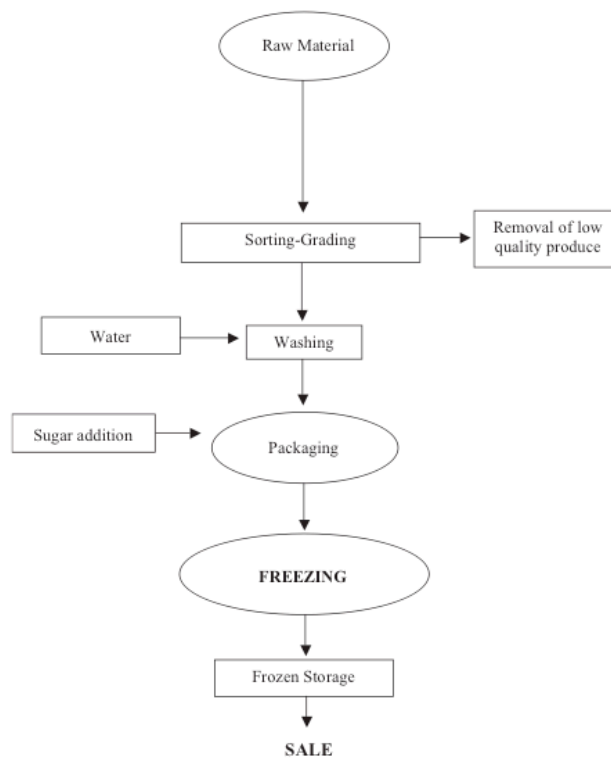
<sup>38</sup> Ingham, Barbara H. "Freezing Fruits & Vegetables". Wisconsin Safe Food Preservation Series. B3278. University of Wisconsin-Extension. Cooperative Extension. <http://www.foodsafety.wisc.edu/topicsA-Z/d-h.html>.

<sup>39</sup> Barbosa-Cánovas et al. "Freezing of fruits and Vegetables. An Agri-Business Alternative for Rural and Semi-Rural Areas". FAO Agricultural Services Bulletin 158. 2005. <http://www.fao.org/docrep/008/y5979e/y5979e00.htm#Contents>.

1. Wash and peel/ slice
2. Use antioxidants to prevent color change of some fruits after peeling (such as a solution of vitamin C, ascorbic acid mixtures, lemon juice or citric acid)
3. Pack, add sugar/ syrup if needed, and freeze<sup>40</sup>

For details on how to freeze specific types of fruits and vegetables please consult the Wisconsin and FAO guides listed in the footnote.

*Figure 2: Flow diagram of freezing process for fruit-based product.*<sup>41</sup>



The equipment required for freezing fruits and vegetables includes kitchen utensils for washing and cutting, hot water kettles for blanching vegetables, proper devices for packaging, and freezers. The highest investment cost is the freezer operation. Freezing food would entail the following costs:

<sup>40</sup> Barbosa-Cánovas et al. "Freezing of fruits and Vegetables. An Agri-Business Alternative for Rural and Semi-Rural Areas". FAO Agricultural Services Bulletin 158. 2005.  
<http://www.fao.org/docrep/008/y5979e/y5979e00.htm#Contents>.

<sup>41</sup> Ibid.

- initial cost of freezer
- lost interest in cash outlay of freezer
- maintenance and repair
- electricity needed to reach and maintain freezing temperatures
- packaging materials
- water and fuel to prepare food for freezing
- added ingredients, such as sugar or anti-darkening agents<sup>42</sup>

The initial cost of a freezer varies with size, type, special features and age. A chest freezer, which is suitable for keeping food frozen for long periods of time, costs between \$4,600 to more than \$10,400, and has an average size of 24 cubic feet.<sup>43</sup> New freezers should require little repair in the first few years. However, in the long run the U.S. Department of Agriculture (USDA) recommends an expected repair cost on new freezers of 2 percent of the purchase price per year, and this rate may be higher for used freezers. Research finds that it takes 0.1 kilowatt hours (kwh) to freeze a pound of food and lower its temperature to 0 degrees. The cost of packaging, including reusable containers, is estimated to range from 2 to more than 6 cents per pound. Rigid containers, such as plastic cartons or glass jars, cost more initially, but not when divided over several years' use. The cost of water and fuel used in washing, blanching, and chilling foods varies with area utility costs and individual practices, and is estimated to cost less than half a cent per pound of food.<sup>44</sup>



<sup>42</sup> Barbosa-Cánovas et al. "Freezing of fruits and Vegetables. An Agri-Business Alternative for Rural and Semi-Rural Areas". FAO Agricultural Services Bulletin 158. 2005.  
<http://www.fao.org/docrep/008/y5979e/y5979e00.htm#Contents>.

<sup>43</sup> Buyer Zone. <http://www.buyerzone.com/restaurant/commercial-freezers-and-refrigerators/ar-quick-guide/>.

<sup>44</sup> P. Kendall and L. Payton. "Cost of Preserving and Storing Food". Colorado State University Extension. August, 2008. <http://www.ext.colostate.edu/pubs/foodnut/08704.html>.

## Estimated Equipment Costs

The potential equipment costs for equipping the CDC can range widely depending on the assessed scale of use, size and space, energy use and requirements, available budget, and type of equipment and processes included. There will be certain equipment such as walk-in refrigerators, ovens, and stoves that will be necessary no matter what additional equipment is chosen. For specialized types of processing, the overall cost of canning equipment is relatively low: for example a 32 pint-jar capacity canner costs about \$500 and large pots for water bath canning, funnels, tongs, jars, and lids would add probably between \$200 and \$300.<sup>45</sup> Freezing has greater costs associated with it in terms of more expensive equipment, long term electricity costs, and concerns about having enough storage space.<sup>46</sup> Freezers could cost anywhere from \$2000 for a standard walk-in to \$25,000 for a Blast Chiller which lowers food to freezing temperatures fast enough to preserve greens without blanching and to preserve flavor better. However, the Crane facility has two backup diesel generators that would ensure that in the event of a power outage food would not spoil. This added insurance is another bonus for farmers using the CDC as opposed to their own kitchens or another facility which might not have this type of back-up. Freezing also takes a significantly shorter time than canning.

Meat processing equipment is more specialized and thus less versatile, while equipment purchased for canning could also be used for sauce-making. Meat equipment could still be purchased in a cost effective way - slicers, grinders, sausage stuffers, and dehydrators for jerky each can cost between \$200-\$900, with an average total of about \$1,400-\$3,000 for meat

---

<sup>45</sup> "The All-American Pressure Canner 941 (41 1/2 Quart Capacity)". Homestead Harvest. 7 Dec 2010. <http://homesteadharvest.com/aa925.html>.

<sup>46</sup>Kendall, P. and L. Payton. "Cost of Preserving and Storing Food." Colorado State University Extension. Aug 2008. 8 Dec 2010. <http://www.ext.colostate.edu/pubs/foodnut/08704.html>.

equipment<sup>47</sup>. Electric ice cream makers can cost between \$200 for a 6-quart capacity to \$1,200 for a faster, higher quality 2-quart capacity.<sup>48</sup> Also while there are many specific laws for every type of canned and processed foods, the USDA, FDA, and the state of Massachusetts food processing regulations are strictest with meat and dairy because of the greater risks involved. Especially with meat, from the farm to the slaughterhouse to the processing facility it is harder to trace a problem if something did go wrong with the meat, so this is another potential cost for the CDC to consider.

## **PART V: RESULTS**

Our ten-question survey was designed to gauge farmers' general interest in the facility as well as issues of equipment, marketing, and transportation. We set up an online version, and the link was distributed through a USDA Farm Service Agency newsletter as well as the Berkshire Regional Planning Commission newsletter. We mailed out 160 surveys, but unfortunately 16 of them were returned because of out of date or incomplete address information. We called 12 farms as well, and did 5 interviews (one of whom also responded by mail). We received 39 survey responses from farms, 14 of which were not particularly useful because three already have their own kitchens or processing equipment, five did not see the facility as applicable to their products (for example honey, Christmas trees, maple syrup), and six were going out of business. We also sent a modified survey to twenty restaurants, but only received one response from Brix Winebar that was not interested in the project. Of the 25 farm surveys that generated the data we have been analyzing, 6 were from the online survey, 13 were mailed, 3 were

---

<sup>47</sup> "Canning Equipment." Canning Pantry. 2 Dec 2010. Canningpantry.com.

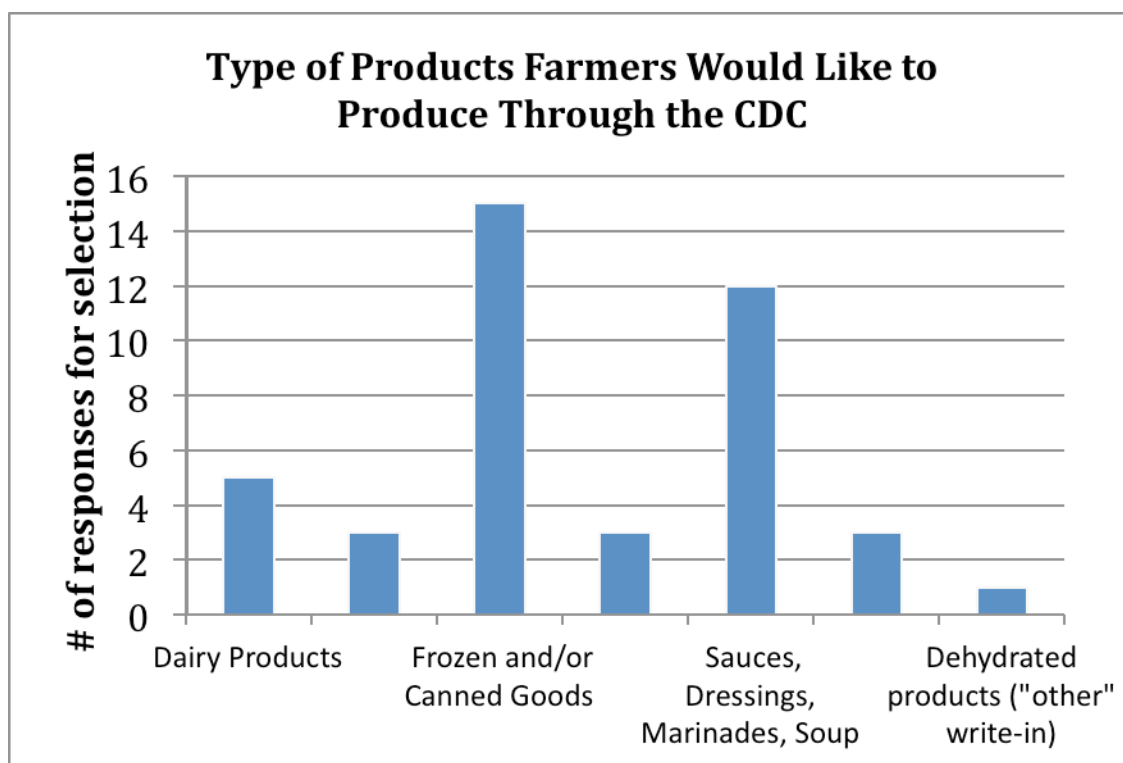
<sup>48</sup> "White Mountain Ice Cream Makers." *Make Ice Cream.com*. 12 Dec 2010. <http://www.makeicecream.com/whitmounicec.html>.

conducted in person, and 3 were over the phone. Overall the surveys have shown a general enthusiasm for the CDC and also offered important suggestions and questions. Sixty-four percent of the respondents were definitely or probably interested in the commercial kitchen, and 60 percent of the 23 who answered about the value added facility were also interested. In reference to the value-added processing facility, Desirée & Jesse Robertson-DuBois of Holiday Brook Farm said that “In the height of summer it would be great to bring extra vegetables to the facility for processing (not by us),” and similarly Bill Stinson from Peace Valley Farm said he would be too busy to do the processing himself but would definitely be interested if other people would do it for him.

In terms of specific products farmers would be interested in producing, they could select as many of the options as were applicable, and there was interest in all of our suggested categories (dairy products, baked goods, frozen/canned goods, alcohol, sauces/marinades). The top choices were “canned and/or frozen goods”, with 68% of 22 respondents selecting this option, and “sauces, marinades, and soups”, which was selected by 55% of respondents.

*Figure 3: Products that might be produced at the CDC facility.*



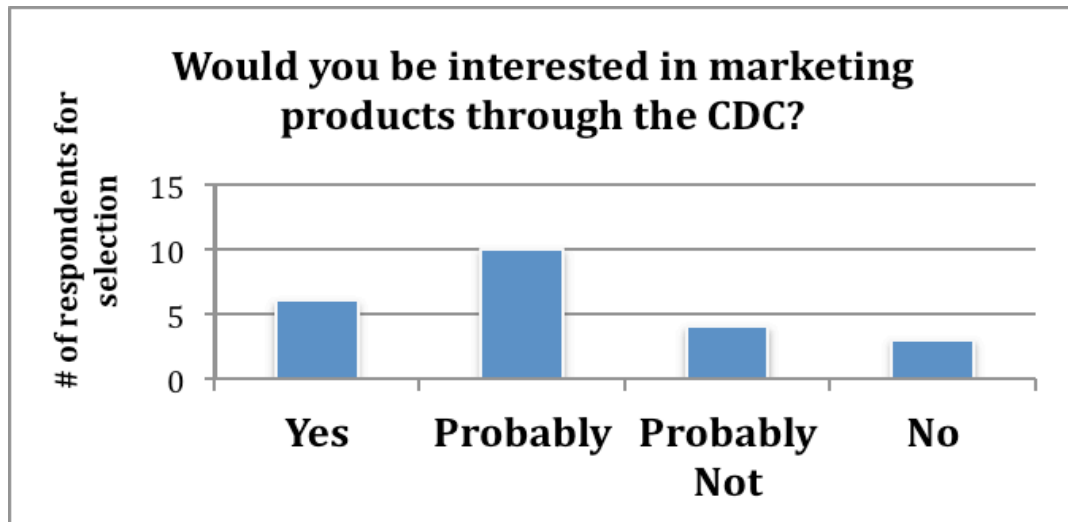


We had an “other” option where three farms independently filled in “meat products” such as sausages and jerky. Some other interesting potential products written in included melon alcohol and ice cream, tobacco for cigars, and dry muffin/baked good mixes. Also in the “other” category when farms wrote in “pickles” we added this to the canned good option. Additionally, one farm added “dehydrated products” which we had not considered or offered as an option, so it is possible that other farms would be interested as well. We heard differences of opinion about freezing versus canning- one farm strongly preferred the ease of freezing while another worried about the loss of quality and freshness through freezing, and therefore preferred canning. Consequently it would be important for the facility to have both popular processing methods available. Fewer farms expressed interest in dairy products, but this is likely due to the low response rate from dairy farms- we primarily heard from vegetable and meat farmers.

There was a range of interest, but a general enthusiasm for marketing products through the CDC by creating a unique label for farm products or potentially through combining with

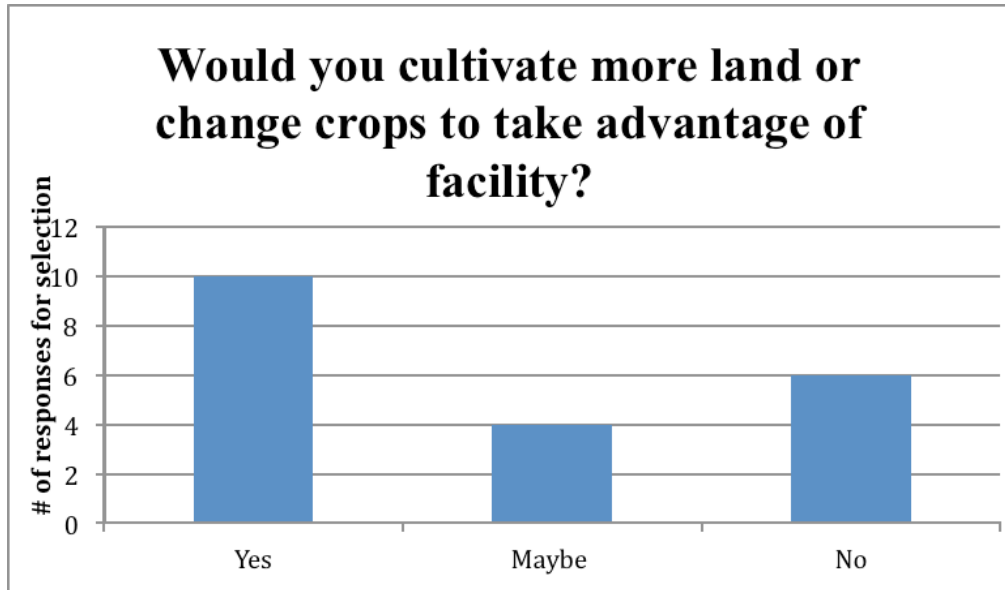
other farmers to make a CDC brand. We heard different opinions from the farmers we spoke with: one was immediately enthusiastic while another seemed more hesitant. Forty-three percent of respondents expressed probable interest and 26 percent were definitely interested in marketing.

*Figure 4: Interest in marketing through the CDC.*



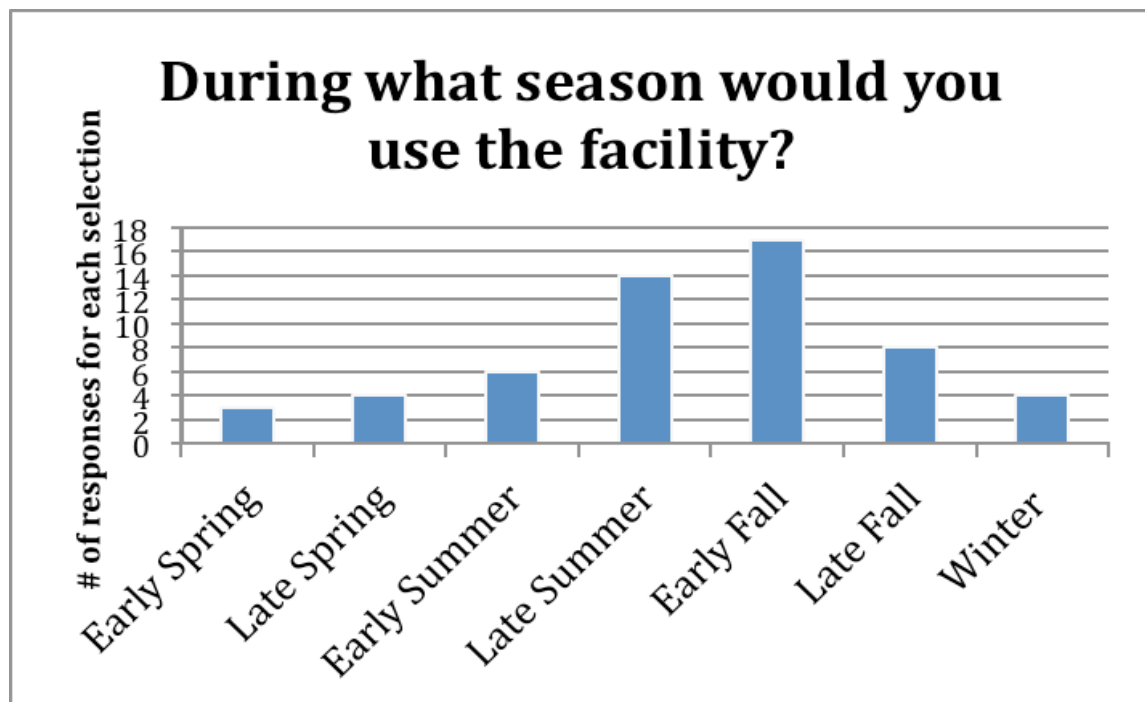
Also, 70 percent of respondents indicated that they would maybe or definitely grow more or change their crops because of the facility. For example, the Leaheys from Leahey Farm responded that they are “already expanding dairy, [and] having this facility would motivate us further” and Laura Meister from Farmgirl Farm said she might be “motivated to find more land”.

*Figure 5: Change crops or add land into cultivation.*



The surveys indicated that the CDC would have year round users, but the preferred season for heaviest use, as we predicted especially for produce farmers, would occur during late summer and early fall.

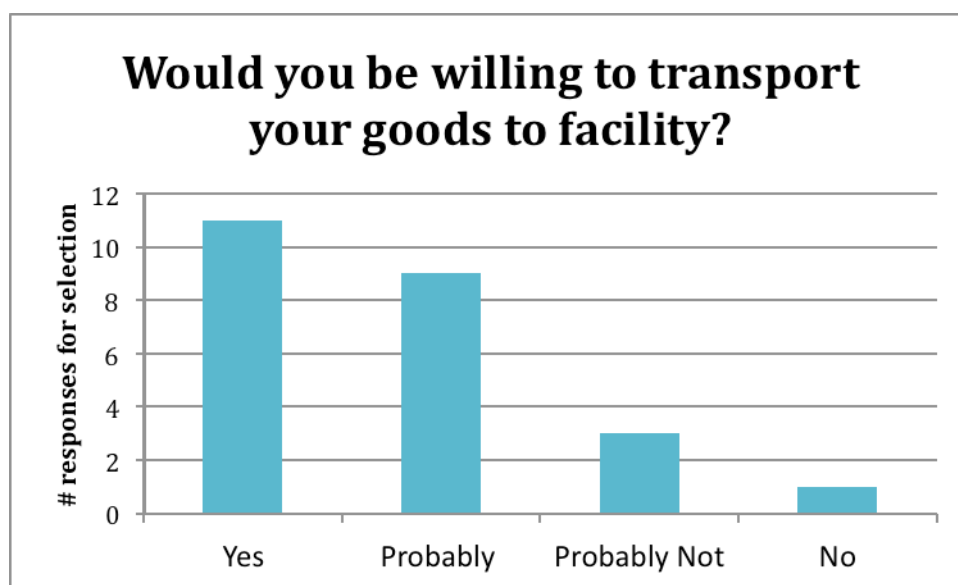
*Figure 6: Seasonality of use.*



Kenneth Wirtes from Bradley Farm<sup>49</sup> expressed concerns about these shared heavy use times and sited one of the problems with the Franklin County CDC and other similar facilities is the difficulty of being able to reserve space at the time he would really need it.

Transportation was another issue we investigated in order to determine how necessary it would be for Mr. Guyer to hire drivers. Eighty-three percent of the 24 respondents said they would or probably would transport their own goods to the facility. In the follow-up question, would they use CDC transport if it were provided, 59 percent said they would not or probably would not.

*Figure 7: Transportation to and from the CDC facility.*



The farms who said they would or probably would use transportation were all (except one) located more than 30 minutes away. Bill Stinson noted that for this question, his response mostly would depend on the price of transportation services, so it was hard to know at this point, and we can assume that other survey respondents had similar questions.<sup>50</sup>

<sup>49</sup> Personal conversation with Kenneth Wirtes, 11/28/2010.

<sup>50</sup> Personal conversation with Bill Stinson, 11/20/2010.

The questions and concerns about the CDC ranged from worry about government regulation, to fears that the project sounded great in concept but would be “awkward” in reality, to not having the time or energy to put into this project. Farmers were also concerned with the potential costs, and one was nervous that with the cost of processing she would still not be able to sell the value-added goods at a marketable price. Also, as we had anticipated, some of the meat farmers said that what they needed more urgently would be a USDA inspected/certified slaughterhouse to be able to process beef, lamb, pork, and poultry. However, the majority of the comments from respondents, even those who would not personally be able to use the facility, were positive, for example: “We are very excited about this project” (Holiday Brook Farm), “We are interested in the development of this facility and are eager to learn more about it” (Leahey Farm), “Access to a commercial kitchen could significantly improve our viability by allowing us to process and add value to some of our own products” (Square Roots Farm), and “This would help us expand by giving us more options” (Elmartin Farm). Another suggestion we received from Don Leab from Ioka Valley Farm, who expressed strong interest in the facility, was that it would be helpful if there was “support to test recipes and obtain nutritional information” for products. Even farms which were out of business or did not think they would have the time to use the facility thanked us and Mr. Guyer for working on this project and expressed what a positive development this would be for small farmers and the community.

## **PART VI: RECOMMENDATIONS**

As the mission of the Berkshire CDC is to serve the needs of local farmers and provide them with new opportunities and markets in which to sell their products, our recommendations are based almost entirely on the survey results we gathered. Equipment costs and regulations are

important concerns as well, and we address them slightly, with the understanding that greater research will need to be conducted once the CDC has an initial budget and better understanding of the limitations of the space.

Freezing and canning were the most popular types of processing desired in the value-added processing facility, so we would recommend investing the greatest time, resources, and space to equipment for these processes. The USDA recommends pressure canning as the safest way to preserve low-acid vegetables, but some farmers might have more experience with water bath canning, so having both equipment available would be ideal.<sup>51</sup> Adequate freezing equipment is important due to popularity, suitability of the facility, and relative ease compared to canning. Extensive freezer space would also allow farmers to temporarily store produce until they had more time to can or otherwise process the goods later on.

The next most popular potential products were “sauces, marinades, and soups”, so we suggest a significant investment in mixing, cooking, straining, and bottling equipment, all of which could be useful in canning as well. Having equipment for all of those options would best serve the produce farmers who were our main respondents and will most likely be the primary users of the facility.

It will be important to respond to the interest in meat and dairy processing in a way that handles the more complicated regulations and greater health and safety risks. In terms of meat processing, we would recommend investing in sausage and jerky making equipment because several farms were interested in processing meat products, and especially because these are not services offered locally. We would recommend ice cream making equipment, but if the facility were limited for funds or space initially, this would be an option that could be put on hold. It is likely that if the equipment was there and was successfully used by some farmers, this would

---

<sup>51</sup> All American Canner. Dec 13, 2010. [www.allamericancanner.com/allamerican921pressurecanner.htm](http://www.allamericancanner.com/allamerican921pressurecanner.htm).

attract others, making the investment in the equipment worthwhile. Similarly, brewing equipment for making alcohol does not need to be a priority- this will also reduce some of the regulations and licensing that could delay the opening of the facility. All farmers who were interested in making alcohol also expressed interest in other types of processing and products, therefore the exclusion of brewing equipment would most likely not limit their interest in the facility. Baking also does not need to be a primary concern, especially because the commercial kitchen space will most likely have the necessary equipment for baking. Finally, greater investigation of the feasibility of and interest in grain milling would be valuable. This was a suggestion from one survey, not something we asked about specifically, and the infrastructure is lacking in Berkshire County.

We further recommend that the facility should offer marketing and branding resources such as the ability to easily make labels for products as well as assistance with understanding the types of permits farmers would need. The facility could also potentially create a Berkshire CDC brand where farmers could pool their surplus vegetables, for example, to sell in markets or to schools or, as Aleisha Gibbons from Berkshire Organics suggested, make a CDC brand tomato sauce, listing the farms that provided each of the ingredients<sup>52</sup>. Though we were cautious in our survey and in interviews to avoid the word “cooperative” in case farmers had negative past experiences with these systems, Desiree from Holiday Farm and several other respondents did not seem too attached to their surplus vegetables and had no worries about combining with other farmers in a Berkshire CDC brand. Recipe testing is another service several respondents requested, so we recommend that the CDC hire an experienced chef who could work with users of both the commercial kitchen and the value-added processing facility. Ideally this individual

---

<sup>52</sup> Personal conversation with Aleisha Gibbons, 11/30/2010.

would also have had experience with USDA recipe approval processes that might be unfamiliar to many CDC users.

Because eighty-seven percent of respondents indicated interest in using the facility in late summer and early fall, this will clearly be the busiest time for the facility. Mr. Guyer should plan accordingly in order to avoid the scheduling frustrations many farmers had with the Franklin County CDC. Consequently we would recommend that the facility should hire more employees during late summer/early fall to help handle the greater demand for the facility. We also received the suggestion that perhaps the facility could operate on an incentive-fee structure where it would be less expensive to use the facility in the off-season. Farmers could also be incentivized to use the facility twice at different times of year instead of once during peak times, for example they could bring a bumper crop of strawberries to the value-added processing facility to freeze in mid-summer then return in December to process the frozen berries into jam in the commercial kitchen.

The large percentage (eighty-six percent) of respondents who indicated that they would be willing to transport their goods to and from the facility indicated that vans, drivers, and other transportation costs and logistics do not need to be a priority for the CDC. Transportation would especially be unnecessary if Berkshire Organics moved to this facility as they already pick up products from farms to distribute them. Aleisha, one of the owners, indicated if they became more connected to the CDC they might be willing to transport goods for farmers, especially to facilitate and involve more farmers in their current project of delivering fresh produce to Pittsfield schools.<sup>53</sup>

Finally, we recommend that the CDC reach out to local schools and restaurants as well as community members who might be budding small business entrepreneurs in order to link more

---

<sup>53</sup> Personal conversation with Aleisha Gibbons, 11/30/2010.



institutions and individuals in the community. In conclusion, we hope that this report, and especially the recommendations, helps Mr. Guyer proceed with the design of the facility with a better understanding of the needs and desires of Berkshire County farmers. Despite many unresolved questions about this facility, it is clear from our surveys, interviews, and phone conversations that farmers are enthusiastic about the project and that the commercial kitchen and value-added processing facilities of the Berkshire CDC have the potential to provide a very welcome boost to the local food economy of Berkshire County.

## APPENDICES

### I: Farm Survey Results

#### *CDC Facility Questions:*

1. From the description of the CDC in the attached letter, are you interested in using such a facility?

Commercial Kitchen- **n=25**                      Yes-**10**    Probably-**6**                      Probably Not-**7**                      No-**2**

Value-Added Processing Facility- **n=23**    Yes-**8**    Probably-**6**                      Probably Not-**8**                      No-**1**

**\*Responses from 14 of total 39 surveys were not included because the farms were not in business or did not consider the CDC applicable to their type of production**

*The following questions refer only to the value-added processing facility, NOT the commercial kitchen.*

2. Is there specific processing the facility could offer which would allow you to extend your season or make a crop more profitable? Explain.

-canning, jams and jellies, pickles (5)

-Pesto (2)

-salsa

-apple grinder and apple press

-Dairy- ice cream (2)

-meat

-large oven

-freezing vegetables

-Production of melon wine or ice cream

-“Grain milling. Animal processing is good locally, but more capacity needed.”

-“Meat processing, pumpkin butter, peeled/frozen squash, strawberry jam and frozen strawberries”

-“For preserving and making food, ex. Pickled beets and dill pickles, salsa and tomato sauces, all in sealed jars”

-“Theoretically tomato sauce, paste, etc, but not sure the numbers work- pounds of tomatoes needed for a quart of sauce might make sauce too expensive”

-A large USDA slaughterhouse to accommodate more Berkshire producers

3. From the products you grow, what value-added products might you be interested in producing at this new facility? Circle all that apply and feel free to be creative with alternative responses as well! **n=22**

i. Dairy Products (ice cream, cheese, etc)-**5**

ii. Baked Goods-**3**

iii. Frozen and/or Canned Goods- **15**

iv. Alcohol-**3**

v. Sauces, Dressings, Marinades-**12**

vi. Other (please specify): \_\_\_\_\_

**Meat products (sausages, jerky, smoked meat)- 3**

**Dehydrated products-1**

**Pickles-2 (included in frozen/canned goods)**

**Tobacco**

**Grain**

4. Would you be interested in branding or marketing these products through this facility? **n=23**

Yes-**6**                      Probably-**10**                      Probably Not-**4**                      No-**3**

5. What season might you use the facility most? **n=23**

**Early Spring-3**

**Late Spring-4**

**Early Summer-6**

**Late Summer-14**

**Early Fall- 17**

**Late Fall-8**

**Winter-4**

6. Would you change your crops or cultivate more land in order to take advantage of the facility? If so, what would you produce? **n=20**

**-Yes: 10**

Would grow; basil to make pesto, apples, tobacco, cane, small fruits, berries, tree fruits, vegetables (beets, onions, peppers, potatoes, garlic, greens, green beans, carrots, cucumbers, cabbage, herbs), grains (to improve field rotations and open farm up a bit), "Already expanding dairy, having this facility would motivate us further"

**-Maybe- 4**, "This is too vague as a speculative venture to predict this"

**-No-6**

7. How far is your farm, approximately, from Dalton? **n=23**

0-15 Min-4

15-30 Minutes-9

30-45 Minutes-6

45-60 Minutes-4

Over 60 Minutes-0

8. Would you be willing to transport your goods to and from the facility? **n=24**

Yes -11

Probably-9

Probably Not-3

No-1

9. If transportation (pick-up and delivery) is offered by the CDC, would you take advantage of this service? **n=19**

Yes-4

Probably-5

Probably Not-12

No-1

10. Do you have any further comments or questions regarding this facility or study?

-Demand for meat is high, but demand for vegetables is fairly low, with the exception of CSA shares. Access to a commercial kitchen could significantly improve our viability by allowing us to process and add value to some of our own products. Moving a higher percentage of our vegetables through our CSA, rather than farmers market, will also help.

-We are very excited about this project since we've investigated having co-packers preserve our tomatoes, cilantro, basil, garlic pestos etc. Greenfield is too far

-See attached story, my huge concern in government getting in the way of good food products

-This would help us to expand by giving more options

-At a Berkshire coop event and there was a woman who was making and selling salsa, I bet non-farm people would be interested too etc.

-Glad you are looking into this! Thank you!

-As part of funding a way to clear a parcel of cropland I have an interest in setting aside couple of acres to work w/ Food Pantry

-I work at a facility which currently rents to 2 start up business because they have a large sanctioned kitchen.

-At present we are out of business. The farm may be rented in the near future, but for what we are not sure. Also not sure what the next 5-10 years may bring.

-The single most important facility to help my business is a USDA inspected slaughterhouse and butchering facility for both meat and poultry in Berkshire County

Additional Comments from Question # 1- Interest in CDC: Please Explain.

- “Depends on distance needed to travel to facility”.
- “We have our licensed kitchen for most items I might be able to work with a grain miller, something like that. We use a lot of flour, but can't make the quality we need from our own grains”
- “In the height of summer it would be great to bring extra vegetables to facility for processing (not by us). Commercial kitchen would be of use to us in off season for small batch process of frozen product”
- “We would be interested in the commercial kitchen- if it was arranged to make it feasible to leave the farm. Also if there was support to test recipes and obtain nutritional information. Value added- great to send our surplus pumpkins/squash/strawberries”
- “Yes, interested, however I have no additional time to devote to this or expense and I fear govt regulation would inhibit profit”
- “We would expand our product line and add value added products which would necessitate a commercial kitchen. We are also interested in expanding into dairy products.”
- “Too busy to drive down and do it, but if someone else would process that would be a great option”
- “Dalton might be too far” (2)
- “I think this is a good idea but I don't have the energy to do all stuff”
- “Been cutting back, not lots of time, heard availability of these places is hard to get”
- “Good resource for seconds”
- “We finally found a slaughterhouse 2 hrs away. Excellent! But the trip is too long”
- “Good idea, I played around with dehydrating this year but it took too much time and energy, hard to know if we could get a marketable price for goods produced through CDC, don't have extra crops right now. In theory I would love to use the kitchen, but in reality I wouldn't have time, so more inclined at first anyway to use the value-added processing facility (but unsure of scale that would make a run worth it)”
- “All of my produce is pretty well taken care of, my only problem is transportation”

## II: Farm Cover Letter



November 2010

Dear Berkshire County Farmer,

We are writing to you on behalf of the Berkshire Regional Planning Commission and Denis Guyer about the farm economy of Berkshire County. We are conducting two research projects about Berkshire farms: 1) a foodshed analysis of what is currently being produced on local farms and 2) we are assessing farmers' interest in Mr. Guyer's proposed Community Development Corporation (CDC) to be built in Dalton, Massachusetts within the next two years. He plans to convert the former Crane Stationery plant into a multiuse building with residential units, retail space, a commercial kitchen and a value-added processing facility.

The goal of the value-added facility is help farmers increase their profits by producing value-added products and creating connections to consumers through new markets for value-added agricultural goods. Mr. Guyer has spoken with various farmers in Berkshire County who expressed interest in producing value-added goods from their raw products, such as salsa from tomatoes, ice cream from milk, frozen vegetables to be sold throughout the year, etcetera.

This commercial kitchen and value-added facility would eliminate some of the upfront costs associated with equipment, space, and labor needed to produce these goods by an individual farm. The connection between farmers as well as opportunities for selling these goods through the CDC's retail facility could open up new markets and increase profits for growers.

The **commercial kitchen** would be a space with multiple work stations supplied with state-of-the-art basic kitchen appliances. These units could be rented by the hour by farmers (and other entrepreneurs) in order to process their crops themselves, on a small scale.

On a larger scale, the **value-added processing facility** would provide the space, equipment, and labor needed to turn raw materials into end products. Growers could deliver their yield along with a recipe to the facility, where employees would process and package these products for market. These value-added goods could be sold back on the farm they originated or elsewhere. The facility could also connect farmers to consumers and restaurants and provide a greater network for marketing farm products.

In order to make this project a success, we request your input as to how to develop this facility. We seek suggestions about what products farmers would process in this facility in order to know what equipment to buy. A questionnaire is attached to this letter. We would greatly appreciate if you could take 5-10 minutes to consider these questions and mail back your responses in the envelope provided by December 5<sup>th</sup>.

We will call you in the coming weeks, or please feel free to leave a message for Lauren McDonald at (301) 922-4745 with a good time to call you back. We look forward to hearing your opinions and seeing this project take shape. Thank you for your input and time!

Sincerely,

Elizabeth Dorr, KK Durante, Vashti Emigh, Lauren McDonald, Thuy Phung, Anthony Raduazo,  
On Behalf of Berkshire Regional Planning Commission and Denis Guyer

### III: Estimated Equipment Cost Table

Equipment	Cost (\$)	Other Notes
Upright refrigerator	2000	
Blast chiller	25000	really expensive but save on other costs (water etc)
Oven	4500	
6 burner stove	1500	
8 burner	4100	
10 burner	11617	
1 door reach in freezer	1500	
Walk-in coolers	4500-9000	
Walk-in freezers	4600-10400	depending on size
Food processor	189	for smaller KitchenAid
Commercial food processor	1300	
Sheet pan	25	
32 pint jar pressure canner	499.85	
Mason jars	12 for 6-10	
WonderMill for grain	269.95	
Vacuum seal kit	239.95	
Meat grinder	109-659	
Meat slicer	99, 379, 579	
Sausage stuffer	369 (15lb), 895 (25lb)	
Dehydrators (for jerky or dried fruit)	219.95	grinds up to 100lbs of flour per hour
Ice cream maker- 6 quart capacity	200	
Commerical, 2-quart capacity ice cream maker	1200	

Totals	
Canning	~\$800
Freezing	~\$1500-\$25,000
Meat	~\$1400-\$3000
Dairy	~\$300-\$1400

Sources:

[www.mychefstore.com](http://www.mychefstore.com)

<http://www.katom.com/cat/walk-in-coolers-and-freezers.html>

<http://www.homesteadharvest.com/aa941.html>

[www.Canningpantry.com](http://www.Canningpantry.com)

[www.makeicecream.com](http://www.makeicecream.com)

