Cheshire County, New Hampshire

Farm Needs Assessment: Farm Labor and Infrastructure

Report written by Cheshire County Conservation District, April 2011

Sarah Sullivan, Project Coordinator
Cheshire County Conservation District

Amanda Costello
Sarah Sullivan

Libby McCann
With special thanks to Tania Schusler, and her Fall 2010 Class, and Anne Nordstrom

Carl Majewski

Bob Bernstein
Craig Oshkello
# Table of Contents

Executive Summary ............................................................................................................ 5  
Methods............................................................................................................................... 6  
Cheshire County Farms ....................................................................................................... 6  
Structure of Report .............................................................................................................. 8  
Labor Needs ........................................................................................................................ 8  
  Help Hiring .................................................................................................................. 8  
  Housing for Labor ......................................................................................................... 9  
Labor Challenges ................................................................................................................ 9  
  Ability to Pay .............................................................................................................. 9  
  Skilled Labor ............................................................................................................... 10  
  Viable Career Option .............................................................................................. 11  
  Seasonality .............................................................................................................. 12  
Labor Ideas........................................................................................................................ 13  
  Collective purchasing of insurance ...................................................................... 13  
  Shared Labor Crew ................................................................................................. 13  
  Educational programs ............................................................................................ 14  
  Mentor Programs ..................................................................................................... 15  
Service Providers Assistance with Labor Needs ......................................................... 15  
Equipment Needs .............................................................................................................. 16  
  Rental ........................................................................................................................ 16  
  Mobile repair service ............................................................................................... 17  
Storage Needs ................................................................................................................ 18  
  Increased Storage .................................................................................................. 18  
  Storage and Market Expansion .......................................................................... 19  
Storage Challenge ........................................................................................................... 19  
  Location of Storage .............................................................................................. 19  
Distribution Needs ............................................................................................................ 20  
  Market expansion .................................................................................................... 20  
  Shared transport ..................................................................................................... 21  
Distribution Ideas.............................................................................................................. 22  
  Processing .................................................................................................................. 22  
  Value-added Products ............................................................................................. 22  
Service Providers Assistance for Infrastructure Needs ................................................... 23  
Social Infrastructure ...................................................................................................... 23  
  Agriculture Commissions ...................................................................................... 23  
  Farmer Networks ................................................................................................... 24  
Recommendations ............................................................................................................. 24  
  Labor Recommendations ....................................................................................... 24  
  Infrastructure Recommendations ........................................................................ 26  
Limitations of the Study .................................................................................................... 26  
Larger Systemic Issues ..................................................................................................... 27  
Suggestions for Future Research ..................................................................................... 27  
Appendix A: Sustainable Labor System ........................................................................... 29  
Appendix B: Labor Focus Group Notes .......................................................................... 34
Appendix C: Infrastructure Focus Group Notes ............................................................... 40
Appendix D: Interview Guide .......................................................................................... 58
Appendix E: Notes from Community Forum ................................................................. 69
Appendix F: Farm Infrastructure Matrix .......................................................................... 72
References ......................................................................................................................... 73

Table of Figures

Figure 1 – Adequate Labor Pool ....................................................................................... 10
Figure 2- Farming as Career Path .................................................................................. 11
Figure 3 – Labor Barriers ................................................................................................. 12
Figure 4 – Labor Ideas .................................................................................................... 15
Figure 5 – Interest in NRCS Programs ............................................................................ 16
Figure 6 – Equipment Ideas ........................................................................................... 17
Table 1 - Types of Storage ............................................................................................... 18
Table 2 - Storage and Market Expansion ...................................................................... 19
Figure 7 – Storage and Processing Ideas ....................................................................... 20
Figure 8 - Current Markets and Expansion ................................................................... 21
Figure 9 – Interest in Value-added Processing .............................................................. 22
Figure 10 – Interest in Ag Commissions by Town ......................................................... 23
EXECUTIVE SUMMARY

This report is the result of a USDA Sustainable Agriculture Research and Education (SARE) grant to explore farm labor and infrastructure needs for farms in Cheshire County, New Hampshire. The intention of this research is to provide farmers, agricultural service providers and community members with the necessary information to promote the economic viability of farms in Cheshire County. The research was conducted through two focus groups followed by 39 in-depth one-on-one interviews, lasting about an hour each.

The first section of the report details findings for farm labor, including the largest barriers farmers face in regards to labor, as well as the ideas that farmers are most likely to participate in to help address labor concerns. The biggest barriers the farmers in our interviews face are the ability to provide health insurance, the ability to pay workers and the ability to pay workman’s compensation. Another issue regarding labor that came up was the low percentage of farm employees who see farming as career option for themselves.

The ideas for addressing labor issues that had the most interest were collective purchasing of health insurance to reduce costs, and educational programs both for farm laborers as well as for farmers. Other ideas that had some interest were a labor crew shared between farms, and a mentor program for new farmers.

The second section of this report focuses on infrastructure. That section is subdivided into the topics of infrastructure that our research focused on: equipment, storage, distribution and value-added processing. The main barrier for equipment is the expense of the equipment, and there was strong interest in an equipment rental program run by a non-farming entity.

There is some interest in beginning to produce value-added products for farmers who are not currently doing so. Making dairy products is the most popular idea, and the main barrier for all farmers looking to start producing value-added products is lack of infrastructure required.

About half of the farmers we interviewed need more storage than they currently have. Many of those farmers are interested in getting more storage on their farm, rather than a centralized storage facility. Many of the farmers needing more storage, are also interested in expanding the markets that they currently sell their products to. The most popular option for expanding markets is increasing current on-site farm stands, with many farmers also interested in expanding to farmers’ markets as well as retail stores.
INTRODUCTION

This report is the result of a USDA Sustainable Agriculture Research and Education (SARE) grant for a Farm Needs Assessment in Cheshire County, New Hampshire. This research follows up on a previous SARE grant conducted in 2007, which identified infrastructure and labor as two greatest barriers to the economic success of farms in Cheshire County.

This study was designed to explore these two issues in greater depth, with the aim of determining labor and infrastructure needs for farmers in Cheshire County in order to better understand how to promote the economic viability of farms in Cheshire County as well as farms outside the county. In addition, we looked at the idea of a sustainable labor system, and what it means for Cheshire County (see Appendix A: Sustainable Labor System).

Methods

This research was conducted through two focus groups followed by 39 in-depth one-on-one interviews. The process for finding farmers for the interviews and the focus groups was to send a letter and an email to Cheshire County farms in the Cheshire County Conservation District (CCCD) database. The focus groups and interviews were open to any farmers in the county and the Conservation District strove to interview as many different farm types as possible, as well as to get a geographic variety from throughout the county.

The focus groups were in a fish bowl style with agricultural service providers present. Agricultural service providers are non-farming organizations with an interest in promoting the viability of farms from a variety of different sectors. The first focus group was on farm labor and it took place in March 2010 and the second focus group was on infrastructure and it took place in October 2010. The interviews were conducted between November 2010 and February 2011. The interviews lasted about one hour each, and had a mix of open-ended and survey type questions (see Appendix D: Interview Guide).

The project ended with a Community Forum that took place on April 5, 2011. There were approximately 65 people present with a mix of service providers, farmers and community members. The event had a presentation portion, and a small group discussion portion. The notes from the small group discussions are available in Appendix E.

Cheshire County Farms

Cheshire County is located in Southwestern New Hampshire with an area of 707.4
square miles and a population density of 104-people/square mile (US Census Bureau, 2009). According to the 2007 Agricultural Census, there are 419 farms in Cheshire County (USDA, 2009), although there are 145 in the CCCD database. Despite this difference, the variety of farms that participated in the project is a fairly accurate reflection of the distribution of farms in the Cheshire County as compared with the 2007 Agricultural Census. There were farms of different sizes, locations, types and sales that participated in the project. The following information reviews the different farms that participated.

- 5 farmers participated in the Farm Labor Focus Group (see Appendix B: Labor Focus Group Notes)
- 18 farmers participated in the Infrastructure Focus Group (see Appendix C: Infrastructure Focus Group Notes)
- 39 farmers participated in the in-depth interviews (see Appendix D: Interview Guide)

12 farm types:
Vegetable CSAs, Dairies, Vineyards, Apple Orchard, Horse farm, Meat farms, Apiary, Berry Orchard, Animal/Vegetable Diversified, Chickens, Sugaring and Perennials

21 of 23 towns in Cheshire County:
Alstead, Chesterfield, Fitzwilliam, Gilsum, Harrisville, Hinsdale, Jaffrey, Keene, Marlborough, Marlow, Nelson, Rindge, Roxbury, Stoddard, Sullivan, Surry, Swanzey, Troy, Walpole, Westmoreland and Winchester

Farm Size:
- Range from 1 acre to 500 acres
- Average size farm at 80 acres
- 27 of 39 farms are less than 50 acres

Gross Value of Farm Sales:
- Range from less than $1000 to over $500,000
- Average is roughly $110,000
- 19 farms less than $50,000

Participating farms include: Alyson's Orchard, Brookfield Farm, Country Critters Farm, Earth Haven Farm, East Hill Farm, Echo Farm, Edgefield Farm, Fertile Fields Farm, Flying Cloud Dairy, Green Wagon Farm, High Hopes Farm, Hillside Farm, Hodge Podge Farm, Kroka Expedition, Manning Hill Farm, Maple Lane Farm, Milkweed Farm, Misty Mountain Farm, Monadnock Berries, Old Ciderpress Farm, Patriot Farm, Peep Willow Farm, Perpetual Perennials, Picadilly Farm,
Pitcher Mountain Farm, Red Fox Farm, Sawyer Farm, Stonewall Farm, Sunnymance Farm, The 1780s Farm, The Milkhouse at Graves Farm, Tracie's Community Farm, Tri-Wells Farm, Walpole Mountain View Winery, Wellscroft Farm and Windy Hurst Partnership.

**Structure of Report**

The report is broken broadly into two main sections to reflect the main focus of the research, farm labor and infrastructure. For infrastructure, the topics are further subdivided into equipment, storage, processing and distribution. For each topic, there is a section on *needs, challenges and ideas*. The needs sections highlight aspects of farm labor and infrastructure that could potentially be addressed in a more straightforward way.

The challenge sections highlight issues that point to a larger systemic problem and may require more creative solutions. There is also a section at the end of the report that looks at the systems within which Cheshire County is nested, and some of the more systemic impacts that this has on farms in this county.

The ideas sections highlight ideas that came from the focus groups or the interviews and they are recommended as beginning approaches for addressing farm labor and infrastructure needs and challenges. At the end of the report there is a recommendations section, as well as one for suggested further research. The suggestions for future research were mentioned in the interviews, but were outside the scope of this research.

Some sections of the interview were designed to determine the degree to which different components of labor system are a barrier, as well as the likelihood that farmers are to participate in particular ideas if they existed. For those sections of the interview, the responses were on a 1 – 4 scale with 1 being small/infrequent barrier or unlikely to participate and 4 being large/frequent barrier or very likely to participate, depending on which questions they were asking about. There is a graph for each of these three components with the average responses, and throughout the report there is discussion regarding the different pieces of these and refer to average response as well as number of farmers who responded in a particular way.

**Labor Needs**

**Help Hiring**

Some of the farmers we spoke with are in a start-up phase with their businesses, and are in the process of determining their labor needs. Farmers in this part of their business, as well as more established farmers, recognized a need for help with the hiring process. The specific questions varied from farm to farm, but the idea of where to get started was
a consistent theme. There were two main challenges that came up in these conversations and two main suggestions for approaching these challenges and other challenges in starting to hire labor.

The first of the two challenges that came up in a number of the interviews was help with help hiring legally, which included issues such as understanding the regulation and paperwork around workman’s comp. The second was the challenge of recruiting labor. For some farmers, knowing where to find people willing to work is a big challenge and sometimes farmers looking for specific skills do not know the best places to advertise.

There were two main ideas that came from the interviews to address these challenges. The first is a “How to” guide for hiring farm labor. The hope is that this document could provide a farmer with the necessary skills and knowledge to start and execute the hiring process successfully. The other idea was to have a more robust farm classifieds in Cheshire County. These two tools could help farmers who are just starting the hiring process, or who are looking for labor with specific skills.

**Housing for Labor**

Many farmers at the Infrastructure Focus Group (see Appendix C) talked about the challenges that they face with housing their employees. However, in the interviews housing for labor was rated as the second smallest barrier, with an average of 1.88, and the idea of centralized housing was the idea that farmers said they were least likely to participate in, with an average of 1.74. Many of the farmers who said they did need housing for their labor said that they were more interested in finding a way to house them at the farm.

Many of the farmers who said that it was not a barrier either hire employees who already live in the area, or hire employees on such an infrequent/short-term basis that they would not be able to afford to provide housing. Despite the low average rating for housing, there were 9 farmers who said that housing for labor is a large/frequent (4) barrier for them, but only 3 of those farmers said they would be very likely (4) to use centralized housing for labor if it existed.

**Labor Challenges**

**Ability to Pay**

18 of 39 (46%) of the farmers pay their employees at an hourly rate. The other 21 farms either do not employ non-family members, or provide other compensation (such as housing, food and weekly stipend). 10 of 18 farmers start employees at minimum wage ($7.25), but 6 of those 10 have a range that they pay (up to $15.25) depending on skill set and/or how long an employee has been working with the farmer. The highest hourly wage paid by farmers we interviewed is $15.25 and there are three farms that pay some
of their employees at that wage.

The ability to pay workers and the ability to provide health insurance were the two biggest barriers identified by farmers in regards to labor, with average responses of 2.72 and 3.07 respectively. 20 farmers said that the ability to provide health insurance is a large or frequent barrier (4) to their success. There were 8 farmers who said that providing health insurance was a small or infrequent barrier (1), although many of them said that was because they thought they would never be able to provide it, so it was not a barrier they were trying to overcome. The ability to provide workman’s comp, with an average response of 2.66, was the third largest barrier (see Labor Barriers).

These three barriers are linked to the previous challenges and needs discussed in this section, as well as viable career option, which is addressed later in this section. If farmers are not able to pay employees how they would like, it becomes very difficult to retain skilled labor year to year, which compounds with the challenge of finding skilled labor to work on the farms.

Skilled Labor

“You’ve got the opportunity to make $15,000 to $20,000 a year on manual labor or you can go sit behind a computer and make $100,000. What are you going to do?”

In looking at skills necessary for working on Cheshire County farms, two main categories emerged. There is just about an even split between the two categories, the first of which is more traditional farm skills and second is more character skills. The first category of skills that farmers are looking for are general knowledge of farming such as animal husbandry, managing a herd, knowing plants and stacking hay.

The other category deals more with character traits. The words that farmers used to describe what they are looking for are: hardworking, honest, reliable, trustworthy, a positive attitude towards farming and a desire to learn. For each skill category, about half of the farmers describe their labor pool as adequate and the other half say it is not adequate. It is interesting to note that regardless of the skills or character traits farmers
are looking for, they have an equally difficult time finding adequate labor.

Overall, there is just about an even split between farmers who say their labor pool is adequate and those that say it is not adequate (see Adequate labor graph). Access to skilled labor as a barrier had an average response of 2.38. While this barrier has a lower average rating than the responses linked to ability to pay, it is still among the top for barriers for farmers concerning farm labor.

A few farmers mentioned that they had struggled to find adequate labor, but then they started using migrant labor and the people they hired were able to meet all of their criteria. The two programs that were mentioned are H2A and J1 workers. This was only a very small portion of the people looking to hire labor, and certainly not representative of the whole, but important to note because a few farmers were able to address their labor concerns in this way.

**Viable Career Option**

“It’s expensive to hire somebody, especially on the books with workers comp and insurance. On the other side of it, why would you go work at a farm for $8 or $10/hour working hard, when you can go work at McDonald’s and get paid $12/hour and all you do is stand there. If you don’t love it, you’re not doing it.”

The above quote gets at the two-sided nature of the challenge of making farming a viable career option. Working on a farm is hard work, and for many people, the prospect of working that hard without making very much money is a daunting one. However, many farmers are in such a tight spot financially that they are not able to pay farm laborers at a higher wage, and subsequently have a difficult time keeping skilled labor on the farm.

The question of farming as a career path is an important one in addressing farm labor issues. If farm laborers do not see farming as a career path for themselves, but rather a chance to make a bit of money in between other jobs, it becomes increasingly difficult to find farm labor with necessary farming skills and knowledge. Of the farmers who have farm labor working for them, just under half said, from their perspective, less than
a quarter of their employees see farming as a career path. There were only 4 farmers who said that more than three-quarters of their employees see farming as a career path (see Farming as Career Path).

According to the 2007 Agricultural Census, the average age for farmers in Cheshire County is 53.6 (USDA, 2009). It is very important that more young people see farming as a career path so that they can continue to maintain the farms long into the future. As the quote below states, there are many ways to get people interested in farming, and if there was more of an effort to make farming a career path, there might be more young people interested in staying in farming.

“It would be nice if kids had the opportunity to pursue an agricultural career by having agricultural classes in school... All the things that go with a farm, not just, 'this is how you milk a cow’, but also, ‘this is how you run a business.’ That’s something that can attract people too. There’s something for everybody. There’s something for every interest, whether you’re interest in website design, or marketing. As a farmer you have to do all of that. It’s a viable option for anybody, you just have to pitch it.”

![Figure 3 – Labor Barriers](image)

**Seasonality**

Several farmers talked about the challenge of seasonality in regards to hiring labor. Many farmers have trouble retaining labor year after year because they are only able to
hire them for specific seasons. For those that are unable to hire throughout the year, they often need to recruit and train new labor at the start of each season. This appeared to be a challenge mostly on farms that are highly seasonal, such as vegetable farms, or on farms that operate at a very small scale and therefore do not have a lot of overhead for hiring labor.

This challenge is not an unknown in farming, and is not one that can be changed per se. However, it seems there is an opportunity to think creatively about how to address this challenge. Perhaps partnerships between businesses and farms could allow for labor sharing such that farm labor could be employed year-round. At the face of it, this is one of those challenges that could seem beyond the scope of this county, but by finding an approach that works on our scale, this is an issue that could be addressed within Cheshire County.

An example of this from another region is Frog’s Leap Vineyard in Napa, California. They partner with an olive grove so that their employees can be working in December and January, when they do not have work for them at the vineyard (Guzman et al, 2007). While the types of farms are very different here than Napa, California, the idea of sharing labor between two different types of businesses is one that could work well in Cheshire County.

**Labor Ideas**

**Collective purchasing of insurance**

Paying for health insurance had an average response of 3.07, which made it the largest barrier to farmers in terms of labor (see Labor Barriers). It makes sense then, that a program for collective purchasing insurance was tied for first for ideas for labor. The average response was 3.03, with 18 farmers saying they would be very likely to participate (4) if such a program existed, and only 7 said they would be unlikely to participate (1).

There is an example of a program like this in Wisconsin called the Farmers’ Health Cooperative of Wisconsin (http://www.farmershealthcooperative.com/), which allows farmers to purchase health insurance collectively to take advantage of buying power. Many people also mentioned that they would be interested in joining a collective purchasing for workman’s comp as well as health insurance.

**Shared Labor Crew**

The idea of a labor crew shared between farms came up in one of the focus groups. It was presented as one of the ideas to address labor issues, and the average response was 2.71 (see Labor Ideas). While many people were interested in this idea (15 farmers said they would be very likely to participate (4)) many also expressed concerns with the idea.
(10 farmers said they were unlikely to participate (1)). There were two main issues that people could foresee. The first is that many farmers are likely to need help at the same time of year, and for something like haying, on the same day. Additionally, many people were concerned that the labor crew would not be trained to the specifics of their farm, and therefore would be less useful than people trained on their farm.

Educational programs

“I believe that if you are going to try to make New Hampshire sustainable, it’s not so much subsidies, but it’s education. I’d like to see them put more education, not only for young farmers, but also for the public.”

There was strong interest in educational programs both for farmers as well as for farm workers (see Labor Ideas). The preference was for one-day trainings so that people would not need to be away from the farm for much time. Many people indicated that they would be interested in sending their workers to one-day programs particularly if they were targeted at safety (general farm safety, food safety, tractor safety, etc). The average rating for one-day trainings for farm workers was 3.03, and 2.96 for farmers.

For some farmers, attending workshops that they are interested in is not always possible because of scheduling. Some farmers mentioned that they would appreciate access to notes after a workshop that they missed so that they could still benefit from workshops they were not able to attend.

While interest for one-day programs was strong, there was much less interest in a labor-training program offered over several months if the aim was to train people to be farm employees. Many farmers felt that they would rather do on-the-farm training because each farm has their own routines, and they also did not think that they would be able to afford somebody who had gone through a several month training program. Many farmers felt that it could be useful for people interested in starting their own farms, but not for people working as farm labor. This is an important distinction. Since the focus of this research was to determine needs for farm labor, a labor-training program over several months does not fit as well as one-day trainings. However, a program like this could still be very useful in the region for people interested in finding land and starting their own farm.

Several people talked about the importance of linking agriculture to schools so that youth are exposed to agriculture on a more regular basis. There were two main reasons that farmers felt that this is important. The first is that by teaching children about agriculture at an early age, they might be more interested in agriculture as they get older. The other reason that farmers spoke of was to give the public more exposure to agriculture. If the public has a better understanding of what is involved in agriculture in Cheshire County, they might be more willing to pay a higher price for their food, or go
Farm Labor

out of their way to support their neighbor.

Figure 4 – Labor Ideas

Mentor Program
Farmers expressed interest in serving as mentors in a mentor program for new farmers. The average rating for that idea was 2.79, just behind one-time educational programs for farmers. 14 farmers said they were very likely (4) to participate in such a program if it existed, and 7 farmers said they were unlikely (1) to participate. For many of the farmers who said they were unlikely to participate, they felt that they either did not have enough time to devote to such a program, or felt that they needed more farming experience themselves before they were able to serve as a mentor. A mentor program could be a good way to help develop stronger farmer networks, as well as help encourage young people to get started with the help of more experienced farmers.

Service Providers Assistance with Labor Needs

The majority of responses fit into three main categories for how farmers said agricultural service providers could be helpful. The first category, which had slightly less than a quarter of the responses, was for help with insurance, which included health insurance, workman’s comp and liability insurance. The second category, which had just over one-quarter of the responses, was related to attracting skilled labor, and finding farm laborers who are interested in farming as a career. The third main category, which had fewer responses than either of the previous two, was about government regulation
and government reporting.

The chart at right shows interest in Natural Resources Conservation Service (NRCS) programs. The responses shown in the chart are from 28 farmers. The two programs that farmers are most interested in participating in are ones related to waste and manure handling, forestry.

**Equipment Needs**

**Rental**

Equipment is an important part of infrastructure, and many farmers need more equipment than what they currently have. 28 of 39 (71.8%) farmers said that they need more equipment than they have, and 26 of those 28 (92.9%) said that the expense of the equipment was the reason that they did not have that additional equipment. Of the four ideas presented as options in the interview for helping farmers get equipment, renting equipment from a non-farming entity was the most popular idea with an average response of 3 (see Equipment Ideas).

Farmers said that they liked the idea because a rental organization would be responsible for maintenance and scheduling. There were 19 farmers who responded that they would be very likely (4) to participate in an equipment rental program if it existed, and only 6 farmers who said that they would be unlikely (1) to participate. Northwest Agricultural Business Center (NABC), located in Washington State, has a successful program renting a mobile poultry-processing wagon (Northwest Agricultural Business Center).

There are certain types of equipment, such as haying equipment, that many people were not inclined to rent because everyone will need it on the same day. However, there were many pieces of equipment that people mentioned they would be interested in renting on a daily basis. The type of equipment that people want to rent is equipment that is not weather dependent (such as Haying equipment) and they would use infrequently so they do not want to buy it.

Examples of rental equipment:
- Processing wagon
- No till drill
- Soil test kit
- Honey extractor
- Wood splitter
- Manure spreader
- Posthole pounder
- Potato digger

The other ideas for equipment were creating a farmer equipment cooperative (2.24), sharing equipment (2.25) and borrowing equipment (2.35). Many farmers felt that with an equipment cooperative, it would be difficult to know where to store equipment, and who would be ultimately responsible for the equipment, as opposed to renting equipment. Many farmers also felt that sharing and borrowing equipment was risky, because there is a high potential to damage relationships between farmers if something happens to the equipment. That being said, several people mentioned that they do currently share particular equipment with neighbors.

Figure 6 – Equipment Ideas

Mobile repair service
Some farmers mentioned that the time and expense required to maintain and fix equipment is a challenge for them. A big part of the difficulty with equipment repair is taking the day to transport the equipment to a place to get fixed. Many people were interested in having an equipment repair service that would travel around to the farms (see Equipment Ideas). The average rating for that idea was 2.38, which was the second
highest for infrastructure ideas, following behind renting equipment.

**Storage Needs**

**Increased Storage**

33 of 37 (89.2%) farmers currently have storage for their products, but 20 of 38 (53%) farmers need more storage than they currently have. The types of storage needed vary depending on the farm, but freezer space and some sort of temperature and humidity controlled storage were the two types in highest demand.

<table>
<thead>
<tr>
<th>Farm Type</th>
<th>Cold, moist</th>
<th>Cool, moist</th>
<th>Cool, dry</th>
<th>Warm, dry</th>
<th>Warm, moist</th>
<th>Freezer</th>
<th>Refrigeration</th>
<th>Cheese cave</th>
<th>Hay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fruit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruit</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apple</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apple</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meat</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meat</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Meat</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meat</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meat</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Horse</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Veg</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Veg</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Veg</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Veg</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Veg</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Veg</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Veg</td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dairy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dairy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Dairy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dairy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dairy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>7</td>
<td>5</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>
The table above shows a breakdown of storage needs for the 20 farmers and shows farm type, which demonstrates the clear link between type of farm and type of storage needed.

Storage and Market Expansion
The table below shows the relationship between farmers need for storage and their interest in expanding their markets. The strongest relationship shown is between the need for storage and interest in expanding markets. While this does not necessarily indicate a causal relationship, it is interesting to note that almost three-quarter of the farmers who indicated that they need more storage are also interested in expanding their markets. Currently, the local food market meets 6% of demand in New Hampshire (Magnusson, Gittell & Carter, 2007). In order to increase this to a higher percentage, it will be important to look closely at these issues.

Since increased storage may allow farmers to access a greater variety of markets, as well as increase the length of time in the year that they can access markets, it is possible that helping farmers increase their storage could also begin to help them reach new markets.

Table 2 - Storage and Market Expansion

<table>
<thead>
<tr>
<th>Interest in Expanding</th>
<th>Need Storage</th>
<th>Do not Need Storage</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interested in expanding</td>
<td>14</td>
<td>9</td>
<td>23</td>
</tr>
<tr>
<td>Not interested in expanding</td>
<td>6</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>20</strong></td>
<td><strong>18</strong></td>
<td><strong>38</strong></td>
</tr>
</tbody>
</table>

Storage Challenge

Location of Storage
There was a relatively low level of interest in using shared centralized storage. The average response was 1.66 (see Storage and Processing Ideas). 9 farmers responded that they would be likely (3) or very likely (4) to use a centralized storage facility if it existed. 24 farmers responded that they would be unlikely (1) to use such a facility if it existed, however only 10 of those farmers indicated that they needed more storage. For the farmers who said that they needed storage but were unlikely to use a centralized storage facility, they said that they would like more storage on their farm.

Less than one-third of the farmers interviewed are willing to drive off the farm for collective storage facilities, although, of the farmers who need more storage, half of them are willing to drive off the farm for storage facilities. The average distance that people are willing to drive is 18 miles, although the range of responses was 5 – 40 miles. One of the farmers who needs more storage but wants it on the farm mentioned that they
could really benefit from engineering help with storage on their own farm. A concern that one or two farmers raised was about cross-contamination if their products were stored with other farmers’ products.

Figure 7- Storage and Processing Ideas

**Market expansion**

Over half of the farmers interviewed are interested in expanding the markets that they currently sell to. The figure below shows the breakdown of farmers currently selling to eight of the nine options presented in the interviews, as well as the number of farmers interested in expanding to each one. The option of on-site farm stands is not included in the graph because every farmer who said they were interested in expanding their farm stand currently has one.

There are currently 22 farmers who sell who sell from an on-site farm stand, and 8 of those farmers are interested in expanding their farm stand. For some of those farmers, they actually want the on-site farm stand to be their only market because of the flexibility that it would give them to be on the farm more. However, the farmers interested in cutting back to just a farm stand are currently not able to sell enough just through a farm stand to be able to do that.
For the interviews, we separated grocery stores and retail food co-ops, although they are both retail markets, because we recognized that they could differ in scale and relationship with the farm. Three of the farmers interested in expanding to grocery stores and retail food co-ops overlap, although there were still a few people who preferred a traditional grocery store or a retail food co-op. Many of the people who are interested in expanding to a retail food co-op specifically mentioned the Monadnock Community Market (a retail food cooperative coming to Keene, NH).

Some farmers are also interested in expanding their markets through use of the Internet. 12 of 33 (36%) farmers said that they currently use their website for sales, or would be interested in joining an e-commerce platform to increase sales through the Internet.

![Figure 8 – Current Markets and Expansion](image)

**Shared transport**

The average response to the idea of using shared transport for distribution was 2.09 (see Infrastructure Ideas). There were 13 farmers who responded that they were likely (3) or very likely (4) to use such a service if it was available. Many of the farmers that were interested said that they would like to share transportation with farmers in their area, rather than use a non-farming distribution service.
There were 20 farmers who said that they were unlikely (1) to use shared transport if it existed. There were a variety of reasons that farmers cited for being unlikely to use shared transport. There were three main reasons that people were not interested, which were that the farmers currently have a CSA style distribution that they arrange with their CSA members, they sell their products through a wholesaler, such as Organic Valley, or they only sell on the farm. There were a few farmers who mentioned that it was not worth it for them because of the challenge of coordinating logistics with other farmers.

**Distribution Ideas**

There were a few farmers who said that they were joining up with other farms to do a joint CSA style distribution. Since this was not part of the interview, it is difficult to say how much interest there is in this idea, but it could potentially help different types of farms market together to reach the direct to consumer market. There was also one farmer who expressed interest in joining with other farmers to transport products to the Boston area to sell products there.

**Processing**

**Value-added Products**

16 of 39 (41%) farmers currently produce value added products. 10 of 23 (43%) farmers not currently producing value-added would like to start. 2 of 16 (12.5 %) farmers currently producing a value-added product, would like to produce a new type. This graph shows data for the 12 farmers interested in starting, or expanding, production of value-added products. Figure 9 – Interest in Value-added

Value-added processing for dairy is the most popular option, and the second most popular option is processed meats. For over three-quarters of the people interested in starting to produce value-added products, the major barrier is lack of infrastructure; for cheese specifically it is processing equipment and access to a cheese cave. 6 of 7 farmers interested in producing cheese say infrastructure is a barrier for them. The other two barriers to producing value-added products are lack of time and expense of getting started, which were true for about half of the farmers interested in starting to produce value-added products.
There was relatively low interest for a centralized processing facility, with an average response of 1.83 (see Storage and Processing Ideas). 9 of 26 (35%) farmers currently producing value-added products, or interested in starting to produce value-added products, said they were likely (3) or very likely (4) to use a centralized processing facility. All other farmers responded that they were somewhat likely (2) or unlikely (1) to use such a facility if it existed.

**Service Providers Assistance for Infrastructure Needs**

“One of the things that I think, from having worked on farms, that would be helpful would be training farmers to setup better infrastructure on their farms; more efficient packinghouses for vegetables or prepping products for market. Figuring out ways to make that work more efficiently on farms.”

There were many different responses for how agricultural service providers could be helpful. There were three main categories that about half of the responses fit into, and then there were several responses that did not fit into one of the larger categories. The three main categories, each with about an eighth of the responses, were storage, equipment and marketing and distribution. Some of the other responses were help with land, help with grants, increasing public awareness, low interest loans, cheap power, a facility to prep for markets and cooperative purchasing of hay.

**Social Infrastructure**

While the focus of this research was on physical infrastructure, we did have a few questions that were targeted at social infrastructure – the social networks that provide support to farmers.

**Agriculture Commissions**

Agricultural Commissions are created on the municipal level through town meetings by passing a local bylaw (Merrill, 2007). The purpose of an agricultural commission is to protect farming on the municipal level through protecting agricultural lands, preserving rural character, providing a voice for farmers and encouraging agricultural
businesses (Merrill, 2007). Five towns in Cheshire County currently have Agricultural Commissions – Fitzwilliam, Marlow, Richmond, Harrisville and Nelson.

In our interviews we were interested in determining the level interest in other towns in Cheshire County for starting Ag Commissions. Overall for farmers in towns that do not currently have agricultural commissions, 12 of 22 (55%) are interested in starting one. The remaining 10 farmers were either not interested, or not sure of their interest level. There were 8 towns where at least 1 farmer said they were interested in starting an agricultural commission – Gilsum, Keene, Sullivan, Troy, Walpole, Westmoreland and Winchester.

One place where Agricultural Commission can be helpful is with local policies that pose barriers to farms. Roughly half of the farmers interviewed said that there was at least one local policy that posed a barrier to their operation. The policies that are barriers differed by farm type and location, but 4 people said taxes were an issue and 2 people said sign laws were an issue.

**Farmer Networks**
The issue of ways for farmers to connect to each other came up in the Infrastructure focus group (see Appendix C: Infrastructure Focus Group Notes). At that focus group several farmers mentioned that they would like additional ways to connect with each other to facilitate coordination and cooperation between farms. In our interviews, we found that 11 of 25 (44%) farmers are aware of online farmer networks, such as e-mail list serves. 16 of 25 (64%) farmers are interested in joining a network or are currently part of one, which includes 6 of the farmers who were not previously aware of networks to use.

**Farm Infrastructure Matrix**
Land For Good, a non profit based in Keene NH, had personnel survey existing capital infrastructure by type and usage, evaluating its status as “LO, MED, HI.” Input was obtained by means of a stakeholder meeting at which some 20 individuals and organizational representatives participated. Please see Appendix F. Farm Infrastructure Matrix.

**Recommendations**

This report has highlighted farm labor and infrastructure challenges and needs identified through this research. Some of these challenges and needs have more straightforward recommendations, whereas some others require taking a systems look at how these different issues are connected. These recommendations are suggested as a place to start addresses these needs and challenges. Those recommendations from interview findings are referenced in earlier portions of the report, and have references to page numbers. Others of the recommendations came from the Community Forum and reference Appendix E for full detailed notes from the Forum. As well, the recommendations for labor are connected to the
Sustainable Labor System report in Appendix A.

**Labor Recommendations**

1. The first recommendation for labor is more structured help with hiring (page 8). This applies to farmers who are just establishing their businesses, but also with farmers who have established businesses, but are struggling to find adequate labor. For farmers who are just starting this process, it would be good to have a “How To” guide for hiring that allows them to successfully start and execute the hiring process. For farmers who are struggling to find adequately skilled labor, there are two approaches that could be helpful. The first idea came from an interview, and it is to create a more robust farm classifieds in Cheshire County. The second idea came from the Community Forum (see Appendix E) and that is to have a central hiring agency where all farm workers looking for work could apply. The hiring agency would be able to match appropriately skilled workers with farmers, and farmers would be able to focus more on farm work.

2. The next recommendation came from the Community Forum (see Appendix E) and it is for a labor sharing program through seasons, maybe with another seasonal industry such as ski report. Many farm workers have a difficult time finding income in the off season, and as a result they do not necessarily go back to the same farm year after year. This is difficult for farmers because it means that they have to find a train new employees each year. If there was an established program to help place farm workers in the off-season, there is a greater chance that they would be able to return to the same farm year after year. There is an example of a similar program in Napa California where there is a partnership between a vineyard and an olive grove (page 13).

3. The third recommendation is access to health insurance. Many farmers cited ability to health insurance as a large barrier (page 10). There was strong interest in a program for collectively purchasing insurance to make it more affordable (page 13, Appendix A). In order to make farming a more viable career option, it is important to make access to health insurance more affordable. Wisconsin has a program called Farmers’ Health Cooperative of Wisconsin (www.farmershealthcooperative.com) which allows for collective purchasing of health insurance to reduce costs.

4. The fourth recommendation is more one-day educational programs for farm workers and farmers (page 14). There is strong interest in these programs, particularly programs that are gear towards safety (tractor safety, food safety and general safety).

5. The next recommendation is to create a mentor program where experienced farmers can mentor new farmers (page 15). There was strong interest from farmers interviewed to serve as mentors to new farmers. This could really help with getting new farmers started in the process of farming. The challenge is to figure out how to structure it so that it works around farm schedules, which might mean that it only runs in the winter, or in slower parts of the year.

6. The final recommendation for labor is creating a stronger connection between schools and farms (pages 12 & 14). There are many reasons to create a stronger link between farms and schools. In terms of farm labor, if children are introduced to agriculture at an
earlier age, there is a greater chance that they will be interested in agriculture as a career option. Additionally, there is huge value in connecting children to agriculture so that they grow up with an understanding of where their food comes from, and so that their parents are exposed to it if they have not been before.

Infrastructure Recommendations

1. The first recommendation for infrastructure is to create an equipment rental program that is facilitated by a non-farming entity (page 16). Many of the farmers interviewed have equipment needs beyond what they currently have, and renting from a non-farming entity was the most popular idea for how to address this issue. From the Community Forum (see Appendix E) there was an idea for creating an equipment sharing program such as Green Start (http://www.greenstartnh.org), a program in the Seacoast Region of New Hampshire that has an established equipment sharing program.

2. The next recommendation is to increase access to storage, both on the farm and off the farm (page 18 & Appendix E). About half of the farmers interviewed need more storage than they currently have and this is an important issue to address. There is a need for both storage on farms as well as centralized storage that is shared between farms.

3. The third recommendation is to create a communication network for shared transport between farms (page 21). Additionally, it would be a good idea to look at existing distribution routes to see if there is an opportunity to connect farmers with what already exists (see Appendix E).

4. The final recommendation for infrastructure is to create a shared resource for cheese processing in Cheshire County (page 22). There is strong interest in starting to produce cheese from a number of farmers in the county, and the major barrier is lack of infrastructure. Creating a resource for farmers to use at a low cost could provide farmers with a means to access markets that they do not currently have access to (see Appendix E).

Limitations of the Study

The limitations for this study are linked to budget and time. With more time, we could have interviewed more farmers to gain an even larger sample. With the time available, 39 of 145 (26%) farmers from the CCCD database participated in the interviews. However, according to the 2007 Agricultural Census there are over 400 farms in Cheshire County. Hopefully, the CCCD will continue to grow the database so that there is a greater pool to pull from for the next study. Additionally, there is always more information to gain from reviewing results of interviews, especially interviews of a qualitative and quantitative nature.

Another limitation was the self-selecting nature of the participants. We only got the perspective of people who were willing to participate in an interview or focus group, so we do not know the barriers and challenges of the portion of the population that was not interested in participating. Because we had diversity with farm type, location, sales and size
of farm, we hope that our sample is representative of the whole, but it is always an important thing to consider when reviewing results.

The third limitation is related to the larger systemic issues in the next section. We were focused on farm labor and infrastructure, which together cover a wide range of issues for farmers, but there were other issues, such as those mentioned in the next section, that we did not address on a large scale. Some farmers mentioned the impact that these issues have on their operation. However it was not a formal part of the interview so it is difficult to determine the degree to which these issues are a barrier overall.

**Larger Systemic Issues**

The focus for this study was Cheshire County, New Hampshire and many of the issues that were discussed in the interviews are issues that can be addressed on a local scale. However, it is important to recognize that Cheshire County is nested within several other systems of increasing complexity, such as the state of New Hampshire, the Northeast Region and the US as a whole.

Some of the issues that came up in the interviews, such as the federally regulated price of milk, are outside the area of influence for people in Cheshire County, however has a direct impact on many farmers here. It is important to recognize this because while the challenges and barriers discussed in this report are impacting the farmers in this county, there are additional barriers coming from outside the county that are also impacting farmers.

Educating the public is another issue that can be dealt with to some degree on a local scale, but is intertwined with all the different systems Cheshire County is nested within. Increasing awareness of the challenges of agriculture, and the importance of personal connections to our food sources is something that needs to be dealt with in all parts of the country. This is not to say that Cheshire County cannot begin to address this issue on a small scale, but just to say that there is an opportunity to work on a larger scale to begin addressing this issue.

**Suggestions for Future Research**

Throughout the interviews there were times when farmers mentioned an issue that was impacting their operation, but that was outside the scope of our research. Those topics are mentioned here as suggestions for future research in Cheshire County, and on a larger scale.

- Renewable energy
- Beekeeper support
- Marketing
- Soil maintenance
- Paperwork/office work
- Finding land
Appendices

Appendix A: Sustainable Labor System
Appendix B: Farm Labor Focus Group Notes
Appendix C: Infrastructure Focus Group Notes
Appendix D: Interview Guide
Appendix A: Sustainable Labor System

Introduction

A component of the research for this project was looking at the idea of creating a sustainable labor system in Cheshire County, New Hampshire. To explore this issue in greater depth, this document will look at several components of our labor system, and provide recommendations for how to create a more sustainable labor system in this county. First, it will review the current agricultural labor system in the US and look more specifically at New Hampshire and Cheshire County. Then it will explore the idea of a sustainable labor system and review a few examples of regions that have started to define this. Additionally it will review innovative approaches others are taking and assess which could work locally. Finally, it will look more closely at what a sustainable labor system is for Cheshire County and conclude with some recommendations for making this a reality.

Agriculture has always been a low margin business, making it difficult for farmers and their employees to earn a fair wage from the land. There are many economic factors that play into this, such as cost of land, equipment and low prices for products. If we are able to create a more sustainable labor system – one where farm workers and farm owners are fairly compensated for their work, and farm owners are able to rely on consistent labor at the appropriate skill level – we will be able to increase the economic viability of farms in our region, and create a stronger food system overall.

Current labor system in US

Hired farm workers make up one third of the approximately three million people who work on farms in the US (Kandel, 2008). Those farm workers are more likely to have gaps in employment than other wage and salary earners, as well as less likely to have other opportunities to earn outside income (Kandel, 2008). In addition to this, median weekly earnings for full-time farm workers are 59% of all wage and salary earners in the US, with the median for hired farm workers at $400/week and all wage and salary workers at $670/week (Kandel, 2008).

The unemployment rate among farm workers was the highest for all major occupations in 2006 (Kandel, 2008). A factor in finding outside work could be due to the educational attainment level of farm workers. In 2006, 20.7% of farm workers in the US (both citizen and non-citizen) had some college. In the same year, 58% of all wage and salary earners in the US (both citizen and non-citizen) had some college (Kandel, 2008). This educational difference likely plays a part in the difficulty in finding off the farm work in the off seasons.
One of the concerns addressed by Bottoms, Smith and Wolfe (2009) is that farming is not seen as a career, meaning that it is difficult to keep sufficient skill in farming. The implication of this is that farm owners have a hard time relying on the same workers year to year, and spend a significant amount of time training new staff. With statistics such as those above, that situation is unlikely to change in the near future. The situation extends beyond monetary compensation. Farm work is one of the most dangerous professions in the US and many farm workers and farm owners are without health insurance (Kandel, 2008). Part of the difficulty in addressing many of these issues is that nearly one half of all farm workers in the US are here illegally (Kandel, 2008). This is a major challenge because they do not have a voice in advocating for themselves, so they are unable to provide pressure to change the system.

New Hampshire

Agricultural wages in New Hampshire are low, as in the rest of the US. In 2007, 15% of New Hampshire’s workforce was employed in food systems and the average annual wage was $17,217, which is 60% less than overall average annual wage in New Hampshire (Magnusson, Gittell & Carter, 2007). This statistic is for all food systems work, which includes food service as well as agriculture. Magnusson et al (2007) state that the average annual wage in local agriculture is $6,220, which is 85% less than the average wage in New Hampshire. The result of the low wages is that in 2007 70% of farmers in New Hampshire engaged in off-farm work (Magnusson et al, 2007). This situation creates a pattern that is difficult to break. If so many farmers need to work off the farm to be able to provide for their families, it is difficult for them to invest in their operation to a point where they can make enough for themselves, and pay their employees well.

Cheshire County, New Hampshire

According to the 2007 Agricultural Census, there are 4,166 farms in New Hampshire and 51% of those farms are 49 acres or under (USDA, 2009). Cheshire County is experiencing a growth in number of farms, while also a decrease in the average size (USDA, 2009). As Cheshire County’s farm landscape has changed to include more small farms, the average market value of products sold has also decreased from $38,110 in 2002 to $36,768 in 2007 (USDA, 2009). With farms earning less, it becomes more difficult to fully compensate workers as well as allow farmers to earn a living.

According to the New England Agricultural Statistics (2009), the average wage in 2009 in New England for field and livestock workers was $10.85/hour. Specific to Cheshire County, Glasmeier (2010) stated an average of $13.81/hour, but that is for forestry, fishing and farming, so it is difficult to compare the two wage rates. While the information from New England Agricultural Statistics may be more relevant because it
is specific to field and livestock workers, Glasmeier’s wage is specific to Cheshire County. Either way, they begin to give us an idea of average wages for farm workers in Cheshire County.

Below is a table from the Living Wage Calculator from Poverty in America, which is specific to Cheshire County. For this tool, Farrigan & Glasmeier (n.d) define a living wage as taking into account basic needs that the poverty wage does not, such as health insurance and child care, but does not allow for saving for the future, or recreational use of money. While this estimate is a step up from the poverty line, it is still just meeting basic needs. With this in mind, looking at the table below (Glasmeier, 2010) we see that farm workers, by either estimate, are above the living wage for one adult, but below the wage if any children are included.

<table>
<thead>
<tr>
<th>Hourly Wages</th>
<th>One Adult</th>
<th>One Adult, One Child</th>
<th>Two Adults</th>
<th>Two Adults, One Child</th>
<th>Two Adults, Two Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Living Wage</td>
<td>$8.76</td>
<td>$16.09</td>
<td>$12.81</td>
<td>$20.12</td>
<td>$25.62</td>
</tr>
<tr>
<td>Poverty Wage</td>
<td>$5.04</td>
<td>$6.68</td>
<td>$6.49</td>
<td>$7.81</td>
<td>$9.83</td>
</tr>
<tr>
<td>Minimum Wage</td>
<td>$7.25</td>
<td>$7.25</td>
<td>$7.25</td>
<td>$7.25</td>
<td>$7.25</td>
</tr>
</tbody>
</table>

Through our interviews, we have some more specific information about hourly wage in Cheshire County. 18 of 39 (46%) of the farmers we interviewed pay on an hourly rate. The other 21 farms either do not employ non-family members, or provide other compensation (such as housing, food and weekly stipend). 10 of 18 farmers start employees at minimum wage ($7.25), but 6 of those 10 have a range that they pay (up to $15.25) depending on skill set and how long an employee has been working with the farmer. The highest hourly wage paid by farmers we interviewed is $15.25 and there are three farms that pay some of their employees at that wage.

**What is a Sustainable Labor System?**

A few regions have started to define what a sustainable labor system means for them, and this information is incredibly helpful in thinking about what a sustainable labor system looks like in Cheshire County, New Hampshire. Guzman, Runsten, Strochlic, Garza, McIntyre & Mason (2007) and Bottoms et al (2009) have looked into this topic for California and Albemarle and Fluvanna Counties in Virginia, respectively.

Guzman et al (2007) identified priority elements for a sustainable labor system in California:

1. Living wage – Farm worker recommendations for wages were $12-$20/hour. Living wage potentially can be achieved via a combination of production and market-based strategies. Production strategies are those that owners and
workers can both do to promote year-round work. Market-based strategies include options such as a domestic fair trade or other ways to recognize good labor practices.

2. Legal status – The lack of legal status can cause many problems for farm workers and owners. Suggestions include ways to simplify or expedite the legalization process.

3. Access to health care – This is a major issue among farm workers and owners. Potential strategies include tax cuts to growers for health insurance and group plan so that rates are lower because there are a larger number of payers.

4. Worker health and safety – Increased training and enhanced regulation could help with this issue.

5. Healthy agricultural communities – There are many elements that are important in creating healthy communities such as housing, environment and recreation, planning for the future and civic engagement.

Bottoms et al (2009) identified three indicators and foundational concepts in a sustainable labor system:

1. Education – For farm workers and owners (potential and experienced) as well as for youth. There is a need to teach children about agriculture at an early age so that it can be viewed as a viable career path.

2. Labor recruitment and retention – Networking resources for farm owners as well as farm laborers. Labor retention is also an issue, which means that workers are reliable enough and stay for long enough to make it worthwhile for owners to train them.

3. Worker conditions – Compensation (wages, housing, farm products and/or benefits), physical access to job sites and access to legal council and other social services and safety training and safe work environment are all important components of worker conditions.

**Recommendations**

Looking both at the results from our research in Cheshire County as well as research done in other regions, there are a few areas that require attention in order to create a sustainable labor system in Cheshire County. It is important to figure out how to provide a living wage to farmers as well as farm workers. This has an impact on so many other aspects of people’s lives, that it should be a priority.

The next issue is access to health care. To create a labor system where people are fairly compensated for their work, it is crucial to create a system where farmers and farm workers have access to health care. This has an additional importance because of the dangerous nature of farm work.
The third important piece, which is closely linked to the previous two, is making farming a viable career option. This is important for bringing young people into the profession, but also in order to increase the public awareness regarding the nature of agricultural work. Many of the issues discussed in this report highlight the slim financial margins that many farmers are working with. If there is increased public awareness around the challenges of farming, perhaps people will be willing to pay more for food from their local area.

What is really important in thinking about a sustainable labor system is taking a holistic view to this challenge. All the pieces of this are connected, and each has an impact on other parts of this system. While some issues can be addressed in Cheshire County, there is also a need to look to the larger systems that Cheshire County is operating within. It is possible to create a sustainable labor system here, but it will require engagement from many different sectors in order to make it a reality.
Appendix B: Labor Focus Group Notes

Monadnock Farm Focus Groups
Labor and Housing

Keene Public Library
March 11, 2010

1.) How many employees do you currently have?† Please explain why this is or is not the right number to ensure the success of your business?†

- We employ 2 people for 10 months and just hired an assistant manager, 6-8 seasonal employees including 2 interns from May-November. They have a house that houses 5 interns. Needs more managerial help—now, she does bookkeeping. Have a mix of Spanish speaking and gringo crew, half and half. Work that out by having bilingual workers. June – August = biggest crunch.

- I work all year, office in off season, never enough help. Hires 4 full time people starting in March – end of November. She would rather not do business side of things. Just turned farm into an LLC, lawyer would have been too expensive, so she tried to do it herself. Does all of her own taxes. It would be nice to hire more people—would be a lot less stressful. It is hard to get the same people to come back year after year. There is always more you can do.

- 2 people who work for her, but they only work 2 days a week for 4 hours a week each (this time of year). The growing season is much more intense. When I got Lyme disease and could not do any work, so both women gave as much time as they could to help get the fruit in.

- The main problem for our business is labor. We employ 46 people, very transient—a lot of them have baggage and problems. Some teenagers and other employees bring a lot of baggage. I like school teachers, 3-4 unemployed people. Advertise on Craig’s list, but most people live too far away. When they come, they don’t like heat and bugs and go away after a day or two. We are not large enough to employ many full time folks (it’s just my wife and I), but we need lots of labor in the harvest season. Now, I prune on my own. It is a hard job to get people to work in the cold too. Wife controls the garden center, cash registers at farm stands. Do 6 farmer’s market/week and run 3 farm stands. The problem is you can’t trust people with money.

2.) What are your challenges when it comes to hiring, training, motivating, maintaining, and directing your employees/interns? Or understanding employment laws?
- Currently learning employment laws—last year was the first year she had official employees, workman’s comp., and it was amazing how many things she realized how many little things you haven’t done. You have to have a safety manual, labor training, have a quarterly meeting, etc. If there is a lot of turnover, it can be a huge problem—3 of the 4 people are new. Go on NH Department of labor page and it is all there, so you have to shift through it. There are so many people that think they want to farm, but they don’t know what to to. It took me years to learn how to interview—to judge if people will really be good workers, and not need a lot of direction and be as efficient as possible. Managers want to make a lot of money, and I can’t afford to hire them.

- Thinking about more technical pieces, I am surprised to learn all of the things that happen. I have concerns with OSHA and the I-9 handbook, and so many questions about filling out the I-9 sheets. I went to an I-9 workshop, but there were only larger businesses there with full time employees. I would love to have a training re: compliance of I-9 tailored for farmers specifically.

- One of her employee has helped her for 14 years, and the other is a daughter of friends. There are so many people who think they want to work on an organic farm, but they can’t.

- All people who come to work on the farm fill out a form and get references. “There is a place for the alcoholic picking berries—there are very flexible hours.” The only thing is, you have to have to pick a lot of berries and you need a lot of workers to get the flats ready on time to sell to Whole Foods Market. Some pick, some work in the farmstand, some do both. If officials looked at the way we run our business, they’d probably put me on the boat back to the old country. In England, they have a group of Eastern European students, and you pick up the phone and say: “I want two guys for 5 days.” My brother uses them for pruning and harvesting. You have to pay them a lot per hour, but you don’t have to pay for taxes, housing. IDEAL= Have a labor pool you can draw from all year. We were a big teenager employer, but now we’ve gone into the school teacher pool, which is much better.

- Just hired our first full-time, year-round employee and wanted to provide her with health insurance, but it became risky to be able to include a third employee in their LLC health insurance group, so we ended up just offering a health insurance stipend. Many interns from Massachusetts are asking about health insurance because they come from Massachusetts, where it is more accessible, affordable.

- What if you focused on finding better people who are more efficient?

3.) What kind of work are you looking for additional employees to do? Things to think about: Are you interested in hiring temporary/seasonal employees or are you
looking for year round employees? Fulltime or part time? Contract?

- Wants part-time workers harvesting, working in farm stands. It is easier to get employees to work in the green houses—it is warm in the spring, and it is nice work, more precise, you get a different type of worker on the garden center.

I do the book work for our business, but I’m too much of a control freak, old fashioned, so I’ve always done the books. I get behind in the summer, but I do keep the bills paid. In the winter, I fill the back of the car with paper and do all of the bookwork down in Florida for 2 months.

- Needs more hands to pick berries. I put all of the bills/paperwork in envelopes during the season, but does paperwork in February.

- Would love to have a tractor mechanic and summer weed/harvest crew.

- In the winter, I have time to do HR and logistical stuff, and then carry it through the summer. It is hard to let go of that stuff, as much as I’d love to. You need to be on top of where your business is so you can make good decisions.

- If any businessperson looked at my business they’d say: “You’re out of your mind.”

- We get asked to do stuff a lot for school groups now, but it is challenging to find time and figure out how to be a part of the community as well.

4.) What has kept you from adding on more employees to your team? What resources/infrastructure would take those barriers away?

$$ for everyone.

- A labor exchange is useless. Maybe have a list that people put their names on—a local, central organized list for people to put their names down, so we could call on them if we needed more employees. Craigslist is too loose. Many people use word of mouth for finding workers.

- Uses ATRA and NOFA Massachusetts lists. Generally, these lists attract college students who want to get experience. Not being able to offer full time work is a barrier—I have questioned if I have to come up with another business in the winter to keep them?

- This is a low profit business. On our farm, we harvest and sell from April to January. If we could afford to invest in hoop housing, the next step would be putting in this
infrastructure to support a year round market, and help hire year round workers. For our business, we keep a focus on our prices--we think about where we can sell, and where we can’t, so we look for where we get the best prices for our produce. I’d love to be able to offer this more to other people.

There continues to be a difficult disconnect between selling our carrots and paying for our mortgage.

- I pay my employees more than I pay myself. The low cost of food in our country is hard. The people who are telling the farmers stories right here: MFCC here and Local Heroes in MA, are helping to get the word out about farmers.

5.) What wages, housing, and benefits can you currently offer to employees?††

- Pay $15 hour, give them food, but no benefits.

- We have a camper trailer with a kitchen in it and we give lunches, and everyone who works on the farm gets a share. If they live on the farm they get paid $7.25/hr. If not, they get $8/hr. If you look at workman’s comp, etc., they get paid more than I do. I want to offer myself more than that. I am getting more tired of this--I want to start a family, to pay more to my workers, but the work and expenses never ends, because you always see more that you need.

- I am getting smaller now—my body can’t do it any more. Now, I go to Farmer’s Markets every once awhile in Boston, I used to go multiple times a week. I love the Keene Farmer’s Market. My husband built the house, put in the PV system. In 25 years, Ralph and I have been away for 2 nights—we have put everything back into the farm. For us, health insurance would be $2,000 a month.

- Ouray range is from minimum wage,8/hr, to $15/hr high range, and $20/hour for pruning. If you are a good picker, you can make up to $20/hr. Workers get 50% off of farm stand goods. We don’t offer medical insurance or benefits. If they sell more at the Farmer’s Market, they get commission.

- 30% of our budget is for labor. Our full time staff member gets paid $500/wk and health insurance stipend. Field crew/staff earn between $9-13/hr and offer a $.50/hour raise in the fall for workers that stay on the whole time. Other employees get a week sick time.

6.) What would you like to see agencies provide in terms of training needs?

- A farm safety training for new workers every year would be great. In NY, had a guy
do one from Cooperative Extension. A compliance workshop (OSHA, I-9 workshop) would really help.

- A workshop about hiring employees would be great. Teamwork, motivating training would be great—how to keep people motivated to be efficient.

- I like employing people that have had experience in retail—it is great to have someone who is good at selling and business and marketing.

- I have acted as a babysitter and it would be great to not do this.

7.) How are food safety issues and GAP affecting you all?

- I don’t see a problem because we already have the same standard of practices, but you do have to take more records. I’ve always thought this country is pretty lax with rules.

- I get inspected twice a month as it is, which I have to pay for.

- We put up everything we grow in a USDA certified kitchen, so I already get checked on.

- I take the *wait and see* approach. I think the legislation is just now happening. I think there will have to be more separation—i.e. barn cats from veggie washing. We sell across state lines, so it could make us jump through extra hoops. I try to support the groups that are doing the lobbying work.

8.) What are the housing opportunities employees or interns can afford on the wages you currently offer them? What housing opportunities can you offer employees or interns on or near the farm?

- Both employees have homes, so housing is not an issue.

- A year ago, we had done campers on the farm and having interns live on part of the house—but we realized we needed separate housing. We didn’t have the infrastructure set up on the farm and having interns interacting with our young children became an issue. Farm Service Agency provides a program for helping with this. We purchased a foreclosed home that laborers can live in—we are still figuring out guidelines for cleaning, etc. We have to hire single workers, so that is a limitation of what we can offer, as many people want to bring their families or partners along. The house is æ mile from farm, and they can live there year round, through the winter. I’d like to have people living on the farm, but separate from my family. We’ve thought of cabins in our woods, but we don’t want to take the legal risks.
- I am thinking about a foreclosed home, but we can’t afford it at the moment. Last year, we bought the Garden Center and 20 acres of land. We have a camper trailer and a cabin. Renting houses for housing costs too much, so it would have to be subsidized. Spending money on housing on the farm doesn’t raise the value of your property, but buying and renovating a home would add value.

- I’d like to improve my own living conditions first. I have an old silo and there has been some talk of renovating it for living space.

- I have a hard time passing it on to the government…if people could pay more for food, we could make it work. I have been working with NRCS to get support, but I can’t follow all of their rules/regulations—they don’t work for our business. If someone is only staying for 6 months, so I would have to find people to rent it.

9.) What programs that are currently available to help with labor and workforce housing have you used? What kinds of programs would you like to see exist?

- I don’t have any experience with any housing programs. I called the Rural Development Program, with a 1% loan, but the timing was off. This program also offers construction support.

- Is it possible to get a loan to buy a property off the farm for farm labor for the business?

10. Other things we have missed?

- I would love an adult literacy programs for farm workers, for immigrant/migrant workers. The crop mob—it is nice to have people come and participate out of their own goodness.

- I want a local agency in control of contract immigrant workers that we can draw upon when we need them. An agency would do screening ahead of time—like an employment agency.

- In the Pioneer Valley of MA (5 college towns), they have programs to offer interest-free loan to consumers to enable more folks to join CSAs. It would be great if someone looked into this locally.

- Crop mobs = volunteers who could come to the farms to do a lot of work. The farm could provide food or some of the harvest. Gleaning? Each farmer could offer a short workshop in exchange for crop mob harvest.
Appendix C: Infrastructure Focus Group Notes

October 6, 2010

**Farm Types Represented**  
- 3 CSA  
- 5 Dairies  
- 2 Wineries  
- 1 Orchard  
- 1 Horse  
- 3 Meat  
- 1 Apiary

**Cheshire County Towns Represented**  
- Gilsum  
- Hinsdale  
- Jaffrey  
- Keene  
- Marlborough  
- Nelson  
- Troy  
- Walpole  
- Westmoreland

**Service Provider Organizations Represented**  
Antioch University New England, Cheshire County Conservation District, Great Falls Food Hub, Hannah Grimes Center, House of Representatives, Land For Good, Merrimack County Conservation District, Monadnock Community Market, Monadnock Economic Development Corporation, NH Department of Agriculture, Our Local Table Monadnock, Post Oil Solutions, Southern NH Resource Conservation and Development, UNH Cooperative Extension, USDA Farm Service Agency

**Facilitator:** Dave Chase, DRC Consulting, LLC

**Farm Needs Assessment**  
This Focus Group was the first phase of the Farm Needs Assessment that the Cheshire County Conservation District is conducting. This focus group will be followed by up to 40 in-depth farmer interviews that will be completed over the winter with a focus on infrastructure and labor needs.

This information will be complied and presented in a written report as well as presented at a Community Forum in April 2011. In addition, there will be an evaluation of suitable properties for meeting labor and infrastructure needs in Cheshire County.

The CCCD is partnering with several other local organizations including UNH Cooperative Extension, Land for Good, Antioch University New England, First Course and two local farmers, Tracie Smith of Tracie’s Community Farm and Erin Bickford of Abenaki Springs Farm.

This event was co-funded by the USDA Farm Service Agency and a USDA Sustainable Agriculture Research and Education (SARE) grant.
1. What goals do you have for your farm in five years?

Topics Covered
- Stay in business; still have a viable farm.
- Increase capacity
- Education
- Pick Your Own
- Ability to communicate between farmers – labor and equipment
- Re-introduce bees into local area
- Manage more, work less
- “Compensated Work Therapy Program” (http://www.cwt.va.gov/)
- Sell all milk direct to consumer
- Increase efficiency
- Alternative Energy
- Keep the farm going and the land open

More detailed Responses

- Still in business. Prices are good enough so that we can still be in business, so that it's still a viable farm.

- As a dairy farmer, we would like to be up to 250 cows in 5 yrs.

- Two huge problems in the horse industry
  - One is the loss of land to development, so that horses are now being raised and maintained in suburban areas without any land to have their feet on.
  - The second is the unwanted horse, because we've developed a structure where there's no longer any efficient economical way to dispose of horses that are no longer useful because there's great confusion about whether they're pets or livestock.

- Move more towards pick your own and less towards wholesale – because there's a better profit margin.

- Some kind of an organization with the local farmers to have contact. I think that would be helpful because all of us need extra equipment at certain times of the year, extra labor, and you're sort of out there alone, sometimes. I'd love to be able to send out an e-mail to other farmers.

- We're trying to reintroduce bees into the local area. As part of that we do some education for prospective – we like to call them backyard – beekeepers. We're trying to
get local companies to manufacture the goods to support the beekeeping.

- Just in response to above – I really like the idea of an e-mail list serve. It would be nice for recommending customers, labor sharing, equipment sometimes certain farms are busier, sometimes it would be nice to have, for emergency situations.

- My goal for the farm is to get to the point where I can manage more and work less so I can have a family, so that's kind of my new goal. I'm still working 13-14 hour days during the season. Labor is going to be a big issue for me.

- In response to above - We work w/ the Veterans Administration, and there's a program called the Compensated Work Therapy Program. It's designed to get disabled veterans back, reintegrated into society. You can specify how many people you need for how long and what they need to do. It's called the Compensated Work Therapy Program. Every VA has it. I happen to work through the White River Junction in VT.

- We'd like to be able to market all of our milk ourselves and eliminate the milk truck.

- Many vineyards bring in grapes. My goal is to do it completely- if I don't grow grapes I won't make the wine at this point. But, the equipment I'm buying can handle a lot more production than even when my 5 acres are fully mature. So, I'm just putting the idea out there that if there are local farms w/ the right orientation of sun, soil's right, up on a hill, if that is the case then someone might be interested in growing grapes as a cash crop to feed operations such as myself. It takes 5 years to get a mature crop, so this isn't something that would happen overnight.

- I think it would be great if we could be more efficient. It does come down to infrastructure because we started farming with nothing and we never make enough money to actually purchase or lease the things that we need to make ourselves efficient, like a potato digger.

- We are at max for our facility – there are opportunities for neighboring lands, but that requires funds and restructuring, with their permission in order to house... Our goal is to at least double our herd, but it takes a lot.

- Alternative energy. I'd like to be off the grid. I have the capacity but not the income stream to do that. Such as wind, solar, biomass. And share that with the whole community, or other farm groups that could use it.

- My goal is simply to keep the farm going and keep the land open.

- I'm mostly in the hay business. When you're haying you suddenly need the help all at

once. Yesterday a fellow came by, didn't have work, wanted to work. I could keep him busy, but what does it entail? Legislators have passed so many obstacles in the name of safety regulations, workman's comp. It takes a bookkeeper so much time to pay one person that I do hire quite a bit of the time, mostly during haying – and the workman's comp is more than what I pay her.

- Along those same lines, there's a crisis for the milk price. We're getting closer to a break-even point now. What else is going on in the dairy business, in any business, is that the cost of doing business is so high from 10 yrs ago. A tractor or a piece of equipment that was $10,000 10 years ago is now 30. The cost is killing us as much as the low milk price.

2. When you think about infrastructure: what is most important to what you do right now? Is that equipment? Is that staff? Is that transportation? What are the infrastructure pieces that for you are already in place, that are the most important components of what you do right now?

   Topics Covered
   o Shared equipment
   o Education
   o Employee housing
   o Shared distribution
   o Increased land base
   o Disaster recovery
   o Internet access

   More Detailed Responses

- Equipment. We have a small farm. We need tillers to reseed the field and we don't have the funds to get that. If there were a shared piece of equipment that we could get somewhere that we could rent for the weekend, it would be a huge help. Just for those simple 2-day tasks.

- A serious lack of equipment – all the little things that would be so much more helpful in getting things done so that you can actually earn money to acquire these things.

- We're at a spot in NH without Internet service, except a phone modem.

- Just in response to the equipment-sharing thing – that is a great idea. I feel like I have a lot of the equipment that I need. I don't have things like a potato digger. I don't grow potatoes for that reason. So if we could somehow have cooperative sharing, I think that's a great idea.
- The labor changes every year because it's hard to find people who want to work on a farm. The farms on our scale just aren't making enough money. And then also sharing labor – like you were saying, there are certain times of the year where it's hard – you may need a few extra hands. It's hard, though, with the laws, because you do have to get them on payroll, there are some things that make that a little tough.

- In response to that, we created an internship program this year. It worked out very well, but it was a stretch to get them anywhere to stay. If you build something to house them, you will be taxed on it. Then there's electricity and water and sewer and everything else. Efficient housing, or maybe some kind of rebate to allow employee housing not to be taxed if it was of meager means.

- We ran into the problem that there was no place to put any housing, because if we put it in the pasture it was disallowed. So we're down to in the driveway or in the woods, and then you have the issue of getting power and stuff.

- One idea on the housing: There was this one guy who had a pretty nice camper/trailer that you pull on the back of your vehicle. It had the kitchen and everything, and the bed. And then we have a bathroom in the barn with a shower and a sink. There was no running water into the trailer but there was into the barn.

- Education is one of the keys to developing infrastructure. Instead of everyone coming to the farm having to be trained from zero to a certain level so that they are productive and happy, we need to have education happen somewhere else. If we had an agricultural charter school that could funnel all ages and types of workers for summer internships in the agricultural areas.

- Something at the old farm where the jail used to be, where there's the infrastructure.

- Talking about the legal issues, though – I think if you are providing housing that's considered part of the compensation – they're supposed to be paying taxes on that.

- When I was farming I could have hired extra help with a trailer, and extra housing, but of course you've got local ordinances that don't allow trailers on a farm. Some towns, if you have a strong agricultural community, they will allow it, but if you don't it's out.

- I think there's an issue for sharing and distribution of small operations. We have an inn, a restaurant. We would be excited to use local products if we could have a reliable, steady stream. We do have great vegetables, but we should be able to go into the meat too. We need it when need it - not 15 sheep one weekend and no more for the next six months. It's a big project. A little cooperative venture could be good.
- For a dairy farm the top issue is high quality help, just like for everyone. Second is a land base that would support dairy farming. We need land for crops.

- On that note, I would love to expand at some point in the near future, but land acquisition costs are totally unfeasible. Think of all the roadside pastures, even 1, 2, 3 or 5 acres that are dormant. We could feed Cheshire County if we wanted to. I have no idea who in my town wants animals in their fields. Older people especially don't have someone to transition the farm to, and are just dying for someone to do something with it.

- Our town is starting an Ag commission. Maybe putting things like that in your town newsletter to get to local people about food issues.

- Land is a huge issue. I almost thought I wouldn't be farming any more and I found some affordable lands that got put in a conservation easement.

- Taxes. That's the biggest thing we're challenged with. We get a historical tax credit for a couple of our barns but it's peanuts.

- A little more attention to disaster recovery. The little guys, during the ice storm. All the trees fell over our new fence during the ice storm. We submitted our claim and then found out that you had to have $1000 worth of damage and we had like $800 or $900. The fence is still down because coming up with cash is hard.

- From the tax point of view of the town it's hard to recognize that the land can't be built on. They still want to kind of hammer on you tax-wise. When it's building-based, they're going to tax buildings. The land in current use - taxes aren't very high – but they tax your buildings.

3. What are the sorts of infrastructure barriers that are limiting your prime goals? How can some of these barriers that you've talked about be solved with physical infrastructure improvements?

*Topics Covered*

- Government policy
- Labor
- Too much paperwork
- Too many regulations
- Internet access
- Internet marketing

*More Detailed Responses*
- It would just be nice if they would just recognize the agricultural people who are adding to the bottom line.

- To add to that, it would be nice not to have to fight all the time. I'm constantly fighting the City of Keene. It would be nice just to have an open door once in a while. I’m a vendor in the farmers market, which is constantly interacting w/ the City of Keene. At every avenue, how I try to sell my products, they slam a door in my face.

- The farmer's market is at the whim of the City of Keene. For Pumpkin Fest, for example, instead of embracing the farmer's market as a part of the pumpkin festival, they kick us out. We have to pay fees, and the vendor's licensing requirements are expensive. It takes a long time to meet that hundreds of dollars in fees.

- The paperwork is just unbelievable. Everything you want to do requires that you sit in that office instead of being out where you need to be. A simple thing, like to be in the Keene farmer's market, since I sell wine from my grapes – you have to go to the Keene council people, get them to approve selling wine in their farmers market, and they have to send a letter to the farmer's market, and it has to go to the state liquor commission. I have to do that every year in every town that I'm in a farmer's market.

- I'm worried about a sales tax. We're talking about one more thing the farmer has to deal with. I could not even imagine what that could do to a farm. To make it these days you just have to do so much office work, and be on top of so many details. All winter I work 10 hours/day to get ready for next year.

- On top of the office work, it's the marketing too. We have to market all our own stuff. That costs a lot of money, if you want to run an ad, for copies and fliers. It costs a lot of money and time to maneuver all of that.

- The cost of advertising is a definitely a big issue. To get into a bulk paper costs hundreds of dollars – and that's 6 animals' worth. It's prohibitive when you end up being the little guy, and you have to pay for advertising.

- I was really concerned last year about the LLC tax. Had that not been repealed we would have gone out of business because of the overhead. Not the additional money cost, but the number of hours you have to put into meeting all the regulatory requirements.

- Internet access. It starts out free, but you must have a ton of expertise to market your products or your business on the Internet.
- We have a friend who wants us to continue farming and she is a computer expert. If you want us to stay a farm, that's a fantastic way to help us. She made a website for us, and takes care of all that stuff for us.

If someone was talking about your farm, for your operation, if you were rating how big a challenge infrastructure is for you, where 1 is not that big and 5 is the biggest challenge, how would you rate infrastructure?

Responses:
- 3 - 5 people
- 4 - 6 people
- 5 – 5 people

- In my experience, I feel like it’s gotten bigger [infrastructure problems]. You have to get to a certain point with your farm where you’re making enough money. It’s just the reality of farming. You get to a certain point where you can afford things more.

4. What are your three wishes for your farm?

Topics Covered
- Better equipment
- Land availability
- Labor
- Fair price for product
- Workman’s Comp
- Liability issues
- Connection between farming and outdoors

More Detailed Responses

- I think number one is, if I could have my wish that nothing would break. That’s all I want. My crusher doesn’t go out in the middle harvest. My tractor hydraulics that just went out doesn’t go out when I need it. It’s just that nothing would break.

- That’s actually true. The thing is that equipment becomes more and more expensive but it becomes more poorly made all the time. It’s, you know, most of the stuff is made so poorly its designed to break and, you know, you can’t afford to keep up with that.

- It costs a fortune to get it fixed. They charge you 80 bucks an hour, they charge you time just to drive down from where ever they have to come from just to fix this nice piece of equipment that you are still paying on. It is frustrating. It’s extremely expensive.
- Land availability close by, travel to get the land, help, and regulation, not necessarily in that order. Regulations is going to be the biggest thing I think - it already is - it’s huge like you were all saying about housing and I know in Walpole specifically exempts staying over night in camps even for a night if you have a friend coming who’s supposed to sleep in your camper.

- Competent physical help and help that’s physically competent. Everybody has a bad back or they’re overweight or they’re out of shape or they work for an hour or they’re hot or cold. Or they just don’t know what they are doing.

- Yeah, that goes under the “competent”, you know. And that can save you a lot of all the other things. I mean, maybe you have somebody from the tech school that knows how to fix your tractor. Part of competent help is having someone who knows how to build or fix or help in some way.

- I might get you off track here, but a fair price for our product would solve everybody’s problems to be able to provide infrastructure. And we’re at the bottom of the rung. Everybody above us that takes our product, they set their margins and they get their price. We’re told what we’re going to get.

- Property taxes and more stone-free alluvial soil. And that would do away with most of the equipment breakdowns.

- I’d say for us, labor definitely and on the regulations side workmen’s comp and health insurance is killing us, even just to keep providing them, even just for our own family members. Every time one of those things comes up it cuts into what we have the ability to provide and all those things. If we could get a fair price for our product, I wouldn’t be fighting so hard, it sounds ridiculous . . . but when minimum wage went up just that extra 20 cents equated to that much more, you know?

- If I could chime in on that, just from our restaurant and talking about young kids working and when they raised that minimum wage like they did it really has made it difficult. I mean you’ve got to pay somebody clearing a table a certain price, you know, and they’re just clearing a table, you know, it’s just difficult.

- I’m going to go back to the regulation. It’s sort of this whimsical regulation - you don’t know what’s coming next and its very hard to predict even a year out how maybe we won’t invest in this piece of equipment because my taxes might go up. It’s the uncertainty. It’s really difficult.

- So, I’ll do my three. So it’s the price, the fair pricing would make a big difference for
all of us. We wouldn’t be so tight on everything. Good help, mechanical, just the whole thing, a good manager and then the third is a miraculous way to get my partner to like my farm. Because it’s a real stress on a relationship.

- Well she said it right there, it’s an extremely stressful way to live. To have a farm and a family, those things don’t really go together in this role. You don’t ever make enough money, there’s always way too much work and our culture doesn’t support it and it’s just simply a very difficult way to live, you know, to have a farm and a family.

- A lot of things can go wrong and liability seems to be always an issue. It’s a huge issue with how I try to do most things on my own probably due to the liability issue. I recently had one of my cattle get out and got hit on the highway and it wasn’t a horrible situation but it could have been a huge liability issue.

- Going back to education, we need to connect farming to things we value like a healthy lifestyle, like outdoor living, like being close to the environment, instead of lauding the indoor computer- TV- gizmo- life that we do now. Keene has really changed since I moved here years ago but it used to be an agricultural town.

- To talk about that liability thing again, a lot of us who try to make it interesting to stay in farming - it’s to create this experience of the farm. So, the minute you invite the public to come and look at your farm or enjoy that experience, your insurance costs goes crazy with the liability because they trip and fall because they didn’t wear the right shoes. It should go on their insurance, not mine, and keep our insurance down so that we can do agro-tourism.

5. What are some shared infrastructure ideas?

Topics Covered
- Equipment maintenance
- Rotate fields for different produce, share land
- Liability insurance, workman's comp (Hospitality Association)
- Sharing part of the pastures
- Collaborate on purchasing items
- Workman’s Comp
- Shared storage space, freezer, root cellar

More Detailed Responses

- A share in equipment, as somebody who works a lot on equipment, I can see in 5 yrs if you purchase something new, who’s going to maintain that? And where is it going to be housed? Is there going to be a central location with a building, and a person who runs
that building to say this is when the equipment was sent out, this is when it came back, it’s maintained and then back out again?

- Yeah, I was thinking that too. How would you make that work? It really would have to be a third party arrangement say you had like RA Johnson in our town or something. You know, they would have this piece of equipment that they would have to maintain and you would just pay them all together. We would pay them incrementally as a group to keep it going and then have times to sign up to use it, but those things. But those things are very difficult if everybody wants something at the same time or if there is somebody who really uses it or if you are really having difficulties but I think that all around it would help everybody because they wouldn’t have to pay as much upfront.

- My thoughts on that are if some things can be shared, and some things really can’t be, everybody needs certain things and I have a double tilled seeder that somebody just used. You know, that’s the type of thing people don’t use very often but some of the things you’re going to use every year eventually you have to get your own.

- But it is for the smaller growers who aren’t there; I would love to get to that point where you can. I mean, I would love to have our own potato digger but it’s not going to happen any time soon and it would be great if other growers could just share it for a little while just like you said.

- I guess just a question that you were talking about, like land and some things just don’t lend themselves to being able to share those resources. Like when you’re trying to work with a farmer in the off season and you’re going to grow a cover crop and then you harvest that, the idea being that we’re reusing that same land and they were going to grow that cover crop anyway. I have a friend that’s in Maine and I know the resources are very different up there but they kind of share resources. Finding out where those fields are that aren’t being utilized.

- There’s been a lot of talk about liability insurance and so forth. So, we also have an inn and maybe 20 years ago or so we had this workmen’s comp problem and we were able to form our own workmen’s comp group. Now, you have to have some kind of organization and you have to agree that if the farm people could get together somehow to form some kind of organization, but we’re pooled and we’re self-funded, and there hasn’t been a year after the first 5 years that we don’t get a return on our investment. We still pay on workmen’s comp and it’s not cheap – the state sets the regulation – but by having this group and doing a lot of controls it.

- I’ve been in the process of solving the problem by developing my whole 17-acre farm into an equestrian community. All the cleared land will stay in one whole piece and there’s the possibility of having a share of the total property and keeping two horses of
your own and building your own house on my property, and that’s all done through the whole process of development. So I don’t have to do all the work anymore. Hopefully the 7 other residences will participate however they want in the maintenance of this particular piece of property.

- There are certain times that you want to make something new, like cheese. To follow USDA regulations you need hundreds of thousands of dollars in equipment. It would be nice if there was some kind of place that you could go to test it out to see if you like it or if you’re good at it, before you spend all of that money. To see if there’s a market for it, see how it goes. That’s a huge barrier. For us, we’re just starting to make our own hotdogs and right now I’m traveling down to Chickapee, Mass because that’s the only place in New England that is licensed to do it. It’s a long trip.

- I’d say that speaks to some degree about having the ability to collaborate on purchasing things. Like sugar, or this, or that, and every time somebody adds an increase to those items it just squeezes us on the other end that much more. For example, there might be some ability to make some of the purchases in some way.

- Or local suppliers even, such as shipping and handling and all of that when you’re buying pounds and pounds of things, items every year and supplies, that costs quite a chunk of money.

- Part of that is knowing what other people have and are willing to share. I mean there are a group of farmers that all live relatively close.

- You’re close but it’s such a great distance because were all doing everything all of the time, we’re not all hanging out, or going out for coffee. We don’t all hang out.

- One of the things that we do in the bee-keeping world is almost like a co-op. We have kind of a nice problem, which is that our demand for local honey is always higher than our supply could ever be. So we have a lot of local beekeepers that have one or two hives, or maybe three hives, but we have an extraction, so we allow them to come in and use all of the extraction and bottling equipment. Then there’s a very small cost there, a small rental, so there’s people who can maybe rent to each other instead of thinking about all of the legal issues in being in a co-op together with liability insurance and this and that, but maybe a hand shake works better than a couple of lawyers.

- Yeah, one thing that I was turning over is shared storage space, shared fruit seller, shared freezer, shared kitchen. The CSA that I would love to add value to is only 35 members so there’s really nothing out there that can support me on that small of a scale where I don’t have to hire this or hire that. It just adds more cost than what I am actually gaining from providing 35 members with a jar of tomatoes or whatever. Something that
I can participate in, like if I have a bumper crop of winter squash which I do this year. I can’t store it in my root cellar because it’s too small and it’s not the right climate control for winter squash so then where am I going to put it all? But I want to give it to my CSA members in February. I’m struggling with only having so much space and so many buildings on your farm.

- You said we could come up with three things for the Genie? I’ve got one left and I kind of mulled it over. Everybody talks about liability and regulations and this and that or the other, but it would be nice if no lawyer were allowed to be a legislator. That is a conflict of interest in my mind.

6. What are the top things that service providers could be doing to support farms with respect to infrastructure?

Topics Covered
- Business planning, marketing and USDA loans
- Rental equipment
- Explanation of available information and services
- Communication Hub
- Trade Network
- Make it easier to buy locally
- Use more local sources
- Low interest loans
- Educate the public
- Make themselves known to farmers

More Detailed Responses

- The banks could give us low interest loans for acquisition of land and materials or equipment.

- If we could contact RA Johnson or Keats or whomever, to see if they’d be willing to have some of this equipment for rent just because they’ve already built the buildings.

- I would like to see the Ag. Department help us out with business planning and business everything that is associated including marketing. And also to help us get some of the USDA loans and USDA programs that are available to be more efficient.

- I think they’ve been doing a great job in trying to get the information out there to people at large and explaining to people what it is that they are doing by providing food and helping people understand that it’s worth a lot more than what people are actually paying for it. Anyway, just the education aspect of it, I think they are doing their job and
we need a lot more information out there so people understand what it is we’re doing and why it’s worth doing.

- Another thing is coming up with that email network. I know there is a network but I don’t think people are using it these ways. Some people are on, but I think getting people more actively using when they have extra labor then put it on there so that if someone else needs the labor or equipment sharing. You need more fields or you have extra, you know, just getting that out there so that we all actually use it. Or, items you have, we all could be more aware of what each other has for sale so that we could let our customers know. I know that kind of thing can save energy in those ways.

- Yeah, communication, places to funnel communication out.

- Developing a trade network or for somebody who might have the skills to manage your paperwork, or for woodworking or repair or somebody who might want horse manure in exchange for vegetables.

- We all work much better with the trading than with dollars and cents. Then you don’t have to pay taxes on it.

- As producers we know what our things are truly worth and maybe we might not actually get that cost from somebody else, but if you’re dealing with another producer you can actually make things work out better because they understand that your product is worth this and you understand them. It’s much easier to barter and exchange than it is to try to deal with money. You don’t get as much for it.

- I have something to say on that. Part of the reason why I’m here today is because I believe that there probably are things out there that could probably help everybody in this room but it’s a matter of knowing what’s out there. Whenever I have a problem I find there is somebody who could help me with it, I just didn’t know prior to the problem that that existed. It just seems like, maybe, this is another one of those things where everybody is looking for more solutions but we’re probably unaware of a lot of the things that already exist. So these guys being better known in the farm world, I could probably do a little homework and learn a lot from what’s already there is all I’m saying. So I look forward to meeting these people behind me and all around me.

- One thing that I think is a big thing that service providers can do is help to educate all sorts of other businesses in the community to look local first and set up the systems that make it easier to get local first whether its restaurants, whether it’s the grocery store, or any place that sells food. The systems that exist right now, it so much easier to order it on the Internet and get whatever you want from a farm but that same infrastructure doesn’t exist on a smaller local scale. There’s not a truck running from Keene to
Fitzwilliam gather what I’ve got together. So, that is a huge piece that none of us can do but as service providers you can.

- And somebody could do that cost effectively. A lot of times you end up using distributors. We were trying to get our local food to schools but the distributor wants to get 40 %. By the time they get what they get we’re way out of the water expense wise so I can’t even get close. Bring it to our level. Why do they have to get that much and can it be done more cost effectively on a local level without a big corporation coming in and trying to do that?

- I think it’s because it’s not easy. Like this morning, just for example, we had our snacks here at the beginning. How much of that was local? I know this is a difficult thing.

- And, we’re not going to be able to do it. It’s the people on the next level that have the resources that are going to be able to do it for us.

- So if you’re having a meeting, there’s a place you can call and say, I need 40 muffins and that person knows who to call that’s making muffins today. And they’re all locally made. And without that kind of central resource – it isn’t that people don’t want to do it its just too hard or too expensive.

- I think something that could be useful to all of us since we’re not computer experts and lawyers, would be some education classes someone could put on, to tell us the changes that happen every year with what you have to do to hire someone, all the paperwork you have to fill out. We have a very expensive bookkeeper who tells us what we have to do all the time. That and there’s the taxes, all the changes that happen legally every year. We could have a course, maybe there’re some short cuts. That’s a practical suggestion that could be extremely helpful.

7. Any final thoughts on infrastructure?
   
   Topics Covered
   - Education the public
   - Organization to coordinate selling
   - Extra storage

   More Detailed Responses

   - I wanted to hop back for a second because we were talking about this whole localvore movement which is really big here and has been happening especially among a group like this, but the attitudes outside are not being changed - as a sociology major – and that takes ten years and you have to start that so that we get the help we want. We need
other people to be thinking about wanting our products or our help, and then we want the services that they can provide to help us put out our product so it’s a net, it’s a web that we have to put together instead of operating individually. Not being able to dig your potatoes, not being able to deliver your stuff, not being able to get my students to come in from any closer than Europe, things like that. But they have to know the services are here but first they have to want them.

- Probably, in the future somewhere, and I know there are rumblings at the larger scale, the co-op like the one in Lebanon where we are. The big venders are not friendly to us. Where people wouldn’t know that this place is open 24 hours a day, this is a market, and it’s got local products, and if it has to fill in with other products from different seasonal times then okay. Where you know it’s accessible, you know it’s there, might be the long-term thing.

- Well, the fact that there are really so few of us here, there aren’t very many farmers left and there isn’t very much farmland left for the reason we’ve just talked about. Just having everybody out there knowing that and understanding it and trying to make it different in whatever way possible is really what it’s all about. Everybody needs to understand that if we want farmers to exist we need to do anything and everything to let them know why that’s important.

- There are simple things that could be put in place if people do want to try to buy more locally. If the grocery stores were required to put a little note next to the price on how many miles away this was purchased, like these strawberries came from 2000 miles away and the ones next to it came from 20 minutes down the road. Maybe people would make those choices but sometimes you go and you don’t know what you’re buying so it’s that education piece you were talking about.

- Some of that too, right now is that for most of the stores it’s easier for them to get it from California than here. There’s no infrastructure, no help.

- There’s nobody managing what we have right here in the Monadnock region. Nobody is coordinating that, nobody is distributing that. Except for us individually, every day, on top of animal chores, on top of harvesting, on top of everything else, and that just doesn’t create a sustainable local food system. It’s all of us, shooting darts, sending out an email. “I’ve got extra this right now.” That goes out to maybe 20 people. You know what I mean, there’s nobody coordinating that.

- There’s no push from the public either to try, like, if they knew that that’s all they have to do is put a little pressure on the grocers to look a little harder locally that would start coming together. There is no program here; there is nothing in it for them to do something that is harder, like you said. It’s too hard for them to find the local
strawberries that week or whatever. It’s easier to make a phone call.

- Part of that is also that when you go into a store that says local you presume that it is local but that’s not the case. Just look at the liquor store, to take a bad example. You go into a liquor store to buy New Hampshire wine, and the question is what wine do they direct you to? In 90% of the cases they direct you to a wine that the liquor commission is buying from California and they put their own labels on. And then they throw out the New Hampshire wine from the liquor stores because they don’t sell enough.

- I thought there were a lot of local things. I get emails all the time about these groups of people trying to start where they are advertising where local things grow – I’ve been to several of those meetings - this year because we lost so much of our crop due to the weather, peaches came three weeks early. And we lost 80% of our peach crop. And what we had all came in at once so I sent emails out to my tennis group, my reading group, etc. We didn’t want to turn on the refrigerator to preserve them because that costs a couple thousand dollars a month in electricity. So we wanted to get rid of the peaches, we didn’t want them to spoil so I just emailed everybody I thought I knew and a lot of people came and bought them. We didn’t have many peaches left. None of them really went to waste. But that’s what you mean.

- That, what you did was awesome. That’s great. So, then there’s a lot of little things but its hard to latch on to little things if you don’t know if it’s going to fall out from under you, I mean, it’s your livelihood we’re talking about.

- I would love people to come up on the weekends because we have people come to the orchard and they want to be entertained, they want to talk to people, they want to buy things and I would love to have people come up, bring your own little tent and sell some things. Because I’ve got all that public coming to me August through September and October and I would like to entertain them, so I guess, if we had some kind of organization or if we could talk about these things, but then the problem is liability! Should I do this or not? You know?

- So, I just wanted to respond to the whole coordinating thing. Whoever does that, they are somehow going to have to make money so again there’s going to be money coming out of your pocket. I had a big crop. I was trying to sell carrots and I finally called Black River Produce after doing whatever I could to get rid of it elsewhere. They gave me less than 40 cents a pound or something unbelievably cheap but I just couldn’t do it. So luckily, I’ve slowly been able to sell it, you know. I don’t have that much storage space and I’m wondering what I’m going to do with all of this butternut.

- But, my biggest issue is labor and it comes down to, like somebody said, all of our issues come down to money. So, if people are willing to just keeping that whole local
food thing, which a lot of us are doing here. I know it’s happening, I see it here all the time, but people really have to pay more still for what we are giving them. It’s hard in these times when everybody is afraid of the economy and where things are going, so, I think just getting to the point where people pay us enough, then we can pay for help and for infrastructure.
Appendix D: Interview Guide

BACKGROUND
1. How long have you been in farming (in years)? _____ years

2. Approximately how many total acres do you farm? _____ acres
   a. How many do you own? _____ acres
   b. How many do you lease? _____ acres

3. What is your main goal in farming? (Select all that apply)
   - Full-time profitable enterprise
   - Part-time profitable enterprise
   - Enjoyable hobby
   - Pay property taxes
   - Keep land in agriculture
   - Other (please specify)

Table is for question 5

<table>
<thead>
<tr>
<th>Products/farm type</th>
<th>Land used</th>
<th>Herd size (if applicable)</th>
<th>Value added Products (please specify)</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vegetables</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dairy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poultry and eggs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hogs and pigs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cattle and calves</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sheep and goats</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bees</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grains, oil seeds, and dry beans</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flowers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fruits, tree nuts, and/or berries</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Christmas trees</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nursery and/or greenhouse</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Horses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hay</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maple syrup</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. In the past year did you work off the farm in a part-time or full-time job? (Select one.)
   - Did not work off the farm
   - Was employed part-time off the farm
   - Was employed full-time off the farm

5. What does your farm produce? (See Table above and select all that apply)

6. Are you doing any value added products (cheese, salsa, honey etc)?
   Yes
   No

7. What other activities, if any, occur on your farm?
   Agri-tourism
   Educational programs
   Special events (e.g., weddings)
   Other (please specify)
   None

8. What was the approximate gross value of farm sales from your operation last year including all agricultural activities (crops sold, animals sold, dairy products, etc. but not special events, educational programs, etc.)? (Select one.)
   Less than $1,000
   $1,000 – $2,499
   $2,500 - $4,999
   $5,000 - $9,999
   $10,000 - $19,999
   $20,000 - $29,999
   $30,000 - $39,999
   $40,000 - $49,000
   $50,000 - $59,999
   $60,000 - $69,999
   $70,000 - $79,999
   $80,000 - $89,999
   $90,000 - $99,999
   $100,000 - $149,999
   $150,000 - $199,999
   $200,000 - $249,999
   $250,000 – $299,999
   $300,000 - $349,999
   $350,000 - $399,999
$400,000 - $500,000  
More than $500,000  

9. Where do you sell your products? (Select all that apply and please specify)  
   On-site farm stand  
   Farmers market  
   Community supported agriculture (CSA)  
   Grocery store  
   Food co-op  
   To a wholesaler  
   Directly to restaurants  
   Directly to schools  
   Directly to hospitals  
   Other  

10. If you are interested in expanding your markets, where do you want to sell your products? (Select all that apply and please specify)  
   On-site farm stand  
   Farmers market  
   Community supported agriculture (CSA)  
   Grocery store  
   Food co-op  
   To a wholesaler  
   Directly to restaurants  
   Directly to schools  
   Directly to hospitals  
   Other  
   Not interested in expanding  

10a. If you are interested in expanding your markets, can we let consumers and wholesale buyers know?  
   Yes  
   No  

11. Would you be interested in a shared “e-commerce” platform for marketing your products?  
   Yes  
   No  
   Not sure  

12. In an ideal scenario, what are your goals for your entire farm operation in the next 10 years?  

LABOR  
   13. In 2010, how many family members worked on your farm? _____
a. Range of hours/person/week? _____

14. In 2010, how many non-family workers did you employ year-round (for 150 days or more)? _____
   b. Range of hours/person/week? _____

15. In 2010, how many non-family workers did you employ seasonally (for 149 days or less)? _____
   c. Range of hours/person/week? _____

16. In 2010, how many interns or apprentices did your farm host? _____
   d. Range of hours/person/week? _____

17. What compensation do you provide non-family workers? (Select all that apply)
   Stipend
   Hourly wage
   CSA share/food
   Housing
   Training
   Health insurance
   Salary
   Other benefits (please specify)
   N/A – (if all employees are family members)

18. If you pay hourly or salary, how much do your employees earn?
   - Hourly wage
     o $7.25 – $8.24
     o $8.25 - $9.24
     o $9.25 - $10.24
     o $10.25 - $11.24
     o $11.25 - $12.24
     o $12.25 – $13.24
     o $13.25 - $14.24
     o $14.25 - $15.24
     o $15.25 - $16.24
     o $16.25 - $17.24
     o $17.25 - $18.24
     o $18.25 - $19.24
     o $19.25 - $20.24
     o More than $20.25
   - Salary
     o Under $20,000
19. Would you pay more for skilled labor?
   Yes
   No

20. In 2010, what pools of people did your workers come from? (Select all that apply.)
   High school students
   College students
   Local workers
   Migrant workers
   Veterans
   Other (please specify)

21. In your opinion, how many of your workers each year see farming as a career path?
   0 – 25%
   26%-50%
   51%-75%
   76% - 100%

22. Does your current labor pool adequately meet your needs?
   Yes
   No
   If no, why not?

23. At what times of year do you need additional labor (if at all)?

24. How many additional employees (if any) do you need, and for what period of time (full-time/part time)?

25. What skills would those employees need to have (as specific as possible)?

26. To what extent does each of the following pose a barrier to your farm’s operation?
### APPENDIX D: INTERVIEW GUIDE

<table>
<thead>
<tr>
<th></th>
<th>1 Not a barrier</th>
<th>2 Small or infrequent barrier</th>
<th>3 Moderate barrier</th>
<th>4 Large or frequent barrier</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access to number of workers needed</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to workers with necessary skills</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to pay workers</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to provide workers compensa-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to provide liability insurance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ability to provide health insurance and/</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Housing for labor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Turnover in workforce</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Need to train labor</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Challenges communicating with work-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify ___________________)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

27. What do you think is the most important labor need that agricultural service providers could help address?

28. We have heard various ideas for potential solutions that could help farmers meet their labor needs. How likely would you be to participate in each of the following if it were available?
29. Why are you likely (or not) to participate in above ideas?

30. What other ideas do you have to help meet your and other farmers’ labor needs?

31. What have we not covered related to labor that would be important for service providers to know?

**INFRASTRUCUTRE**

**Equipment**

32. What are your three most important pieces of equipment that you use on your farm?
   1. ________________________
   2. ________________________
   3. ________________________

33. What equipment do you need, but do not have?

33a. Why don’t you have the equipment that you need? (Please answer for each type of equipment listed above)
Too expensive (specify_)  
No place to store it (specify_)  
Would only use it for short period of time (specify)  
Not sure where to get it (specify__)  
Too expensive to maintain (specify)  
Other (specify)

Storage
34. Do you currently store your products?
   Yes
   No
If yes, please fill in table below.

<table>
<thead>
<tr>
<th>Type of Storage</th>
<th>Product</th>
<th>Amount</th>
<th>Length of time</th>
<th>Time of year</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cold, moist (carrots)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cool, moist (summer squash)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cool, dry (onions)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warm, dry (winter squash)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warm, moist (sweet potato)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freezer</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify____________________)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

35. Do you have products that you need storage for?
   Yes
   No
If yes, please fill in table below.
APPENDIX D: INTERVIEW GUIDE

36. How far from your farm would you be willing to travel to access shared or centralized infrastructure? _____ miles

37. If yes from background section on value-added products, where do you produce your value added products?

37 a. Is this facility sufficient for your needs?
   Yes
   No
   Please explain:

38. Are you interested in expanding your value added products in the near future (2-5 years)?
   Yes
   No

38 a. If so, will the facility you use be sufficient?
   Yes
   No

39. If no from first section about value added: Are you interested in producing value added products in the near future (2-5 years)?
   Yes
   No

39 a. If yes, what products would you like to produce? (Please select all that apply)
   Cheese, yogurt

<table>
<thead>
<tr>
<th>Type of Storage</th>
<th>Product</th>
<th>Amount</th>
<th>Length of time</th>
<th>Time of year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cold, moist (carrots)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cool, moist (summer squash)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cool, dry (onions)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warm, dry (winter squash)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Warm, moist (sweet potato)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freezer</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(specify__________)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
A P P E N D I X  D :  I N T E R V I E W  G U I D E

Canned goods (salsa, sauce)
Dried goods (fruit, vegetables)
Prepared foods (soups)
Processed meat
Other (specify)

39 b. What are the barriers preventing you from producing these products? (Select all that apply)
Don’t have enough time
Too expensive to get started
Don’t have the infrastructure
Don’t know if there is a market for it
Other (specify)

40. What do you think is the most important physical infrastructure need that agricultural service providers could help address?

41. We have heard various ideas for potential solutions that could help meet farmers’ infrastructure needs. How likely would you be to participate in each of the following if it were available?

<table>
<thead>
<tr>
<th>Idea</th>
<th>1 Unlikely</th>
<th>2 Somewhat</th>
<th>3 Likely</th>
<th>4 Very</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment cooperative among farmers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share equipment I own with other farmers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Borrow equipment from other farmers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rent equipment from a non-farming entity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment repair service</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Centralized climate controlled food storage</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shared product transportation to aid distribution</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Centralized processing facility</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Commercial kitchen facility</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

42. Why are you likely (or not) to participate in above ideas?
APPENDIX D: INTERVIEW GUIDE

50. What is the best way for service providers to communicate with you?

51. Is there anything we haven’t covered related to communication and networking that would be important for service providers to know?

52. Are there local policies that support your farming operation?
   Yes
   No

53. Are there local policies that pose barriers to your farming operation?
   Yes
   No

54. Would you like to see an Agricultural Commission formed in your town?
   Yes
   No

55. What else would you like to add about labor or infrastructure as it relates to your farm?
Appendix E: Notes from Community Forum

We held a Community Forum on April 5, 2011 to report findings from this research and to get farmers, service providers and community members involved in the next steps. There were approximately 65 people present that night. The first half of the Forum was a presentation to share results. For the second half of the Forum the group was broken into five smaller groups for discussions on a few issues that came up in the research. Each group had one of the grant partners as a facilitator to help with the conversation. Each group had specific information about their topic so that their ideas would be in-line with the research results. Below are notes from the five different topic tables from that evening. The five topics are (1) ability to pay and seasonality, (2) farming as a viable career option, (3) equipment, (4) storage and distribution and (5) value-added processing.

Ability to Pay and Seasonality (6 people present)

- There is a perception problem of what a farming job is. Sometimes when a new employee starts, they had no idea what they were getting into. Some people have a very idealized view of what working on a farm is.
- It would be helpful to have a central hiring agency. All of the people looking for work on farms could submit their resumes to this one location and they could sort through and look for matches. They could then distribute workers to farms, so farmers would not need to spend so much time doing hiring process.
- The challenge with seasonality is that many farm workers are left trying to find work each winter. If all the part-time laborers were pooled together and the hiring agency was able to help place people for winter jobs, people would be much more likely to continue to come back each summer. This could maybe work with a ski resort in the winter, but the challenge with approaches such as this is where people will live.
- It would be helpful if farmers did business planning so they would know their hiring budget at the start of the season. This would make it much easier to plan hiring because they would know how much they could spend over a period of time.
- There is a sweat equity program in New Zealand dairy farms where people slowly buy the farm from an older farmer. When the farmer is ready to retire, they have somebody ready to take over. This program could work well, because many farmers in the area are thinking about succession planning. If there was somebody who had a stake in the business working there, it could be beneficial to both people.

Farming as Viable Career Option (11 people present)

- What is viable? It is important to define what it means for farming to be a viable career option. This group defined it with several components listed below.
- Family living budget
- Farm business finances – the farm needs to be able to stay financially viable for farming to remain a career option.
- Meeting goals of the future
Owning/leasing a house/land
- Supporting a family
- Bills/loans – retire debts
- Savings
- Affordable health care
- Quality of life when farming (big picture)
  - Spending time with family
  - Being outside
  - If you live and work on a farm, there is no commuting.
  - In some ways working on a farm may be less stressful, and more stressful in other ways.
- Having some ownership
  - Even if it is not your own farm, having a sense of ownership for employees is really important.
- Next steps?
  - Education on farms/in schools to increase interest in farming
    - Workshops
    - Incubator farms partner with universities
  - AUNE linking up with farms and farmers
  - Seasonal educational offerings

**Equipment** (4 people present)

- A program where farms purchase individual pieces then share equipment could work. There is a program on the Seacoast called Green Start that has a program like this. ([http://www.greenstartnh.org](http://www.greenstartnh.org))
- Education about setting up equipment co-op. It may be important to spread information about what this could entail so that farmers can decide if it is something that they are interested in participating in.
- Existing resources in the community to talk to about equipment ideas:
  - Equipment dealers
- Next steps:
  - Inventory existing equipment and expertise
  - Survey current needs
  - Write grants for pilot studies
  - Maintenance training

**Storage and Distribution** (8 people present)

- Potential for shared storage and distribution (shared storage space and truck routes)
- Also a potential to use existing distribution routes such as Black River Produce. Some distributors pick up and deliver directly, which could be helpful for farmers.
- Important to consider cost of storage space as well as maintenance costs.
- Monadnock Community Market Co-op could be center for storage and distribution. It is centrally located in the county and could serve as a resource for farmers
Next Steps:
- Explore option of drying food as storage option
- Important to increase marketing to public as well as educate the public about higher costs of local food.

Local Resources:
- Explore Farm Service Agency programs. They offer related resources and loans that could work well for (farm storage facility with low interest loan)
- What exists currently on farms? Inventory what we have and create network for sharing
- Local conservation district could manage grant writing
- Cooperative extension – identify grants and storage and distribution regionally
- Schools – volunteering/interns/labor/community service
- Market expansion – be aware of changes in policies/access such as WIC program that will impact markets

Value-added Processing (13 people present)
- It is important to learn regulations regarding value-added products when working with meat or dairy products.
- It is important to have open communication between producers (non-compete)
- What are the costs of facilities?
- What are the risks of producing value-added products?
- Need education for producers and consumers
-Monadnock Community Market Co-op could help facilitate communication
  - Minimize risk
  - Maximize marketability
- Why?
  - New products
  - Create demand
  - Nonprofit brewery
  - Co-op local milk
  - Want more meat, honey and syrup products
## Appendix F: Farm Infrastructure Matrix

<table>
<thead>
<tr>
<th>Channels</th>
<th>Existing Capital Infrastructure</th>
<th>Potential Capital Infrastructure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Facilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Food Processing Facilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High acid</td>
<td>MED</td>
<td>HI</td>
</tr>
<tr>
<td>Low acid</td>
<td>MED</td>
<td>HI</td>
</tr>
<tr>
<td>Dairy</td>
<td>LO</td>
<td>MED</td>
</tr>
<tr>
<td>Meat</td>
<td>LO</td>
<td>MED</td>
</tr>
<tr>
<td>Prepared foods</td>
<td>HI</td>
<td>HI</td>
</tr>
<tr>
<td>Wholesaler</td>
<td>MED</td>
<td>HI</td>
</tr>
<tr>
<td>Retail</td>
<td>MED</td>
<td>MED</td>
</tr>
<tr>
<td>Cheese-making</td>
<td>LO</td>
<td>MED</td>
</tr>
<tr>
<td>Ice cream</td>
<td>MED</td>
<td>MED</td>
</tr>
<tr>
<td><strong>Food Storage Facilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dry Storage</td>
<td>MED</td>
<td>MED</td>
</tr>
<tr>
<td>Cold Storage</td>
<td>MED</td>
<td>MED</td>
</tr>
<tr>
<td>Climate Controlled</td>
<td>MED</td>
<td>MED</td>
</tr>
<tr>
<td>Cool-Isola</td>
<td>MED</td>
<td>MED</td>
</tr>
<tr>
<td>Frozen Foods</td>
<td>MED</td>
<td>MED</td>
</tr>
<tr>
<td><strong>Food Distribution</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wholesaler</td>
<td>MED</td>
<td>MED</td>
</tr>
<tr>
<td>CSA</td>
<td>LO</td>
<td>LO</td>
</tr>
<tr>
<td>Retail</td>
<td>MED</td>
<td>MED</td>
</tr>
<tr>
<td><strong>Equipment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Privately owned</td>
<td>HI</td>
<td>HI</td>
</tr>
<tr>
<td>Publicly owned</td>
<td>MED</td>
<td>LO</td>
</tr>
<tr>
<td><strong>Housing Facilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Farmer homes</td>
<td>LO</td>
<td>LO</td>
</tr>
<tr>
<td>Farm employee homes</td>
<td>LO</td>
<td>LO</td>
</tr>
<tr>
<td>Farmer/employee homes</td>
<td>LO</td>
<td>LO</td>
</tr>
<tr>
<td>Lodging</td>
<td>LO</td>
<td>LO</td>
</tr>
<tr>
<td>Planning / Zoning</td>
<td>LO</td>
<td>LO</td>
</tr>
<tr>
<td>Private</td>
<td>LO</td>
<td>LO</td>
</tr>
<tr>
<td>Public</td>
<td>LO</td>
<td>LO</td>
</tr>
<tr>
<td><strong>Energy Facilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conventional</td>
<td>HI</td>
<td>HI</td>
</tr>
<tr>
<td>Solar</td>
<td>MED</td>
<td>MED</td>
</tr>
<tr>
<td>Wind</td>
<td>MED</td>
<td>MED</td>
</tr>
<tr>
<td>Hydro</td>
<td>MED</td>
<td>MED</td>
</tr>
<tr>
<td>Biomass</td>
<td>MED</td>
<td>MED</td>
</tr>
<tr>
<td><strong>Educational Facilities</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On farm</td>
<td>LO</td>
<td>LO</td>
</tr>
<tr>
<td>Outdoor classrooms</td>
<td>LO</td>
<td>LO</td>
</tr>
<tr>
<td>Indoor classrooms</td>
<td>MED</td>
<td>MED</td>
</tr>
<tr>
<td>Foodservice capacity</td>
<td>MED</td>
<td>MED</td>
</tr>
<tr>
<td>On site technical assistance</td>
<td>HI</td>
<td>HI</td>
</tr>
</tbody>
</table>
REFERENCES


